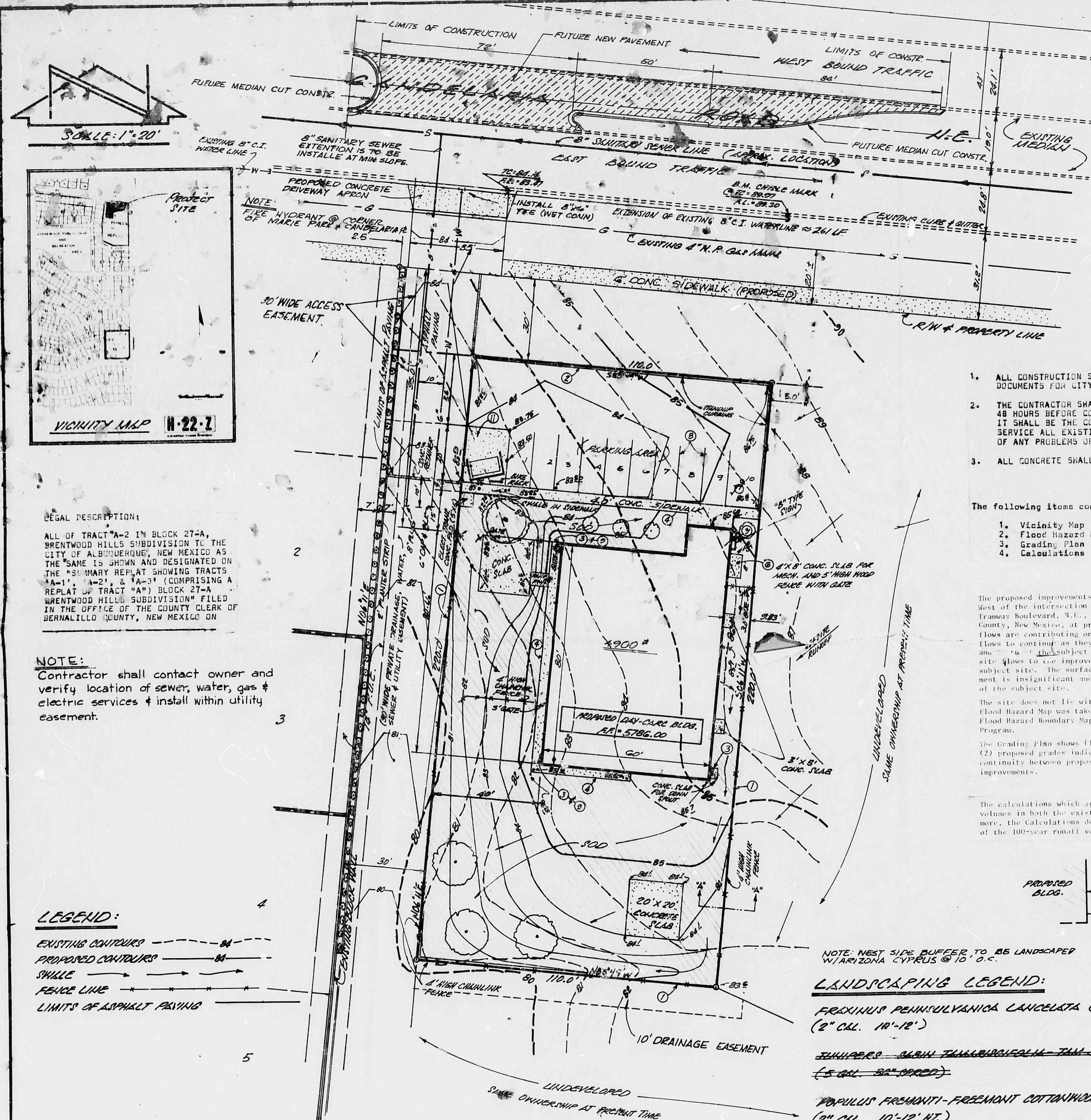




LEGAL DESCRIPTION:

ALL OF TRACT "A-2" IN BLOCK 27-A, BRENTWOOD HILLS SUBDIVISION TO THE CITY OF ALBUQUERQUE, NEW MEXICO AS THE "SAME" IS SHOWN AND DESIGNATED ON THE "SUMMARY REPLAT SHOWING TRACTS 'A-1', 'A-2', & 'A-3' (COMPRISING A REPLAT OF TRACT "A") BLOCK 27-A BRENTWOOD HILLS SUBDIVISION" FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON

NOTE:

Contractor shall contact owner and verify location of sewer, water, gas & electric services & install within utility easement.

LEGEND:

EXISTING CONTOURS
PROPOSED CONTOURS
SWALE
FENCE LINE
LIMITS OF ASPHALT PAVING

NOTE: TOPOGRAPHY SURVEY PERFORMED BY E.R. & ASSOCIATES (JOHN F. ESQUIBEL, N.M.L.S. NO. 5349), JUNE, 1982.

- KEYED NOTES**
- 4' high chain link fence.
 - 6" concrete curb as per typical section.
 - Roof drain downspout.
 - 4' wide x 4" thick concrete sidewalk.
 - 3'x5'x4" concrete slab.
 - 4'x8'x4" concrete slab.
 - 6' wide x 7' long handicap ramp.
 - 4" wide painted parking stripe.
 - Roof drain downspout to outlet to the south and discharge onto swales and into pond area.
 - Terminate concrete curb.
 - 6" thick concrete apron w/4x4-10/10 WWM and 1/2-inch expansion joint.

GENERAL NOTES

- ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF ALBUQUERQUE "CONTRACT DOCUMENTS FOR CITY-WIDE UTILITIES AND CASH PAVING NO. 30."
- THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES BY CALLING 765-1234 48 HOURS BEFORE COMMENCING WORK IN AREAS NEAR UNDERGROUND UTILITY LINES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES. THE ENGINEER SHALL BE PROMPTLY NOTIFIED OF ANY PROBLEMS OR CONFLICTS THAT ARE ENCOUNTERED.
- ALL CONCRETE SHALL BE 3000 PSI CONCRETE WITH 3/4" AGGREGATE.

DRAINAGE PLAN

The following items concerning the La Petite Drainage Plan are contained hereon:

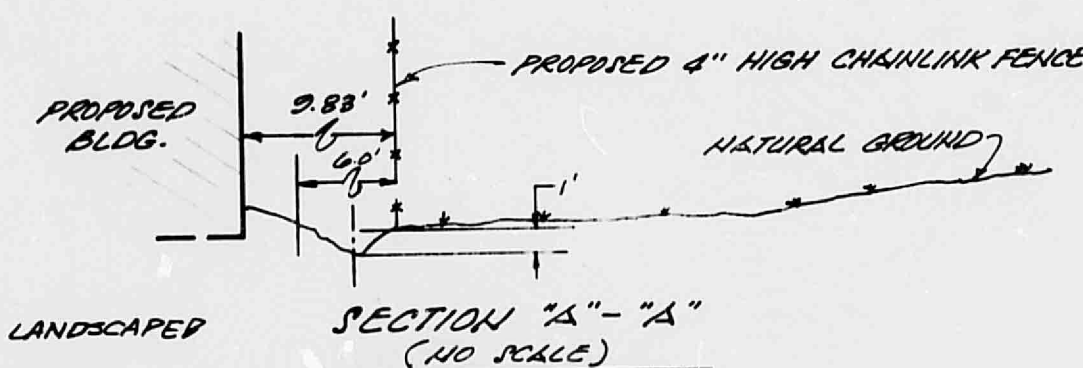
- Vicinity Map
- Flood Hazard Map
- Grading Plan
- Calculations

The proposed improvements, as shown by the Vicinity Map, are located approximately 200' West of the intersection of the Southwest intersection of Candelaria Road, N.E. and Tramway Boulevard, N.E., within the City limits of the City of Albuquerque, Bernalillo County, New Mexico, at present the site is undeveloped. No significant offsite watershed flows are contributing onto the subject property, subject site accepts and allows offsite flows to continue as they are in their present condition. The vacant land to the east and south of the subject parcel are undeveloped. The water shed runoff of the subject site flows to the improved flood control drainage channel located to the South of the subject site. The surface runoff of the proposed parking area within the subject development is insignificant and flows to the 30' wide access and drainage easement to the west of the subject site.

The site does not lie within a flood hazard zone, as shown by the Flood Hazard Map. The Flood Hazard Map was taken from the "City of Albuquerque, New Mexico, Bernalillo County, Flood Hazard Boundary Map" prepared by the U.S. Department of H.O.D., Federal Insurance Program.

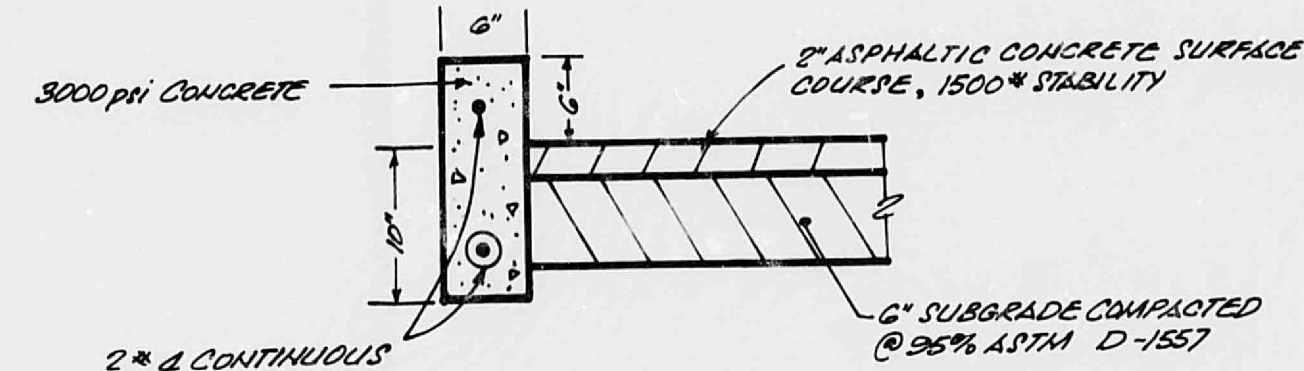
The Grading Plan shows (1) existing grades indicated by contours at 1' 0" intervals, (2) proposed grades indicated by spot elevations and contours at 1' 0" intervals, (3) continuity between proposed and existing elevations, (4) limit and character of proposed improvements.

The calculations which appear below determine the 100-year peak discharge rates and runoff volumes in both the existing and developed status based upon the Rational formula. Furthermore, the calculations demonstrate that sufficient ponding is provided to contain in excess of the 100-year runoff volume in the developed state.



LANDSCAPING LEGEND:

- FRAXINUS PENNSYLVANICA LANCEolata (GREEN ASH)
(2" CAL. 10'-12')
- ~~JUNIPERO~~ ~~OLIV~~ ~~TRAIL~~ ~~BURGUNDIA~~ ~~TRAIL~~ ~~JUNIPERO~~
(5' CAL. 10'-12')
- POPULUS FRASMANI-FREEMONT COTTONWOOD
(2" CAL. 10'-12' HT.)
- SOD. PAX PRENTISS (KENTUCKY BLUEGRASS)
- PYRACANTHA (1 GAL.)



TYPICAL PAVEMENT SECTION & CURB DETAIL
SCALE: 1"=10'

CALCULATIONS

Area of Site = 0.556 Ac.

Existing Condition:

$$L = 230 \text{ LF}$$

$$H_2 - H_1 = 87 - 81 = 6.0$$

$$S_{\text{avg}} = \frac{6.0}{230} = 0.026086$$

$$T_C = 0.00013 \frac{L^{0.77}}{S^{0.385}} \quad (\text{Kirpich Equation})$$

$$T_C = 0.035 \text{ hrs.} = 2.09 \text{ min.}$$

Therefore $T_C = 10 \text{ min.}$ will be used herein

$$i_{100} = \frac{189}{T_C + 25} = 5.4 \text{ in/hr}$$

$$C = 0.40 \text{ (assumed)}$$

$$Q_{100} = CIA \text{ (Rational Formula)}$$

$$Q_{100} = 0.40 (5.4) (0.556 \text{ Ac}) = 1.20 \text{ cfs}$$

$$\text{Volume}_{100} = 0.40 \left(\frac{2.3}{12} \right) (0.556) (43560)$$

$$V_{100} = 1856.8 \text{ cf}$$

Developed Condition:

$$\text{Impervious area} = 0.270 \text{ Ac} \quad (C = 0.95)$$

$$\text{Pervious area} = 0.286 \text{ Ac} \quad (C = 0.40)$$

$$\text{Composite } C' = \frac{0.27}{0.40} (0.95) + \frac{0.286}{0.40} (0.40) = 0.62$$

$$Q_{100} = 0.62 (5.4) (0.556) = 1.86 \text{ cfs}$$

$$\text{Volume}_{100} = 0.62 \left(\frac{2.3}{12} \right) (0.556) (43560) = 2,078.1 \text{ cf}$$

$$V_2 = V_{100} \left(\frac{2.3}{2.3} \right) = 2078.1 \left(\frac{0.4}{2.3} \right) = 1126.2 \text{ cf}$$

Comparison:

$$\Delta Q_{100} = 1.86 - 1.20 = 0.66 \text{ cfs}$$

$$\Delta V_{100} = 2078.1 - 1856.8 = 1021.3 \text{ cf}$$

BENCH MARK:

AT THE INTERSECTION OF TRAMWAY RD., AND CANDELARIA RD., N.E. IN THE NORTHWEST QUADRANT OF THE INTERSECTION.

A SQUARE, CHISELED ON TOP OF CONCRETE CURB AT THE WNW CURB RETURN.

ELEVATION = 5798.247
B.M. NO. 6-632

ENGINEER'S SEAL

[Signature]
8/15/82

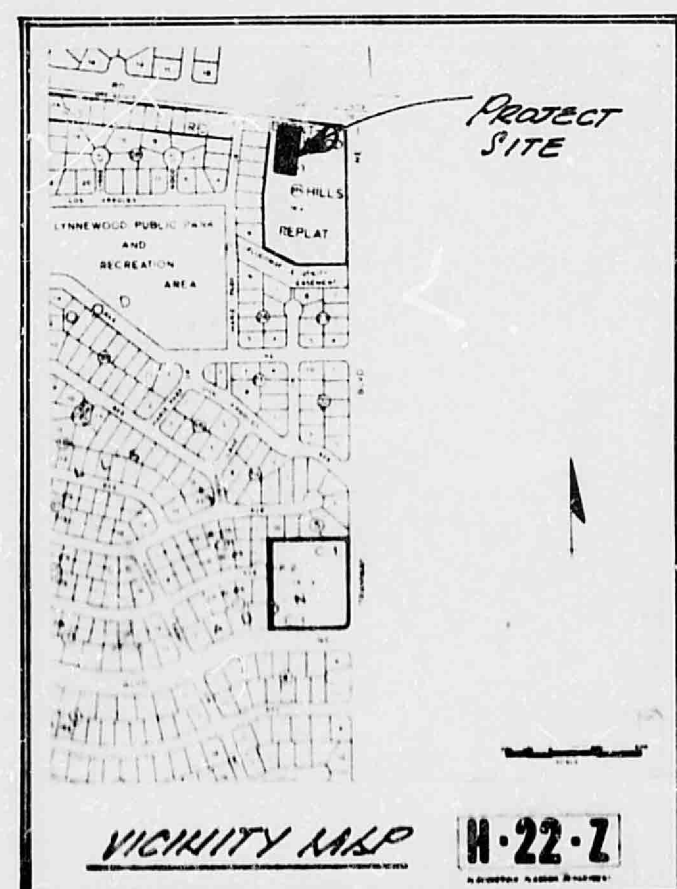
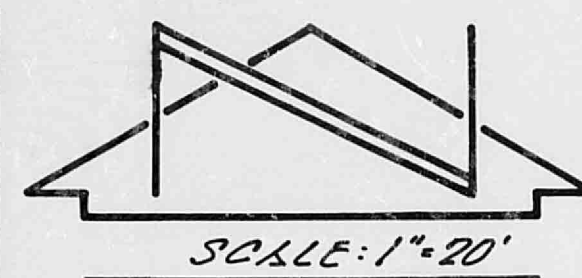
FILE NO.

SHEET 1 OF 2

Trinity Enterprises Inc.
Civil Engineers - Land Planners - Developers
3107 Eubank N.E. Suite 3
Albuquerque, New Mexico 87111
505-282-7063

REVISIONS	DATE	BY	DESIGNED BY: G.T.R.	DATE
			DRAWN BY: G.T.R.	7/21/82
			APPROVED: J.F.E./T.E.	

GRADING AND DRAINAGE PLAN
LA PETITE DAY CARE CENTER
ALBUQUERQUE, NEW MEXICO



LEGAL DESCRIPTION:

ALL OF TRACT A-2 IN BLOCK 27-A, BRENTWOOD HILLS SUBDIVISION TO THE CITY OF ALBUQUERQUE, NEW MEXICO AS THE SAME IS SHOWN AND DESIGNATED ON THE "SUMMARY REPEAT SHOWING TRACTS A-1, A-2, & A-3" (COMPRISING A REPEAT OF TRACT "A") BLOCK 27-A BRENTWOOD HILLS SUBDIVISION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON

NOTE:

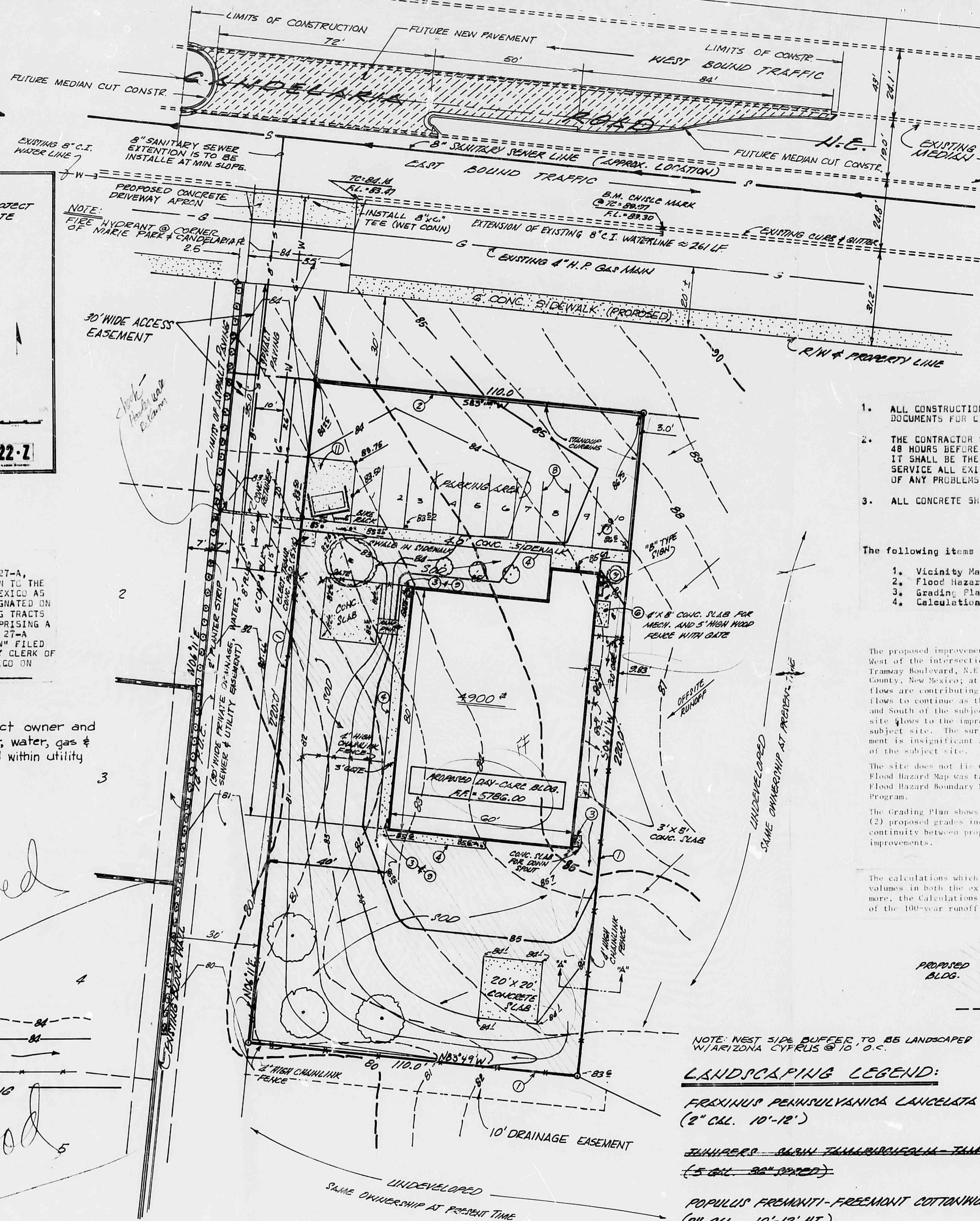
Contractor shall contact owner and verify location of sewer, water, gas & electric services & install within utility easement.

LEGEND:

EXISTING CONTOURS
PROPOSED CONTOURS
SHADE
FENCE LINE
LIMITS OF ASPHALT PAVING

Approved
Rec'd Good
8/26/82

NOTE: TOPOGRAPHY SURVEY PERFORMED BY E.R. & ASSOCIATES (JOHN F. EQUIBEE, A.M.C.S. NO. 5305), JUNE, 1982.



NOTE: WEST SIDE BUFFER TO BE LANDSCAPED WITH ARIZONA CYPRUS @ 10' O.C.

LANDSCAPING LEGEND:

FRAXINUS PENNSYLVANICA LANCEolata (GREEN ASH)
(8" O.D. 10'-12')

~~JUNIPERO (GREEN TAMARISCUS) - TAM. JUNIPERO~~
(5" O.D. 10'-12')

POPULUS FREMONTII-FREMONT COTTONWOOD
(8" O.D. 10'-12' HT.)

SOD. FOX PRENTISS (KENTUCKY BLUEGRASS)

PYRACANTHA (1 GAL.)

- KEYED NOTES**
- 4' high chain link fence.
 - 6" concrete curb as per typical section.
 - Roof drain downspout.
 - 4' wide x 4" thick concrete sidewalk.
 - 3'x5'x4" concrete slab.
 - 4'x8'x4" concrete slab.
 - 6' wide x 7' long handicap ramp.
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GENERAL NOTES

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DRAINAGE PLAN

The following items concerning the La Petite Drainage Plan are contained hereon:

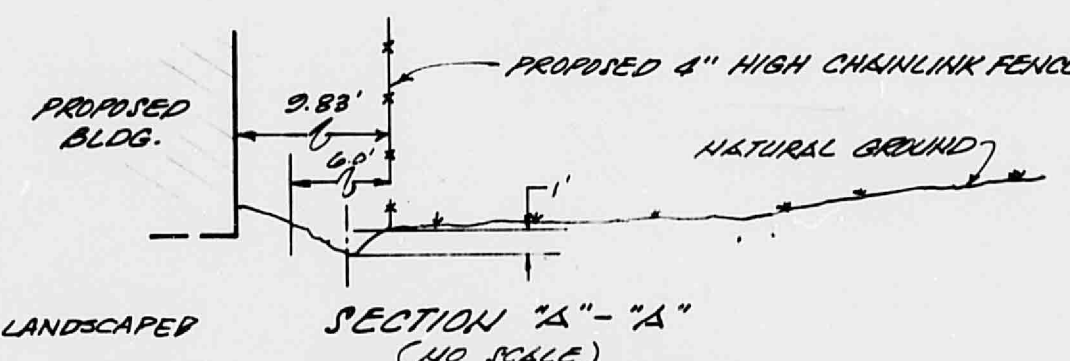
- Vicinity Map
- Flood Hazard Map
- Grading Plan
- Calculations

The proposed improvements, as shown by the Vicinity Map, are located approximately 200' West of the intersection of the Southwest intersection of Candelaria Road, N.E. and Tramway Boulevard, N.E., within the City Limits of the City of Albuquerque, Bernalillo County, New Mexico, at present the site is undeveloped. No significant offsite watershed flows are contributing onto the subject property, subject site accepts and allows offsite flows to continue as they are in their present condition. The vacant land to the east and south of the subject parcel are undeveloped. The water shed runoff of the subject site flows to the improved flood control drainage channel located to the South of the subject site. The surface runoff of the proposed parking area within the subject development is insignificant and flows to the 30' wide access and drainage easement to the west of the subject site.

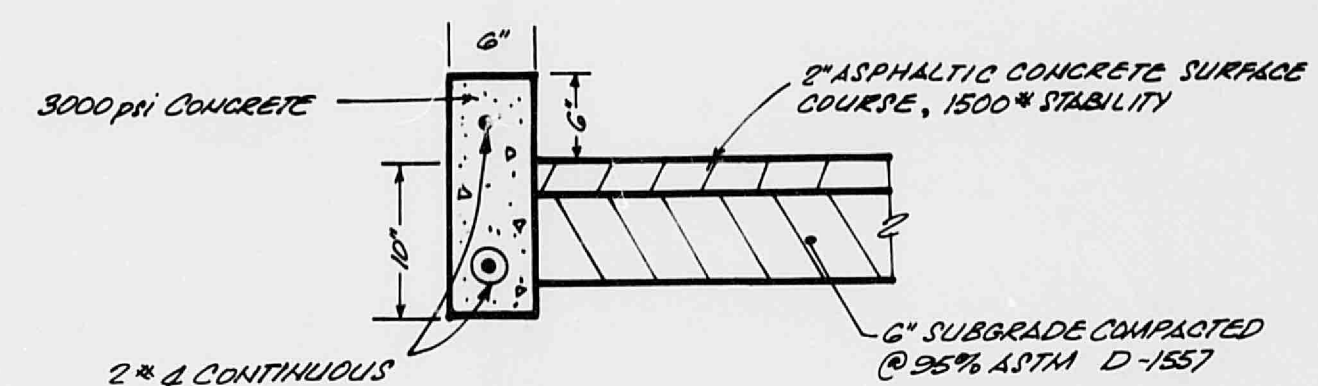
The site does not lie within a Flood Hazard zone, as shown by the Flood Hazard Map. The Flood Hazard Map was taken from the "City of Albuquerque, New Mexico, Bernalillo County, Flood Hazard Boundary Map" prepared by the U.S. Department of H.E.D., Federal Insurance Program.

The Grading Plan shows (1) existing grades indicated by contours at 1' = 0" intervals, (2) proposed grades indicated by spot elevations and contours at 1' = 0" intervals, (3) continuity between proposed and existing elevations, (4) limit and character of proposed improvements.

The calculations which appear below determine the 100-year peak discharge rates and runoff volumes in both the existing and developed status based upon the Rational formula. Furthermore, the Calculations demonstrate that sufficient ponding is provided to contain in excess of the 100-year runoff volume in the developed state.



SECTION "A-A" (NO SCALE)

TYPICAL PAVEMENT SECTION & CURB DETAIL
SCALE: 1"=10'

CALCULATIONS

Area of Site = 0.556 Ac.

Existing Condition:

L = 230 LF

$H_2 - H_1 = 87 - 81 = 6.0$

$S_{avg} = \frac{6.0}{230} = 0.026086$

$T_c = 0.00013 \left(\frac{0.77}{0.385} \right)$ (Kirpich Equation)

$T_c = 0.035$ hrs. = 2.09 min.

Therefore $T_c = 10$ min. will be used herein

$i_{100} = \frac{189}{T_c + 25} = 5.4$ in/hr

C = 0.40 (assumed)

$Q_{100} = CIA$ (Rational Formula)

$Q_{100} = 0.40 (5.4) (0.556 \text{ Ac}) = 1.20 \text{ cfs}$

$Volume_{100} = 0.40 \left(\frac{2.4}{12} \right) (0.556) (43560)$

$V_{100} = 1856.8 \text{ cf}$

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Impervious area = 0.270 Ac (C = 0.95)

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Composite 'C' = $\frac{0.27}{0.60} (0.95) + \frac{0.286}{0.60} (0.40) = 0.62$

$Q_{100} = 0.62 (5.4) (0.556) = 1.86 \text{ cfs}$

$Volume_{100} = 0.62 \left(\frac{2.4}{12} \right) (0.556) (43560) = 2,878.1 \text{ cf}$

$V_2 = V_{100} \left(\frac{0.9}{0.6} \right) = 2878.1 \left(\frac{0.9}{0.6} \right) = 1126.2 \text{ cf}$

Comparison:

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$\Delta V_{100} = 2878.1 - 1856.8 = 1021.3 \text{ cf}$

BENCH MARK:

AT THE INTERSECTION OF TRAMWAY RD., AND CANDELARIA RD., N.E. IN THE NORTHWEST QUADRANT OF THE INTERSECTION.

A SQUARE, CHISELED ON TOP OF CONCRETE CURB AT THE WNW CURB RETURN.

ELEVATION = 5798.247
B.M. NO. 6-622

ENGINEER'S SEAL

3/13/84

Trinity Enterprises Inc.
Civil Engineers - Land Planners - Developers
3107 Eubank N.E. Suite 3
Albuquerque, New Mexico 87111
505-252-7886

REVISIONS	DATE	BY	DESIGNED BY: G.T.R.	DATE
			DRAWN BY: G.T.R.	7/21/82
			APPROVED: J.R.E./T.E.	

GRADING AND DRAINAGE PLAN LA PETITE DAY CARE CENTER ALBUQUERQUE, NEW MEXICO

FILE NO.

SHEET 1 OF 2