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File 1991-0070 Name: North Avenue Marketplace - Final / Rezone

Present	Scanned	
		A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.
X	X	**Table of Contents**
X	X	**Review Sheet Summary**
X	X	Application form
X		Review Sheets
		Receipts for fees paid for anything
		***Submittal checklist**
X	X	***General project report**
		Reduced copy of final plans or drawings
		Reduction of assessor's map.
		Evidence of title, deeds, easements
X	X	***Mailing list to adjacent property owners**
X		Public notice cards
		Record of certified mail
X		Legal description
		Appraisal of raw land
X	X	Reduction of any maps – final copy
X	X	***Final reports for drainage and soils (geotechnical reports)**
X	X	Other bound or non-bound reports
		Traffic studies
X	X	***Petitioner's response to comments**
		***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Ordinance No. 2546 - **	X	X	Drainage Report - 11/18/91
X		Ute Conservancy Dist. - Current Rates and Charges - 1/1/85	X	X	Action Sheet - 11/20/91
X	X	Correspondence	X	X	Utility Coordinating Committee Meeting - 12/11/91
X	X	Subdivision Summary Form	X		Powers of Attorney (not conveyed to City)
X		Annexation Time Form - 10/23/91	X		Development Improvements Agrmt - (not signed)
X	X	Petition for Annexation - 10/24/91	X	X	Site Plan
X	X	Covenants / Restrictions	X	X	North Avenue Marketplace Sub. Plat
X	X	Flood Analysis	X	X	Vicinity Map
X	X	Mesa Co. Dept. of Public Works Review Comments - 11/7/91 - Page 6 through 13 - (missing 1-5)	X	X	Development Schedule
X		Legal Ad - 11/12/91	X		Abstract & Title Co. information
X	X	Planning Commission Minutes - 11/19/91	X		Agreement to Amend/Extend Contract
X		City Council Workshop Agenda - 11/18/91			Vacant Land Contract to Buy and Sell Reall Estates
X	X	Traffic Access and Impact Study - 11/1/91	X		Utility Plan,
X	X	Geotechnical Investigation for Pace Warehouse Site and Preliminary Geotechnical Investigation for Future Development Area - 11/12/91	X		Grading Plan

X		Details	X		Notice of Public mail-outs
X	X	Drychester Retail 1-4 Annexation Maps - Historical GIS Maps			
X		Harmony Market PUD plans			
X	X	North Avenue Marketplace Subdivision Plans - GIS Historical maps			
X	X	Ordinance No. 2552 - **			
X		North Avenue Plan & Profile			

Trammell Crow Company

October 22, 1991

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

Mr. Ron Halsey
Chairman
GRAND JUNCTION PLANNING COMMISSION
250 North 5th Street
Grand Junction, Colorado 81501

Via Facsimile
and Federal Express

RE: Proposed PACE Membership Warehouse
Northwest Corner of North Avenue and 29 1/2 Road
Grand Junction, Colorado

Dear Mr. Halsey:

On Friday, October 18, 1991, I had the pleasure of meeting with Ms. Katherine Portner and Mr. Bennett Boeschenstein of the Grand Junction Planning Department. In accordance with our discussions, I am writing this letter to request that a special Planning Commission Hearing be held on November 19, 1991 concerning the above referenced project.

As Katherine and Bennett can explain, this special hearing is necessary in order for the project to be considered by City Council on November 20, 1991, which in turn is critical in order to achieve or tenant's targeted grand opening date.

Thank you for your consideration of this request. Please accept my sincere apology for any inconvenience that this may cause.

Very truly yours,

DRYCHESTER RETAIL, INC.

Mark H. Sidell
Marketing Principal

MHS:dld

cc: Ms. Katherine Portner
Mr. Bennett Boeschenstein

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

October 22, 1991

Ms. Katherine Portner, AICP
Senior Planner
CITY OF GRAND JUNCTION
250 North 5th Street
Grand Junction, Colorado 81501

RE: Proposed PACE Membership Warehouse
Northwest Corner of North Avenue and 29 1/2 Road
Grand Junction, Colorado

Dear Katherine,

It was a pleasure meeting you in your office on Friday, October 18, 1991. Ann Sperling, Greg Ham, Andy Loewi and I appreciate the opportunity to have met with you concerning our plans for the subject property.

Thank you for the information you shared with us concerning the planning, zoning, and site plan approval process. I have passed your comments on to Donald Slack, our Project Planner and Architect. It is our intent to incorporate your comments into the submittal package on October 28, 1991, in order to comply with the attached proposed schedule. Don Slack and I will coordinate with you on any open issues.

Please call me at 220-0900 and send me a brief letter confirming our special Planning Commission Hearing on November 19, 1991.

Thank you again for all of your help. I look forward to working with you on this and future projects.

Sincerely,

DRYCHESTER RETAIL, INC.

Mark H. Sidell
Marketing Principal

SUBDIVISION SUMMARY FORM

City of Grand Junction

TYPE OF SUBMISSION

Preliminary Plan ____
Final Plat/Plan X

Subdivision Name: North Avenue Marketplace Filing ____

Location of Subdivision: TOWNSHIP 1 S RANGE 1 E SECTION 8 1/4 SW

Type of Subdivision	Number of Dwelling Units	Area (Acres)	% of Total Area
( ) SINGLE FAMILY	____	____	____
( ) APARTMENTS	____	____	____
( ) CONDOMINIUMS	____	____	____
( ) MOBILE HOME	____	____	____
(X) COMMERCIAL	N.A.	23.34	100%
( ) INDUSTRIAL	N.A.	____	____
Street		____	____
Walkways		____	____
Dedicated School Sites		____	____
Reserved School Sites		____	____
Dedicated Park Sites		____	____
Reserved Park Sites		____	____
Private Open Areas		____	____
Easements		____	____
Other (specify)		____	____

Estimated Water Requirements 72 GPM Avg. Flow gallons/day.

Proposed Water Source Ute Water Conservancy District

Estimated Sewage Disposal Requirement 65 GPM Avg. Flow gallons/day.

Proposed Means of Sewage Disposal Fruitval Water and Sanitation Districts.

#70 91

SUBDIVISION SUMMARY FORM

City of Grand Junction

TYPE OF SUBMISSION

Preliminary Plan ____
Final Plat/Plan X

Subdivision Name: North Avenue Marketplace Filing ____

Location of Subdivision: TOWNSHIP 1 S RANGE 1 E SECTION 8 1/4 SW

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( ) CONDOMINIUMS	____	____	____
( ) MOBILE HOME	____	____	____
(X) COMMERCIAL	N.A.	23.34	100%
( ) INDUSTRIAL	N.A.	____	____
Street		____	____
Walkways		____	____
Dedicated School Sites		____	____
Reserved School Sites		____	____
Dedicated Park Sites		____	____
Reserved Park Sites		____	____
Private Open Areas		____	____
Easements		____	____
Other (specify)		____	____

Estimated Water Requirements 12 GPM Avg. Flow gallons/day.

Proposed Water Source Ute Water Conservancy District

Estimated Sewage Disposal Requirement 10 GPM Avg. Flow gallons/day.

Proposed Means of Sewage Disposal Fruitval Water and Sanitation Districts.

Copied 10/18/91

DRAFT: 10/23/91
BROWNSTEIN HYATT FARBER & MADDEN

SET A NEW DUE DATE

DRYCHESTER RETAIL II, INC. ANNEXATION TIME FRAMES

1. Petition Filing - October 23, 1991
2. Council Finding Of Substantial Compliance - October 28, 1991
3. Annexation Impact Report Completion - November 9, 1991
   Filing With County - November 14, 1991
4. First Reading (If Required) - November 20, 1991
5. Hearing - December 4, 1991
6. Second Reading - December 4, 1991

DRYCHESTER RETAIL II, INC. ZONING/PLANNING TIME FRAMES

1. Submission of Plans - October 23, 1991
2. Advertise - October 24, 1991 -- ???
3. Planning Staff Review - October 25 - November 7, 1991
4. Planning Commission Hearing and Decision - November 19, 1991
5. First Reading (If Required) - November 20, 1991
6. Hearing - December 4, 1991
7. Second Reading - December 4, 1991

timeech.gmr
tc2/18d

Drychester Retail II Annex # 1

Beginning 40 ft. south and 379 ft. east of the NW Corner Section 17 T1S R1E, thence north 80 ft. thence east 155 ft. thence south 1 ft. thence west 154 ft. thence south 79 ft. thence west 1 ft. to the point of beginning.

Drychester Retail II Annex # 2

Beginning 39 ft. north and 380 ft. east of the NW Corner section 17 T1S R1E thence east 154 ft. thence north 1 ft. thence east 306 ft. thence south 2 ft. thence west 460 ft. thence north to the point of beginmning.

Drychester Retail II Annex # 3

Beginning 38 ft. north and 380 ft. east of the NW Corner Section 17 T1S R1E thence east 460 ft. thence north 2 ft. thence east 915 ft. thence south 3 ft. thence west 1375 ft. thence north to the point of beginning

Drychester Retail II Annex # 4

Beginning 37 ft. north and 380 ft. east of the NW Corner Section 17 T1S R1E thence east 4,120 ft. thence south 1 ft. thence west 4,120 ft. thence north to the point of beginning.

Drychester Retail II Annex # 5

Beginning at the SE Corner SW 1/4 section 8 T1S R1E, thence north 40 ft. thence N 89 deg. 52 min. 51 sec. W 30 ft. to the true point of beginning thence N 00 deg. 00 min. 00 sec. E 359.99 ft to the SE Corner of Lot 7 Block 4 Palace Estates Subdivision thence N 89 deg. 53 min 14 sec. W 631.06 ft. thence N 00 deg. 00 min. 21 sec. E 921.11 ft. thence N 89 deg. 56 min. 46 sec. W 636.04 ft. thence S 00deg. 00 min. 20 sec. W 660.15 ft. thence S 89 deg. 54 min. 48 sec. E 305. 52 ft. thence S 00 deg. 00 min. 15 sec. W 620.32 ft. thence S 89 deg. 52 min. 51 sec. E 961.60 ft. to the point of beginning and all of Palace Estates Subdivision lying West of 29 1/2 road except Palace Estates Condominium of Lots 8, 9, & 10 Amended, and all adjacent R.O.W. for North ave. not previously described in Drychester Retail II Annexations 1 thru 4.

and

Beginning 178 ft. west and 40 ft. south of the NW Corner NE 1/4 Section 17 T1S R1E thence east along the southerly R.O.W. line of North Ave to its intersection with the northwesterly R.O.W. line of I-70 B. thence southwesterly along said R.O.W. line to the SE Corner of Lot 2 Duo Subdivision, thence North to the SE Corner Lot 1 Duo Subdivision, thence West to the SW Corner said Lot 1, thence North to a point 230 ft. South of the South R.O.W. line of North Ave. thence West 213.5 ft. thence south to a point 257 ft. south of the south R.O.W. line of North Ave. thence East 174.22 ft. thence south to the Northerly R.O.W. line of I-70B, thence westerly along said line to the West line of the NE 1/4 Section 17 T1S R1E, thence North to a point 331 ft. south of the Southerly R.O.W. lineof North Ave. thence West 178 ft. thence North to the point of beginning, including all adjacent R.O.W.

for North Ave. not previously described.

Drychester Retail II Annex # 6

Beginning 37 ft. north of the SW Corner SE 1/4 Section 8 T1S R1E, thence East to the East R.O.W. line extended of 30 rd. thence north along said R.O.W. line to a point 141 ft. south of the south line of Lot 1 Block 2 Francis Subdivision, thence west 1 ft. thence south to a point 38 ft. north of the south line Section 9 T1S R1E, thence west to the west line of the SE 1/4 section 8 T1S R1E, thence south to the point of beginning.

and

All of the SW 1/4 SW 1/4 Section 9 T1S R1E lying North of I-70B and East of 30 rd. except R.O.W. for the Grand Valley Canal and Except for the following described parcels:

Parcel 1: The North 141 ft. of the West 287.1 ft. of W1/2 SW 1/4 SW 1/4 Section 9 T1S R1E except West 40 ft.

Parcel 2: Beginning at a point N 70 deg. 28 min. 29 sec. E 1299.75 ft. from the SW Corner Section 9 T1S R1E, thence North 768.5 ft. to the South R.O.W. line of the Grand Valley Canal, thence S 56 deg. 23 min. 33 sec. E 89.41 ft. thence S 82 deg. 43 min. 57 sec. E 131.68 ft. thence N 88 deg. 25 min. 57 sec. E 122.77 ft. thence South 604.13 ft. to a point on the North R.O.W. line of I-70B, thence S 72 deg. 47 min. W 343.19 ft. to the point of beginning.

Parcel 3: Beginning N 89 deg. 42 min. 11 sec. E 287.1 ft. and S 00 deg. 17 min. 47 sec. E 544.18 ft. from the NW Corner SW 1/4 SW 1/4 Section 9 T1S R1E, thence N 89 deg. 42 min. 13 sec. E 300 ft. thence S 00 deg. 17 min. 47 sec. E 445.33 ft. thence S 88 deg. 40 min. 35 sec. W 259.14 ft. thence N 80 deg. 38 min. 31 sec. W 41.5 ft. thence N 00 deg. 17 min. 47 sec. W 443.02 ft. to the point of beginning and, beginning S 38 deg. 56 min. 41 sec. E 940.05 ft. from the NW Corner of said SW 1/4 SW 1/4, thence N 89 deg.42 min. 13 sec. E 86.85 ft. thence S 00 deg. 17 min. 47 sec. E 253.07 ft. thence S 87 deg. 21 min. 35 sec. W 30.53 ft. thence S 88 deg. 40 min. 35 sec. W 56.36 ft. thence N 00 deg. 17 min. 47 sec. W 255.33 ft. to the point of beginning and, beginning S 34 deg. 30 min. 45 sec. E 510.57 ft. from said NW Corner, thence N 89 deg. 42 min. 13 sec. E 285 ft. thence S 00deg. 17 min. 47 sec. E 121.98 ft. thence S 89 deg.42 min. 13 sec. W 285 ft. thence N 00deg. 17 min. 47 sec. W 121.98 ft. to the point of beginning, except beginning S 46 deg. 43 min. 45 sec. E 789.57 ft. from Said NW Corner thence N 89 deg. 42 min. 13 sec. E 15 ft. thence S 00deg. 17 min. 47 sec. E 190 ft. thence S 89 deg. 42 min. 13 sec. W 15 ft. thence N 00 deg. 17 min. 47 sec. W 190 ft. to the point of beginning.

TO: Karl Metzner

FROM: Don Hobbs

DATE: October 28, 1991

RE: Pace Annexation

The annexation of the Pace property at 29 1/2 Road and North Avenue will not have a noticable impact upon our department since it is strictly commercial.

cc: Ted Novack
Bennett Boeschenstein

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ZD Window 1 DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD?ZD Window 2 DDDDDDDDDDDDDDDDDDDDDDDDDDD?
3                        ZDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD?
3                        3   MESA COUNTY ASSESSOR        3                         3
3                        3   REAL PROPERTY MASTER      3 3                         3
3                  3        3ES   LEGAL DESCRIPTION        3 3                      3
3                        @DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDY                          3
3                                                                                   Y
3BEG N 89DEG42'11SEC E 287.1FT S ODEG17'47SEC E 544.18 FT FR NW COR SW4SW4 SEC 3
39 1S 1E N 89DEG42'13SEC E 300 FT S ODEG17'47SEC E 445.33FT S 88DEG40'35SEC W 23
359.14 FT N 80DEG38'31SEC W 41.5FT N ODEG17'47SEC W 443.02FT TO BEG & BEG S 38D3
3EG56'41SEC E 940.05FT FR NW COR SD SW4SW4 N 89DEG42'13SEC E 86.85FT S ODEG17'43
37SEC E 253.07FT S 87DEG21'35SEC W 30.53FT S 88DEG40'35SEC W 56.36FT N ODEG17'43
37SEC W 255.33FT TO BEG & ALSO BEG S 34DEG30'45SEC E 510.57FT FR SD NW COR N 893
3DEG42'13SEC E 285FT S ODEG17'47SEC E 121.98FT S 89DEG42'13SEC W 285FT N ODEG173
347SEC W 121.98FT TO BEG EXC BEG S 46DEG 43'45SEC E 789.57FT FR SD NW COR N 893
3DEG42'13SEC E 15 FT S ODEG17'47SEC E 190FT S 89DEG42'13SEC W 15FT N ODEG17'47S3
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Cook Associates Ltd

County market

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3 MESA COUNTY ASSESSOR 3 3

3 3 REAL PROPERTY MASTER 3 3

3 3 3ES LEGAL DESCRIPTION 3 3 3

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3 3

3N 141FT OF THE W 287.1FT OF W2SW4SW4 SEC 9 1S 1E EXC W 40FT FOR RD ROW AS DESC3

3 B-1425 P-784 THRU 785 MESA CO RECDS 3

~~Keenan Investment~~

Rocky Mtn. Ltd

NORTH of ANNEX

3 294309300031 3

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3 3 MESA COUNTY ASSESSOR 3 3

3 3 REAL PROPERTY MASTER 3 3

3 3 3ES LEGAL DESCRIPTION 3 3 3

3 @DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDY 3

3 Y

3BEG AT A PT N 70DEG28'29SEC E 1299.75FT FR SW COR SEC 9 1S 1E N 768.5FT TO S R3

3OW LI G V CNL S 56DEG23' 33SEC E 89.41FT S 82DEG43'57SEC E 131.68FT N 88DEG25'3

3 57SEC E 122.77FT S 604.13FT TO A PT ON N ROW LI OF HWY S 72DEG47' W 343.19FT 3

3TO BEG 3

Keenan Investment Co.

3 294309300128 3

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File: assrmstr Key: 1 Window: 1 Page: 4 Rec: 20229 (20229) Act: Y

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EAST of ANNEX

REVIEW

PROJECT: NORTH AVENUE MARKETPLACE SUBDIVISION

SUBJECT: Review of revised plans dated November 18, 1991

BY: Don Newton, City Engineer

SHEET C-4

1. On all street profiles please designate which elevations are proposed and which are existing.

2. Pavement cross-slopes calculated from profile elevations do not agree with 3% pavement cross-slope shown on North Avenue Widening Section No. 17 on Sheet C-7. Please show proposed pavement cross-slope or cross-section at each 50' station.

3. Can't find details for geometry of North Ave. curb cuts. Please reference all details by sheet and detail number.

4. Can't find details for modification of raised medians in North Ave.

5. Pedestrian ramps will be required across raised islands in curb cuts on North Ave.

SHEET C-5

6. Show alignment of 29 1/2 Road on both sides of North Avenue.

7. Show width of existing pavement on the east side of 29 1/2 Road. Show southbound left turn lane and through lane alignments at intersection of 29 1/2 Road and Bunting Ave.

8. Show curb return and radius at north east corner of 29 1/2 Road and North Ave.

9. Show monument line on 29 1/32 road and dimension roadway widths from this line.

10. Submit pavement cross-sections at 100' maximum intervals on 29 1/2 Road. Show cross-slopes on asphalt widening.

SHEET C-6

11. Bunting Avenue is currently classified as a local residential street. Increase traffic generated by the Pace Store will necessitate reclassification of the street to "local commercial" standard. Since the existing street stub was not designed for commercial traffic, the existing pavement section will need to be removed and reconstructed full width to commercial standards from 29 1/2 Road to the west side of proposed curb cut. This standard requires 56' right-of-way, 40' pavement width and 7' curb, gutter and sidewalk on both sides.

    Right-of-way dedication and improvements guarantee will be required for Bunting west of the proposed access to Pace and for lot 3 frontage along 29 1/4 Road.

12. Objects obstructing sight distance at the north west corner of 29 1/2 Road and Bunting will have to be removed before access will be allowed on Bunting.

SHEET C-3 UTILITY PLAN

13. Location and details of irrigation pipe in 29 1/2 Road are not clear. Show location and elevation of siphon pipe in Bunting Ave.

14. Show detail for proposed grease/sand trap.

15. Show sizes of pipes connecting inlets to 36" R.C.P.

16. What is specification for P.V.C. drainage pipes?

17. Where does storm drain end on east side of Pace building?

18. How are roof drains connected to storm sewer pipe?

19. Is proposed type R inlet in North Avenue at same location on 36" pipe as existing inlet? What is purpose of note to provide 18" clearance between Sanitary Sewer and irrigation pipe at this inlet?

20. Why can't sewer services be connected to the sewer line in 29 1/2 Road instead of North Avenue?

21. Proposed fire hydrant does not meet city specs. Hydrant spacing and locations shall be per Fire Departments.

SHEET S-1

22. Show street light to be installed at each curb cut on North Avenue and Bunting Ave.

23. what are proposed truck access routes to and through the site? Are truck turning movements accommodated on these routes?

24. Show width of all parking lot aisles.

25. show where various pavement thicknesses are to be placed.

26. Show detail for and elevations of each island at the ends of parking rows.

ADDITIONAL ITEMS NEEDED:

27. Design for traffic signal at 29 1/2 and North Ave.

28. Landscaping plan revised to provide minimum sight distance at curb cuts.

xc: Jim Shanks
Kathy Portner
Dave Tontoli

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

October 23, 1991

Neva Lockhart
City of Grand Junction
City Hall
250 North 5th Street
Grand Junction, CO 81501

RECEIVED
OCT 2 4 1991

Dear Ms. Lockhart:

Enclosed is a Petition for Annexation for property on the northwest corner of 29 1/2 and North Avenue by Drychester Retail II which is to be read into the record by a special City Council meeting on October 28, 1991. Please insure this Petition is filed and distributed to the appropriate parties as soon as possible.

Sincerely,

Gregory B. Ham
Drychester Retail II, Inc.

cc: Mark K. Achen

PETITION FOR ANNEXATION

DRYCHESTER RETAIL II, INC. ANNEXATION

TO: CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

The undersigned Landowners (hereinafter collectively called Petitioner or Signer), in accordance with the provisions of Article 12 of Title 31, C.R.S., as amended, known as the Municipal Annexation Act of 1965, and the Constitution of the State of Colorado, Article II, Section 30, hereby petition the Mayor and City Council of the City of Grand Junction, Colorado, for annexation to the City of Grand Junction, Colorado, of the unincorporated territory situate and being in the County of Mesa and the State of Colorado, described on Exhibit A attached hereto and made a part hereof.

Petitioner further states to the Mayor and City Council of the City of Grand Junction, Colorado, as follows:

1. It is desirable and necessary that such territory be annexed to the City of Grand Junction, Colorado.

2. The requirements of sections 31-12-104 and 31-12-105, 12B C.R.S. (1986 & 1991 Supp.), exist or have been met, in that:

a. Not less than one-sixth (1/6) of the perimeter of the area proposed to be annexed will be contiguous with the existing boundaries of the City of Grand Junction, Colorado, at the time of the annexation.

b. A community of interest exists between the area proposed to be annexed and the City of Grand Junction, Colorado.

c. The area proposed to be annexed is urban or will be urbanized in the near future and the area to be annexed is integrated with or is capable of being integrated with the City of Grand Junction, Colorado.

d. In establishing the boundaries of the territory to be annexed, no land held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate, has been divided into separate parts or parcels without the written consent of the landowner or landowners thereof unless such tracts or parcels are separated by a dedicated street, road or other public way.

e. In establishing the boundaries of the area proposed to be annexed, no land held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate, comprising twenty (20) acres or more (which, together with buildings and improvements

situated thereon has a valuation for assessment in excess of $200,000.00 for ad valorem tax purposes for the year next preceding the annexation) is included in the area proposed to be annexed without the written consent of the landowner or landowners, unless such tract of land is situated entirely within the outer boundaries of the City of Grand Junction, Colorado, as they exist at the time of annexation.

f. No annexation proceedings have been commenced for the annexation of part or all of the territory proposed to be annexed to another municipality.

g. The territory proposed to be annexed by the City of Grand Junction, Colorado, or substantially this same area, has not been the subject of an election for annexation to the City of Grand Junction, Colorado, within the preceding twelve (12) months.

h. The territory proposed to be annexed is not presently a part of any incorporated city, city and county, or town.

i. The annexation of the area proposed to be annexed will not result in the detachment of area from any school district and the attachment of the same to another school district.

j. The annexation of the area proposed to be annexed will not have the effect of extending a municipal boundary of the City of Grand Junction, Colorado, more than three miles in any direction from any point of such municipal boundary within one year, except such three-mile limit may be exceeded if such limit would have the effect of dividing a parcel of property held in identical ownership and at least fifty percent of that parcel is within the three-mile limit.

k. In establishing the boundaries of the area proposed to be annexed, if a portion of a platted street or alley is to be annexed, the entire width of said street or alley is included within the area to be annexed.

l. Reasonable access will not be denied to landowners, owners of easements, or the owners of franchises, adjoining any platted street or alley to be annexed that will not be bordered on both sides by the City of Grand Junction, Colorado.

m. The mailing address of each Signer, the legal description of the land owned by each Signer and the date of signing of each signature are all shown on this Petition for Annexation.

n. No signature on this Petition for Annexation is dated more than one hundred eighty (180) days prior to the date of filing this Petition for Annexation with the Grand Junction City Clerk.

3. The Signer of this petition comprises more than fifty percent (50%) of the landowners in the area proposed to be annexed, and owns more than fifty percent (50%) of the area proposed to be annexed, excluding public streets and alleys and any land owned by the City of Grand Junction, Colorado, in accordance with the Constitution of the State of Colorado, Article II, Section 30.

4. Attached hereto and incorporated herein by this reference are four (4) prints of the annexation map containing a written legal description of the boundaries of the area proposed to be annexed and showing the boundaries of the area proposed to be annexed; the location of each ownership tract in unplatted land or, if part or all of the area is platted, the boundaries and the plat numbers of plots or of lots and blocks; and a drawing of the contiguous boundary of the City of Grand Junction, Colorado, and the contiguous boundary of any other municipality abutting the area proposed to be annexed.

5. Upon the Annexation Ordinance becoming effective, all lands within the area sought to be annexed shall become subject to the Municipal Laws of the State of Colorado pertaining to cities and to the Charter and all ordinances, resolutions, rules and regulations of the City of Grand Junction, Colorado, except for general property taxes of the City of Grand Junction, Colorado, which shall become effective on January 1, of the next succeeding year following passage of the Annexation Ordinance.

6. In the event that an Annexation Agreement providing, among other things, that the annexation shall become effective only upon the transfer of the subject property to Drychester Retail II, Inc. or its assigns, and satisfactory to both the Petitioner and the City of Grand Junction, Colorado, is not entered into and fully executed, and an ordinance approving zoning of the area described in Exhibit A acceptable to Petitioner is not adopted, on the date of adoption of the ordinance to effectuate the annexation contemplated in this Petition for Annexation, the Petitioner may withdraw its signature from this Petition for Annexation, the effect of which shall be as if no Petition had ever been executed and filed with the City of Grand Junction, Colorado.

Therefore, your Petitioner respectfully requests that the City Council of the City of Grand Junction, Colorado, approve the annexation of the area proposed to be annexed.

Date: October __, 1991

Emanuel G. Pavlakis

Name: Emanuel G. Pavlakis
Address: 5670 E. Evans
Denver, Colo. 80222

Attorney in fact for Owners of land described as Parcel Nos. 1, 2 and 3, in Exhibit A

Date: October __, 1991

UNITED BANK OF GREELEY, N.A.

By: _____
Name: Gregory B. Ham
Title: Attorney In Fact
Address: 1700 Lincoln, 8th Floor
Denver, Colorado 80274-8722
Owner of land described as Parcel No. 4 in Exhibit A
C/O: Thad Ritter

Date: October __, 1991

DALY CONSTRUCTION, INC., a Colorado corporation

By: _____
Name: Gregory B. Ham
Title: Attorney In Fact
Address: 5420 West Hallum Street
Aspen, Colorado 81611
Owner of land described as Parcel No. 5 in Exhibit A
C/O: Tom Daly

AFFIDAVIT OF CIRCULATOR

The undersigned, being of lawful age who, being first duly sworn upon oath, deposes and says:

That he was the circulator of the foregoing Petition for Annexation of lands to the City of Grand Junction, Colorado, consisting of five (5) pages, including this page, and that each signature thereon was witnessed by your affiant and is the true signature of the person whose name it purports to be.

Circulator

STATE OF COLORADO)
) ss
COUNTY OF ARAPAHOE)

The foregoing Affidavit of Circulator was subscribed and sworn to before me this 23 day of October, 1991, by GREGORY G. HAM.

WITNESS my hand and official seal.

My commission expires: My Commission Expires 08/07/1993

Notary Public
7995 E. PRENTICE AVE
ENGLEWOOD CO 80111

EXHIBIT A
to Petition for Annexation

PROPERTY TO BE ANNEXED

The following parcels of real property situated in the County of Mesa, State of Colorado:

Parcel No. 1.

Lots 1 through 7, Block 4,
PALACE ESTATES SUBDIVISION.

Parcel No. 2.

Lots 1 through 7 and Lots 11 through 13, Block 1,
Lots 1 through 8, Block 2, and
Lots 1 through 6, Block 3,
PALACE ESTATES SUBDIVISION.

Parcel No. 3.

The North 920 feet of the E½ W½ SE¼ SW¼ of Section 8, Township 1 South, Range 1 East of the Ute Meridian;
AND
The N½ W½ SE¼ SW¼ of Section 8, Township 1 South, Range 1 East of the Ute Meridian;
EXCEPT tract conveyed to Mesa County by instrument recorded July 20, 1965 in Book 885 at page 796 for road and utility purposes over the West 25 feet.

Parcel No. 4

Beginning at the Southeast corner of the SW 1\4 of Section 8, Township 1 South, Range 1 East of the Ute Meridian; thence West 332.50 feet; thence North 400 feet; thence East 332.50 feet; thence South 400 feet to the Point of Beginning;
EXCEPT the East 30 feet conveyed to County of Mesa by instrument recorded June 25, 1969 in Book 937 at Page 559;
AND EXCEPT the South 40 feet conveyed to The Department of Highways, State of Colorado by instrument recorded May 4, 1966 in Book 779 at Page 175, Mesa County, Colorado.

Parcel No. 5

The South 400 feet of the East 3/4 of the SE 1/4 SW 1/4 of Section 8, Township 1 South, Range 1 East of the Ute Meridian;
EXCEPT the East 332.50 feet thereof;
AND EXCEPT the South 40 feet conveyed to the Department of Highways, State of Colorado by instruments recorded in Book 779 at pages 175 through 179, inclusive and in Book 781 at page 209.

Drychester Retail II Annexation

List of Property Owners

Parcel No. 1.

Lots 1 through 7, Block 4
PALACE ESTATES SUBDIVISION.

Owners: CFP Estate, Ltd.
Paul Gugenheim
Jack L. Strauss
Richard J. Strauss
A. Herbert Cohen
Arthur M. Schwartz Employees Pension
& Profit Sharing Plan

Mailing
Address: c/o Pavlakis Co.
5670 East Evans Avenue
Denver, Colorado 80222
Attn: Emanuel G. Pavlakis

Parcel No. 2.

Lots 1 through 7 and Lots 11 through 13, Block 1,
Lots 1 through 8, Block 2, and
Lots 1 through 6, Block 3,
PALACE ESTATES SUBDIVISION.

Owners: CFP Estate, Ltd.
Paul Gugenheim
Jack L. Strauss
Arthur M. Schwartz Employees Pension
& Profit Sharing Plan

Mailing
Address: c/o Pavlakis Co.
5670 East Evans Avenue
Denver, Colorado 80222
Attn: Emanuel G. Pavlakis

Parcel No. 3.

The North 920 feet of the E½ W½ SE¼ SW¼ of Section 8, Township 1 South, Range 1 East of the Ute Meridian;
AND
The N½ W½ SE¼ SW¼ of Section 8, Township 1 South, Range 1 East of the Ute Meridian;
EXCEPT tract conveyed to Mesa County by instrument recorded July 20, 1965 in Book 885 at page 796 for road and utility purposes over the West 25 feet.

Owner: Las Casas, Ltd.

Mailing
Address: c/o Pavlakis Co.
5670 East Evans Avenue
Denver, Colorado 80222
Attn: Emanuel G. Pavlakis

Parcel No. 4

Beginning at the Southeast corner of the SW 1\4 of Section 8, Township 1 South, Range 1 East of the Ute Meridian; thence West 332.50 feet; thence North 400 feet; thence East 332.50 feet; thence South 400 feet to the Point of Beginning;
EXCEPT the East 30 feet conveyed to County of Mesa by instrument recorded June 25, 1969 in Book 937 at Page 559;
AND EXCEPT the South 40 feet conveyed to The Department of Highways, State of Colorado by instrument recorded May 4, 1966 in Book 779 at Page 175, Mesa County, Colorado.

Owner: United Bank of Greeley, N.A.

Mailing
Address: 1700 Lincoln, 8th Floor
Denver, Colorado 80274-87
Attn: Thad Ritter

Parcel No. 5

The South 400 feet of the East 3/4 of the SE 1/4 SW 1/4 of Section 8, Township 1 South, Range 1 East of the Ute Meridian;
EXCEPT the East 332.50 feet thereof;
AND EXCEPT the South 40 feet conveyed to the Department of Highways, State of Colorado by instruments recorded in Book 779 at pages 175 through 179, inclusive and in Book 781 at page 209.

Owner: Daly Construction, Inc.

Mailing
Address: 520 West Hallam Street
Aspen, Colorado 81611
Attn: Tom Daly

CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

October 25, 1991

City of Grand Junction
c/o Trammell Crow Company
7995 East Prentice Ave.
Englewood, Colorado
80111-2716

Attention: Mr. Mark Sidell

Subject: PACE Warehouse Development
North Ave. & 29 1/2 Mile Road
Grand Junction, Colorado
Job No. 18,248

To Whom it May Concern:

CTL/Thompson, Inc. has been retained by Trammell Crow Company to perform Geotechnical and Environmental Site Assessment studies for the site located northwest of the intersection of North Ave. and 29 1/2 Mile Road in Grand Junction, Colorado. We understand a preliminary planning/zoning review is scheduled for the planned development of this site for a PACE Warehouse on Monday, October 28, 1991. Mr. Sidell has requested we prepare this letter describing the status of our studies and the anticipated completion dates of our reports.

Our Geotechnical Investigation was started Tuesday, October 22 when we initiated drilling of exploratory borings. We anticipate this investigation will satisfy City requirements for a "Geology Report/Soils Report" and "Subsurface Soils Investigation". Drilling was completed Thursday, October 24. We anticipate our report will be completed by about November 7 and plan to provide foundation design criteria during the week of October 28. Subsoil conditions found in borings consisted of 25 to 30 feet of stiff to soft clays underlain by sand and gravel. The clays became more soft near the free groundwater measured at depths of about 20 feet. We anticipate foundation systems appropriate for these conditions will be driven pipe piling or, possibly, footing or pad-type systems. Either of these foundations is very typical for this part of Grand Junction based upon our experience. At this time, we anticipate surface or subsurface soil conditions will not present unusual construction conditions for the planned development of this site from a geotechnical perspective.

Our Environmental study will involve research of the history of use of this site and nearby sites to attempt to determine whether there is reason to suspect toxic or hazardous contamination of the soils or groundwater below the site. We began this process Monday, October 21 and anticipate our report will be completed by November 7, 1991. As part of our work, we have contacted the Mesa County Health Department and will contact the Colorado Department of Health to determine if there is evidence of unusual gamma radiation conditions on the site caused by historical dumping of radium mill tailings on or near the site. We have discovered documents which indicate State Department of Health radiation surveys have been conducted on a portion of the site. The site was excluded from the Department of Energy Uranium Mill Tailings Remedial Action program (UMTRA) because measured Gamma radiation was below the acceptance criteria. The documents indicate tailing materials have been removed from a portion of the site. Our work will include a Gamma radiation survey of the property to indicate present radiation conditions. If requested, we can provide a letter with results of the radiation survey during the week of October 28.

We hope this letter provides information required at this stage of the zoning/planning process. Please call if you have questions.

Very truly yours,

CTL/Thompson, Inc.

by: 

Ronald M. McOmber, P.E.
Associate

rmm
3 copies sent

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

October 25, 1991

Mr. Bennett Boeschenstein, AICP
Director
Community Development Department
CITY OF GRAND JUNCTION
250 North 5th Street
Grand Junction, Colorado 81501

RE: Proposed Shopping Center
Northwest Corner 29 1/2 Road and North Avenue

Dear Bennett,

Attached please find copies of the three fully executed Land Contracts for the purchase of the entire 30 acre site outlined in the land survey plat.

Seller	Sales Price
Daly Construction, Inc.	$600,000.00
United Bank of Greeley	$184,000.00
Pavlakis Company	$660,000.00
Total Value:	$1,444,000.00

The proposed shopping center involves only 14 of 30 acres and therefore is valued at $673,867.00.

As discussed during our pre-application conference, please accept these executed Contracts as documentation of the value of the subject property for the purpose of calculating action sheet Item D, the developer's obligation under application for open space.

Thank you for your cooperation.

Sincerely,

DRYCHESTER RETAIL II, INC.

Mark H. Sidell
Marketing Principal

MHS:dld
enclosures

Original
Do NOT Remove
From Office

770 91

BRAGDON & ASSOCIATES, INC.
Traffic Engineering Consultants

Valley Federal Plaza
Suite 825
(303) 241-2140

P.O. Box 1292
Grand Junction, CO
81502-1292

October 28, 1991

Mr. Mark Sidell
Trammell Crow Company
7995 E. Prentice Ave., Suite 300
Englewood, CO 80111

REF: North Avenue Marketplace
Grand Junction, Colorado

Dear Mr. Sidell:

As we discussed, I am in the process of finalizing the traffic analysis for your North Avenue Marketplace development. The study should be completed by November 1, 1991.

Again, I appreciate the opportunity to work with you on this very important project.

Sincerely,

James A. Bragdon, Jr., P.E.
President

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(303) 244-1430 FAX (303) 244-1599

October 28, 1991

Mark H. Sidell
Marketing Principal
7995 East Prentice Avenue, Suite 300
Englewood, CO 80111-2716

Dear Mr. Sidell:

In calculating the development review fees for the rezone and final plat for the development at the north-west corner of 29 1/2 Road and North Avenue I forgot to add in the acreage fee which is an additional $350. Please remit a separate check for that amount. I'm sorry for the inconvenience.

Sincerely,

Katherine M. Portner

Katherine M. Portner
Senior Planner

DEVELOPMENT APPLICATION

Community Development Department
250 North 5th Street Grand Junction, CO 81501
(303) 244-1430

Receipt
Date 10/28/91
Rec'd By
File No. #70 91

We, the undersigned, being the owners of property situated in Mesa County, State of Colorado, as described herein do hereby petition this:

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
[X] Subdivision Plat/Plan	[X] Minor [ ] Major [ ] Resub	14 acres	NW corner of North Ave & 29 1/2 Rd	Commercial & R-4 County	Large Retail proposed
[X] Rezone		14 acres	"	From: R-4 To: C-I	
[ ] Planned Development	[ ] ODP [ ] Prelim [ ] Final				
[ ] Conditional Use					
[X] Zone of Annex		"	"	C-I	"
[ ] Text Amendment					
[ ] Special Use					
[ ] Vacation					[ ] Right-of-Way [ ] Easement

[X] PROPERTY OWNER [X] DEVELOPER [X] REPRESENTATIVE

Name	Name	Name
	Drychester Retail II, Inc.	Slack/Ellerman Architects, P.C.
Address	Address	Address
	7995 E. Prentice Ave., Ste. 300	7935 E. Prentice Ave., #103
City/State/Zip	City/State/Zip	City/State/Zip
	Englewood, CO 80111-2716	Englewood, CO 80111
Business Phone No.	Business Phone No.	Business Phone No.
	(303) 220-0900	(303) 220-8900

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all hearings. In the event that the petitioner is not represented, the item will be dropped from the agenda, and an additional fee charged to cover rescheduling expenses before it can again be placed on the agenda.

X _____ October 25, 1991

Signature of Person Completing Application — Date

William R. Rothacker, Authorized Agent
Drychester Retail II, Inc., a Colorado corporation

X _____

See attached signature page

Signature of Property Owner(s) - Attach Additional Sheets if Necessary

Date: October 25, 1991

Emanuel G. Pavlakis

Name: Emanuel G. Pavlakis
Address: 3670 E Evans Ave
Denver, Colo 80222
Attorney in fact for Owners of land described as Parcel Nos. 1, 2 and 3, in Exhibit A

Date: October 25, 1991

UNITED BANK OF GREELEY, N.A.

By: Gregory B. Ham
Name: Gregory B. Ham
Title: Attorney in Fact
Address: 1700 Lincoln, 8th Floor
Denver, Colorado 80274-8722
Owner of land described as Parcel No. 4 in Exhibit A

Date: October 25, 1991

DALY CONSTRUCTION, INC., a Colorado corporation

By: Gregory B. Ham
Name: Gregory B. Ham
Title: Attorney In Fact
Address: 5420 West Hallum Street
Aspen, Colorado 81611
Owner of land described as Parcel No. 5 in Exhibit A

#70 91

B

IMPACT STATEMENT/PROJECT NARRATIVE
NORTH AVENUE MARKETPLACE

1. Proposal:

   Developers (Drychester Retail II, Inc., a Colorado corporation, an affiliate of Trammell Crow Company) proposes:

   a. Annexation of approximately 30 acres into the City of Grand Junction.

   b. Establishment of approximately 14 acres of the above parcel from C and R-4 County zoning to C-1 City zoning.

   c. Final approval of site plan for approximately 14 acres of the parcel for a commercial shopping center of approximately 150,000 square feet.

2. The Proposal is located at:
   North Avenue Marketplace
   NWC 29 1/2 Road and North Avenue
   Grand Junction, Colorado 81501

3. The proposal anticipates immediate development of the commercial shopping center upon receipt of necessary final approvals. The remaining parcel will be addressed through separate site plan approvals in the future.

4. The annexation affects all 30 acres; but the site plan approval affects the 14 acres only.

5. The proposed commercial shopping center is compatible with the surrounding areas. The commercial abuts existing commercial zoning to the west which extends the full depth of the proposed commercial center. The remaining vacant land controlled by the developer abuts one existing townhome development (Palace Estates) which is presently bordered by vacant land, existing 29 1/2 Road; and Bunting Avenue. Proposed additional buffering in the site plan, via landscaping and screening, will be provided.

The site is in an urbanized area and this proposal will be consistent with or exceed quality levels in the adjacent areas.

6. Services to be provided will be traditional public services including but not limited to fire protection, police and safety as well as utility services. Private services will include maintenance of the common areas, landscaping and structures.

7. Special considerations include the following:

   a. Major building is expected to be PACE store and 100% pre-leased. No vacancy will exist as the outparcel is not intended to be built until the user is finalized.

   b. PACE will be major source of jobs (170 minimum) and sales tax revenues to the City of Grand Junction (are estimated to be $3.8 million sales tax over 5 years).

8. This proposal is consistent with stated long term annexation plans and land use for the urbanized Grand Junction area.

Hershl Pilcher
Julius Poole
P.O. Box 99
Rangely, CO 81648

Eldion W. Reeves
Olive J. Reeves
P.O. Box 1602
Grand Junction, CO 81502

Elsie Ragman
P. Magnan & M. Wallbeck
516 Morning Glory Lane
Grand Junction, CO 81503

Howard J. Roland
1208 Main Street
Grand Junction, CO 81501

Rose M. Turnbull
1640 Balsam Ct.
Grand Junction, CO 81501

Lee V. James
Patsy James
515 29 1/4 Rd.
Grand Junction, CO 81504

Gilbert Frontella
Jon E. Julius
P.O. Box 50
Silt, CO 81652

Louise Wright
Wesley Wright
7969 Rodeo Dr.
Las Vegas, NV 89123

Todd T. Soper
518 Morning Glory Lane
Grand Junction, CO 81504

Howard J. Roland
1208 Main Street
Grand Junction, CO 81501

Harvey Bradley
Alice Sturtevant
1097 Wallace St.
Fruita, CO 81521

Grace Roberson
517 29 1/4 Rd.
Grand Junction, CO 81504

Janice A. Kay
919 Bennett Avenue
Glenwood Springs, CO 81601

Randi A. Mantell
Irma Mantell
512 Morning Glory Lane
Grand Junction, CO 81504

Rolin S. Franklin
520 Morning Glory Ln.
Grand Junction, CO 81504

Gilbert Frontella
Jon E. Julius
P.O. Box 50
Silt, CO 81652

Lillian Robertson
Virgil D. Robertson
511 29 1/2 Rd.
Grand Junction, CO 81504

Irene Morgan
522 Morning Glory Ln.
Grand Junction, CO 81504

Howard J. Roland
1208 Main Street
Grand Junction, CO 81501

Cheryl A. Bambino
512 S. Morning Glory Lane
Grand Junction, CO 81504

Edward Ryken
E.R. Ryken
519 29 1/4 Rd.
Grand Junction, CO 81504

Virgil D. Green
506 Morning Glory
Grand Junction, CO 81504

Bruce E. Pitts
514 Morning Glory Lane
Grand Junction, CO 81504

Fred M. Mumby
P.O. Box 40548
Grand Junction, CO 81504

Victor W. Perimo
Trustee
606 Viewpoint Dr.
Grand Junction, CO 81504

Dee Dee Warren
513 29 1/2 Road
Grand Junction, CO 81504

Leon G. Larson
L.A. Larson
524 1/2 Morning Glory
Grand Junction, CO 81504

Paul Weaver
Darla Shearea
512 29 1/4 Rd.
Grand Junction, CO 81504

Edward D. Ryken
E. R. Ryken
519 29 1/4 Rd.
Grand Junction, CO 81504

Rachel Stubler
515 29 1/2 Rd., Unit 10
Grand Junction, CO 81504

Alfred W. Ward
515 29 1/4 Road
Grand Junction, CO 81504

Sheila A. Grominges
515 29 1/2 Rd. - No. 1
Grand Junction, CO 81504

St. Nicholas Hellenic Fdn.
c/o Nikki Blackburn
3585 N. 12th St.
Grand Junction, CO 81504

F. M. Wilkerson
c/o Stan L. Willhoite
68 Cliffwood Dr. M P R
Belton, TX 76513

M. F. Mavrakis
522 Otis Ct.
Grand Junction, CO 81505

Grand Jct. Properties, Inc.
c/o Service Corp Int'l
P.O. Box 16290
Houston, TX 77222

F. M. Wilderson
c/o Stan L. Willhoite
68 Cliffwood Dr. M P R
Belton, TX 76513

Russell A. Brown
Sandra L. Brown
165 Vista Dr.
Glenwood Springs, CO 81601

Dewey T. Smouse
Patricia A. Smouse
1430 Caballo Ln.
Hosque Farms, NM 87068

School District 51
Bookcliff Jr. High
2115 Grand Avenue
Grand Junction, CO 81501

Elizabeth C. Armenta
515 29 1/2 Rd.
Grand Junction, CO 81504

Alex L. Brewer
John Frei Trustees
11900 W. 46th Ave.
Wheatridge, CO 80033

Lauren P. Leasure
Julia A. Leasure
2922 Elm Avenue
Grand Junction, CO 81504

Jacqueline S. Cry
Charles Cry
515 29 1/2 Rd., Unit S
Grand Junction, CO 81504

Alex L. Brewer
John Frei Trustees
11900 W. 44th Ave.
Wheatridge, CO 80033

Arthur Kuen
Elfriede Kuen
P.O. Box 8983
Aspen, CO 81612

Donald J. Sanders
Doris L. Sanders
515 29 1/2 Rd.
Grand Junction, CO 81504

Grand Mattress House of Sleep
c/o Ronnie Tannery
2915 North Ave.
Grand Junction, CO 81504

Ilene S. Marx
2919 Sandra Ave.
Grand Junction, CO 81504

Sun Savings and Loan Assoc.
P.O. Box 1089
Parker, CO 80154

Alex Brewer
John Frei Trustees
11900 W. 44th Ave.
Wheatridge, CO 80033

James L. Riddle
Nancy L. Riddle
2919 1/2 Sandra Ave.
Grand Junction, CO 81504

Jack L. Grunwald
515 29 1/2 Rd. - No. 8
Grand Junction, CO 81504

Alex Brewer
John Frei Trustees
11900 W. 44th Ave.
Wheatridge, CO 80033

Landmark Mortgage Co.
300 W. 11th
Kansas City, MO 64105

David W. Maile
P.O. Box 1933
Grand Jct., CO 81502-1933

David W. Maile
P.O. Box 1933
Grand Jct., CO 81502-1933

David W. Maile
P.O. Box 1933
Grand Jct., CO 81502-1933

David W. Maile
P.O. Box 1933
Grand Jct., CO 81502-1933

David W. Maile
P.O. Box 1933
Grand Jct., CO 81502-1933

David W. Maile
P.O. Box 1933
Grand Jct., CO 81502-1933

Boettcher & Co., Inc.
2954 North Avenue
Grand Junction, CO 81501

Boettcher & Co., Inc.
2954 North Avenue
Grand Junction, CO 81501

Homar Investment, Inc.
2288 Plazuela Street
Carlsbad, CA 92009

Homar Investment, Inc.
2288 Plazuela Street
Carlsbad, CA 92009

Walter P. Fleisher
Ann Fleisher
P.O. Box 7111
Van Nuys, CA 91409

Mesa United Bank of Grand Jct.
c/o U-Haul Real Estate Co.
2721 N. Central, Ste. 700
Phoenix, AR 85004

Walter P. Fleisher
Ann Fleisher
P.O. Box 7111
Van Nuys, CA 91409

School District 51
Vocational Center
6115 Grand Avenue
Grand Junction, CO 81501

Valley Federal S & L Assoc.
P.O. Box 400
Grand Junction, CO 81502

James A. Maguire
Donna J. Maguire
1205 Ford Street
Colorado Springs, CO 80915

James A. Maguire
Donna J. Maguire
1205 Ford Street
Colorado Springs, CO 80915

Freeway Properties
P.O. Box 2067
Grand Junction, CO 81502

James A. Maguire
Donna J. Maguire
1205 Ford Street
Colorado Springs, CO 80915

Allan H. Dalee
Mary C. & Irma Jean Allen
925 S. 11th Street
Van Nuys, CO 91409

Walter P. Fleisher
Ann Fleisher
P.O. Box 7111
Van Nuys, CA 91409

F

Covenants/Restrictions

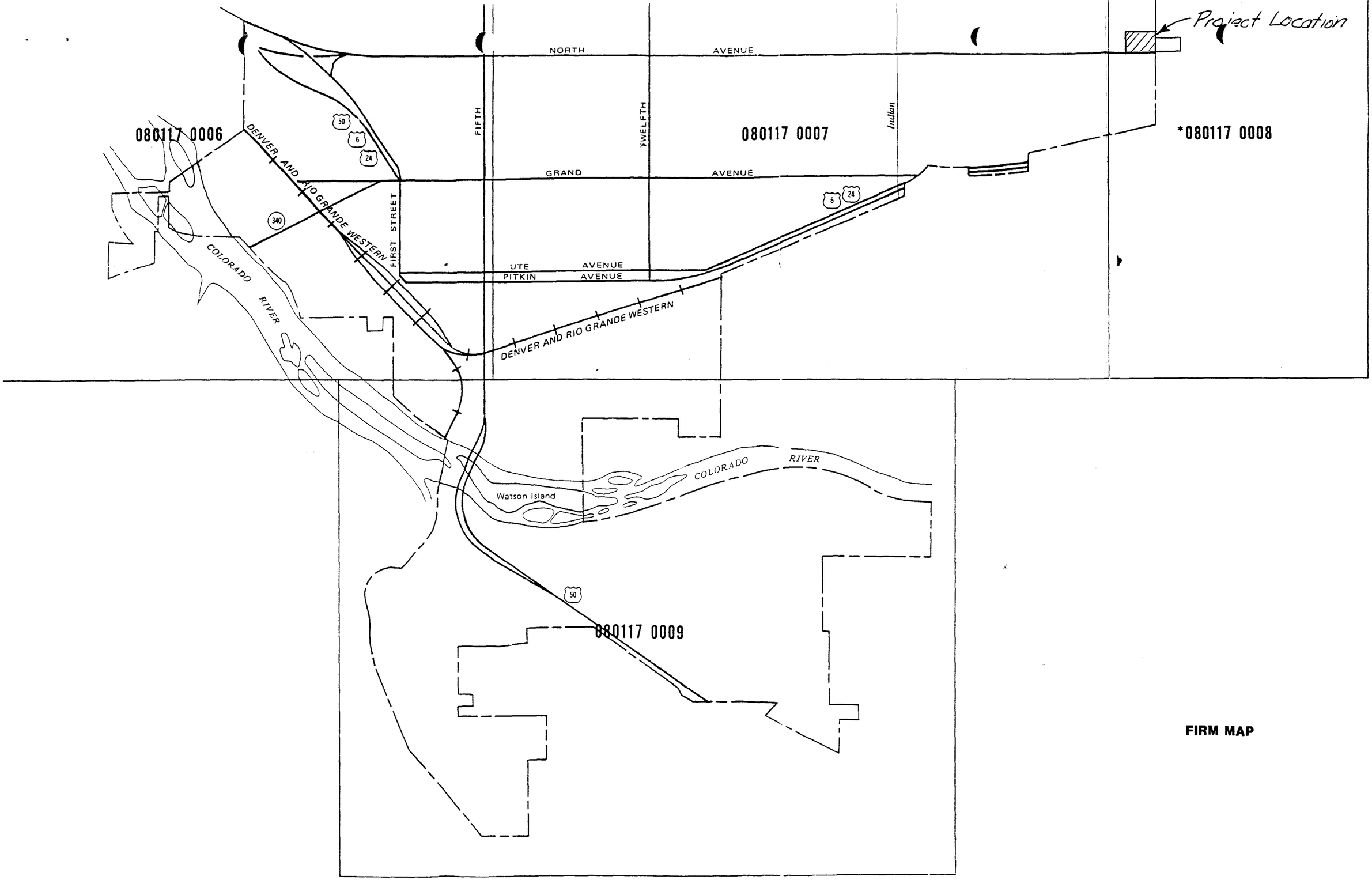
At this time there are no covenants or restrictions associated with the site.

I

FLOOD ANALYSIS

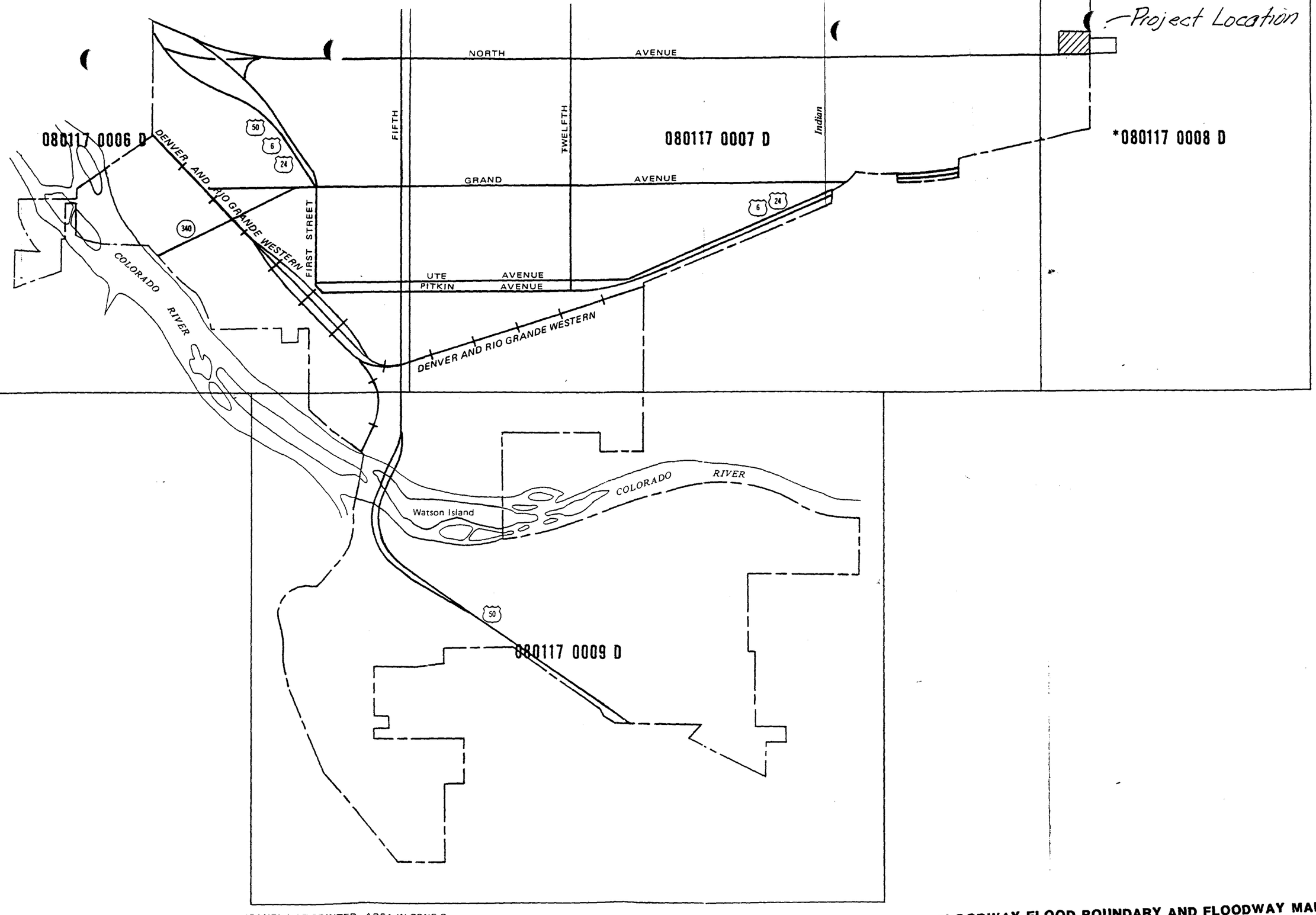
The North Avenue Marketplace is located at the northwest corner of North Avenue and 29 1/2 Road. It is in the SW1/4 of Section 8, Township 1 South, Range 1 East, of the Ute Meridian, Mesa County, Colorado. The project is located in an area of minimal flood hazard and is in zone C. This data is from the FEMA maps: FIRM Map Index, City of Grand Junction, Colorado, Mesa County and Floodway Flood Boundary and Floodway Map, Community Panel Numbers 080117 0001-0009.

870 91



*PANEL NOT PRINTED - AREA OF MINIMAL FLOOD HAZARDS

FIRM MAP



*PANEL NOT PRINTED - AREA IN ZONE C

FLOODWAY FLOOD BOUNDARY AND FLOODWAY MAP

BRAGDON & ASSOCIATES, INC.
Traffic Engineering Consultants

Valley Federal Plaza
Suite 825
(303) 241-2140

P.O. Box 1292
Grand Junction, CO
81502-1292

November 1, 1991

TRAFFIC ACCESS AND IMPACT STUDY

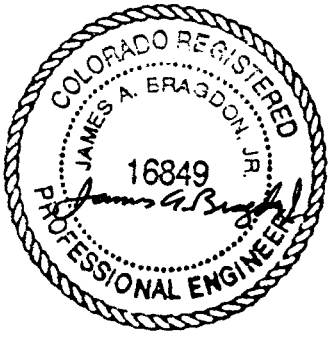
* NORTH AVENUE MARKETPLACE *
GRAND JUNCTION, COLORADO

Prepared For:

TRAMMELL CROW COMPANY

Prepared By:

James A. Bragdon, Jr., P.E.



PURPOSE

The purpose of this study is to assess the effects that the NORTH AVENUE MARKETPLACE will have on the surrounding roadway network, and to determine what provisions are needed for safe and efficient site access and traffic flow.

SITE DESCRIPTION

NORTH AVENUE MARKETPLACE is located in Grand Junction, Colorado, on the northwest corner of North Avenue and 29½ Road. It is bordered on the north by Bunting Avenue and on the west by vacant land. The site contains 13.70 acres and will be occupied by a PACE store (136,276 SF) and a retail store (12,000 SF). There will be 998 parking spaces. There are four proposed access points for the site: "A" and "B" from North Avenue, "C" from Bunting Avenue, and "D" from 29½ Road. The site location and the access points are shown on the AREA MAP, page 2.

EXISTING ROADWAYS:

North Avenue will provide the main east-west access to the site. It is a divided four-lane road with random median openings and left turn bays. It is classified as a Major Arterial and a Category 4 state highway (U.S. 6).

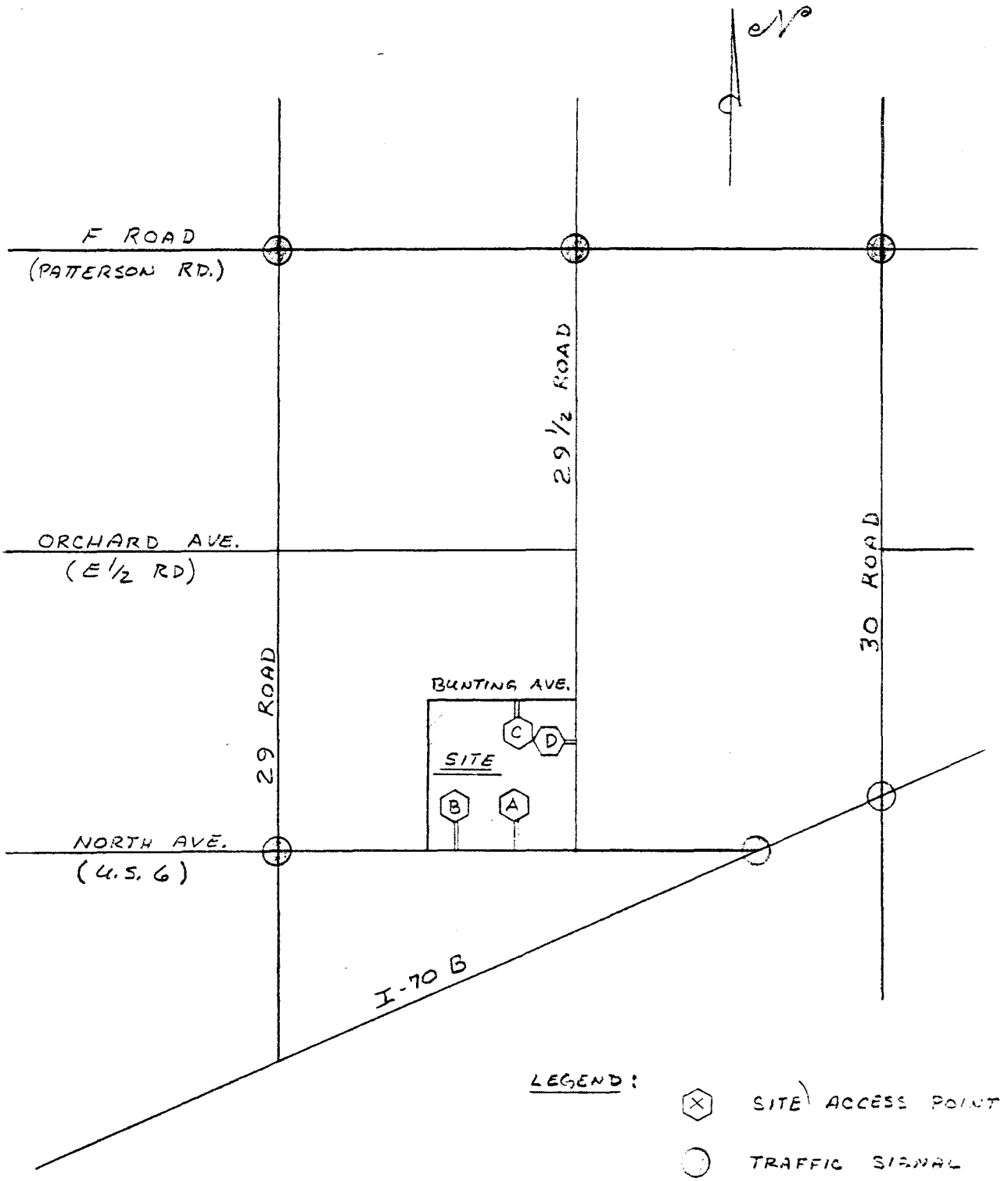
The north-south access to the site will be from 29½ Road, which is a two-lane collector street. The T-intersection of 29½ Road and North Avenue is not signalized, but the southbound approach on 29½ Road has been widened to accommodate right and left turn lanes.

Bunting Avenue will provide access to the north side of the site. It is a two-lane local street that is stubbed out about 120 feet west of 29½ Road.

There are six existing curb cuts on North Avenue, one on 29½ Road, and none on Bunting Avenue.

TRIP GENERATION

The ITE TRIP GENERATION (5th. Edition) was used to project the P.M. Peak Hour trips that will be generated by the development. The analysis can be found on page 3. A total of 525 trip ends will be generated, with 272 trips IN and 253 trips OUT during the P.M. Peak Hour.



AREA MAP

(NOT TO SCALE)

*** TRIP GENERATION ***

GENERATOR:

PACE -- 136,276 SF = 136.276 KSF of GFA

PAD (Retail) -- 12,000 SF = 12.0 KSF of GFA

REFERENCE: ITE TRIP GENERATION (5th Edition)

TRIP GENERATION RATE: (Weekday, P.M. Peak Hour of Adj. St. Traffic)

PACE (Discount Store - ITE Land Use Code 815)

Avg. Trip Rate: 3.43 Trip Ends/1,000 SF of GFA

PAD (Retail - ITE Land Use Code 810)

Avg. Trip Rate: 4.80 Trip Ends/1,000 SF of GFA

TRIP GENERATION (P.M. Peak Hour):

PACE: (136.276 KSF)(3.43 Trips/KSF) = 467.4

PAD: (12.0 KSF)(4.80 Trips/KSF) = 57.6

TOTAL: 525.0 Trip Ends

DIRECTIONAL DISTRIBUTION (P.M. Peak Hour):

From the ITE TRIP GENERATION:

PACE : 52% IN, 48% OUT

PAD : 50% IN, 50% OUT

Directional Distribution:

	IN	OUT	TOTAL
PACE:	243	224	467
PAD :	29	29	58
TOTAL:	272	253	525 Trip Ends

TRIP DISTRIBUTION

It is assumed, based on the characteristics of the area and the surrounding roadway network, that 50% of the trips will access the site from the west on North Avenue, 29% will come from the east on North Avenue, and 21% will come from the north on 29½ Road. The trips are distributed to the four site access points as shown in Figure A, page 5.

TRAFFIC ASSIGNMENTS

Using the trip generations and distributions, the site generated traffic was assigned to the four site access points for the P.M. Peak Hour, as shown in Figure B, page 6.

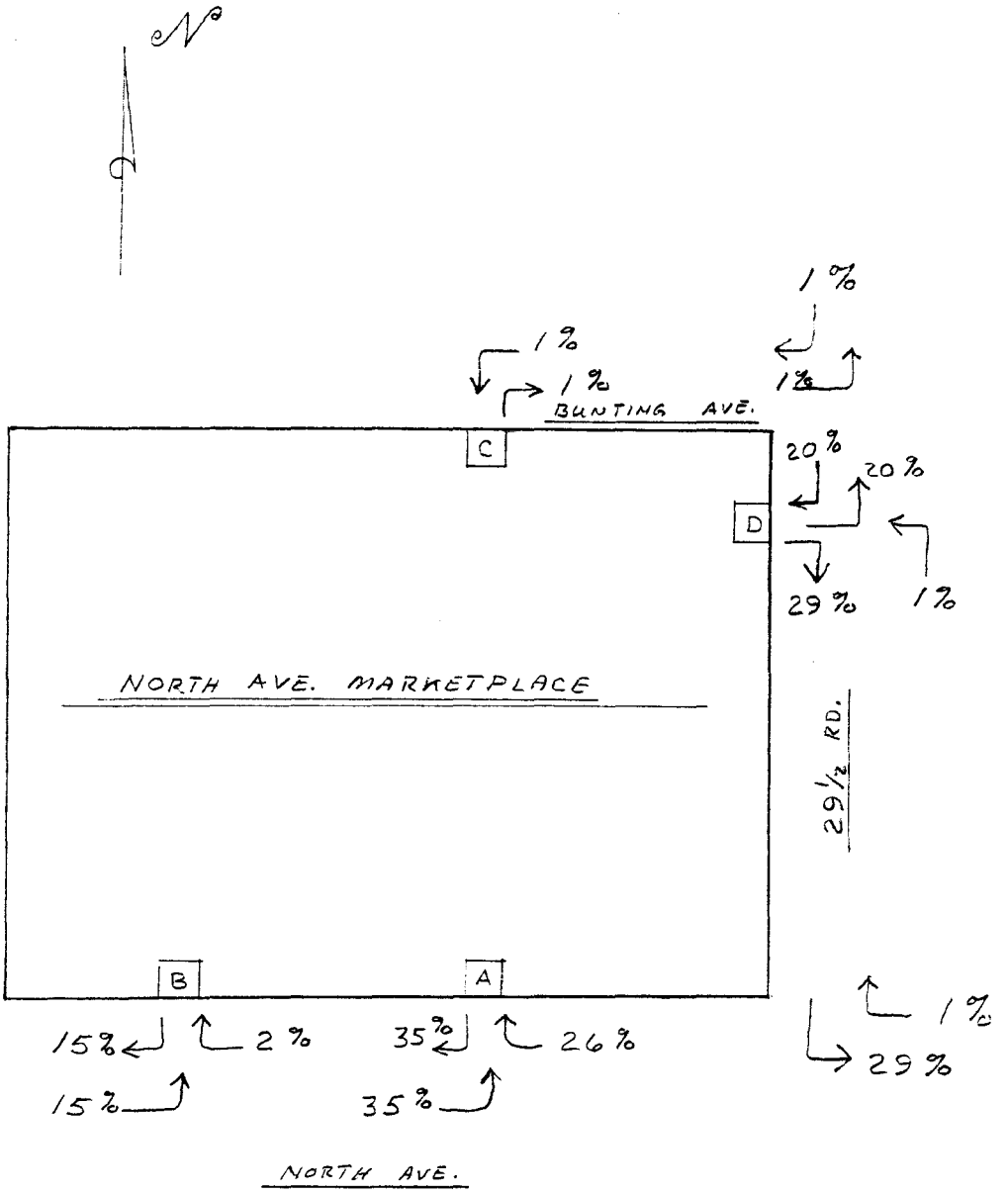
CAPACITY ANALYSIS

Because of historical problems with left turns onto North Avenue, a capacity analysis was done for site access point "A", assuming all turns were permitted. The results indicate that the left turns from access point "A" onto North Avenue would operate at a Level Of Service (LOS) "E". This would cause internal congestion and may create potential safety problems. The same operational problems would exist for the left turns exiting onto North Avenue at access point "B".

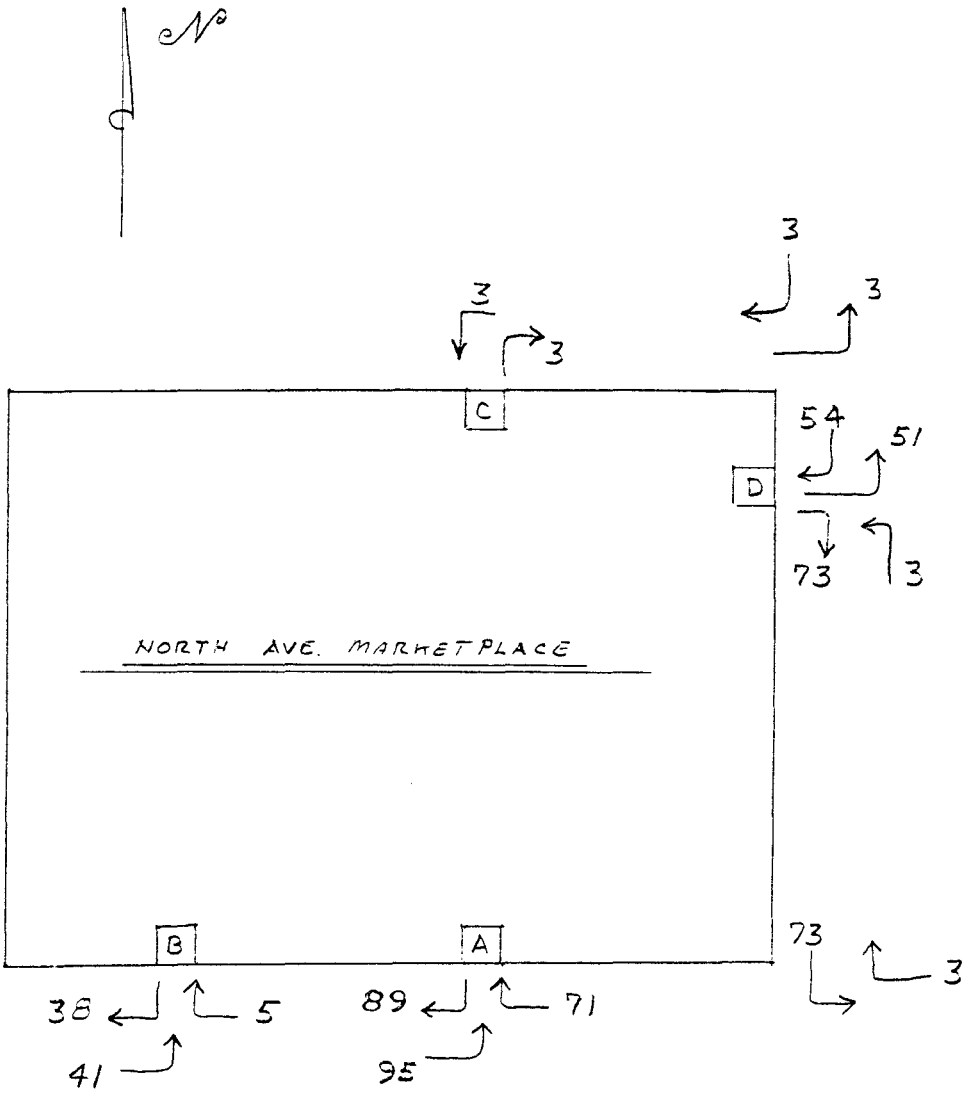
The eastbound left-turn movements from North Avenue into access points "A" and "B", as well as the westbound right-in/right-out movements will operate at a LOS "A". These turns should not create any operational problems on North Avenue.

A capacity analysis was also performed for the T-intersection of North Avenue and 29½ Road. Existing traffic volumes produced a LOS "E" for southbound left-turns from 29½ Road onto North Avenue. When site-generated traffic is added, the LOS drops to "F". Congestion and potential safety problems could also exist at this intersection.

The potential congestion and safety problems that are created by left turns onto North Avenue are a result of a lack of adequate gaps in traffic on North Avenue.



TRIP DISTRIBUTION



SITE GENERATED TRAFFIC

P.M. PEAK HOUR

(4:30 - 5:30 P.M.)

RECOMMENDATIONS

NORTH AVENUE:

The median openings and left-turn storage bays need to be adjusted to accommodate site access points "A" and "B", as well as the access points on the south side of North Avenue.

ACCESS POINTS "A" AND "B":

The deceleration lane for westbound traffic on North Avenue into access point "A" should provide for 50 feet of storage and 180 feet of taper. This is in accordance with Section 4.8.1.f of THE STATE HIGHWAY ACCESS CODE. Any additional length would place the beginning of the taper too close to the 29½ Road intersection.

Because of the previously addressed problems with left turns from the site onto North Avenue, it is recommended that the left turn movements at access points "A" and "B" be physically prohibited with raised islands. Right turns into and out of the site for westbound North Avenue traffic, as well as left turns into the site for eastbound North Avenue traffic create no operational problems and should be permitted.

The acceleration lane from access point "A" for westbound traffic onto North Avenue should be extended to access point "B" to provide it with a deceleration lane.

Because of limited space, an acceleration lane for right-turn traffic out of access point "B" would not be feasible. This movement can be safely controlled with a stop sign.

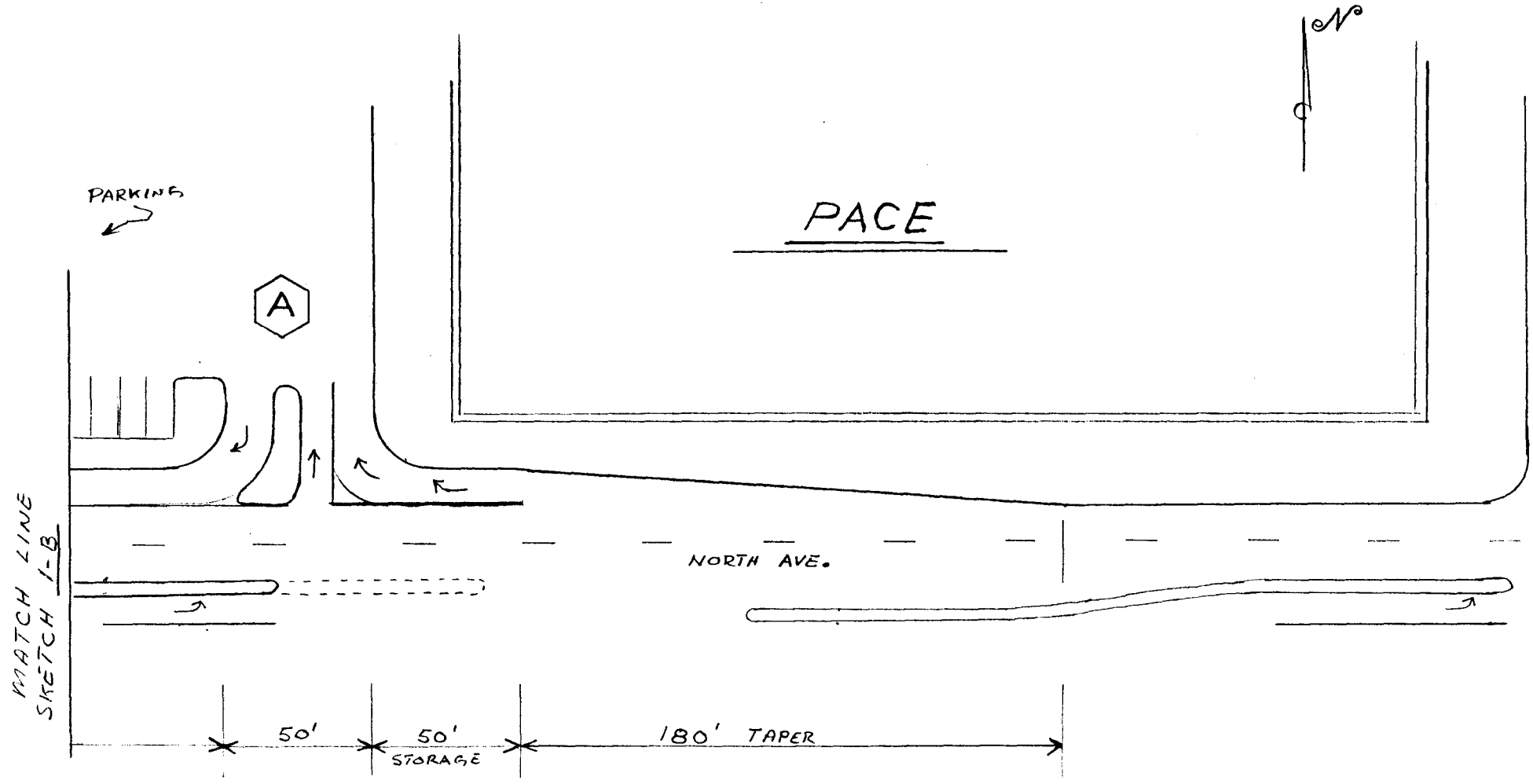
These recommendations are shown on Sketches 1-A and 1-B, on pages 8 and 9.

ACCESS POINT "C"

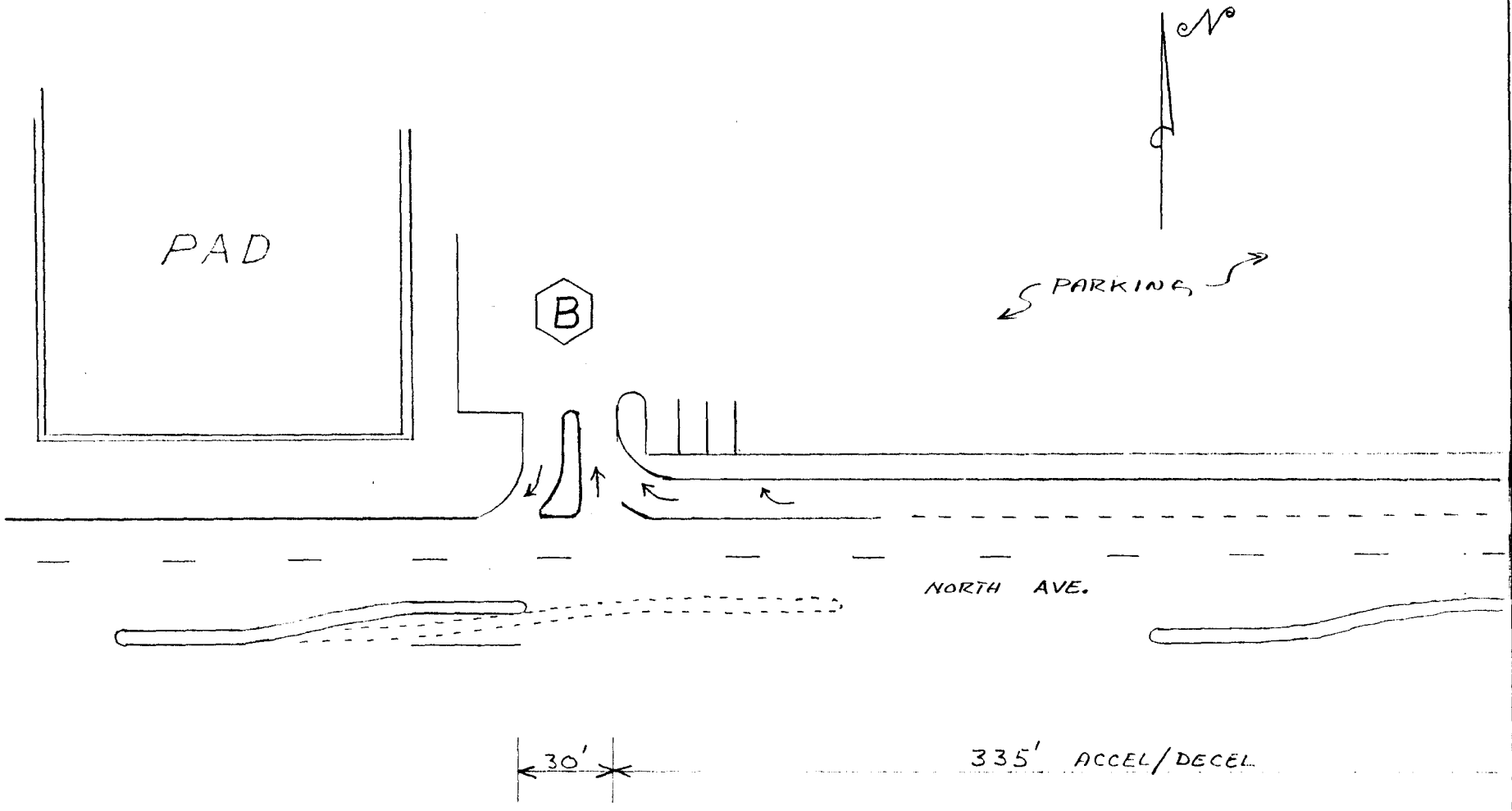
Traffic onto Bunting Avenue should be minimized in order to reduce the impact on a local street.

ACCESS POINT "D"

This is the primary site access point onto 29½ Road. It is wide enough to accommodate two lanes exiting and one lane entering. These movements can safely be made.



SKETCH 1-A



MATCH LINE SKETCH 1-A

SKETCH 1-B

NORTH AVENUE/29½ ROAD INTERSECTION:

Preliminary traffic data available at this time indicates that although left turns from 29½ Road onto North Avenue are adversely impacted because of limited gaps in North Avenue traffic, a traffic signal is not presently warranted. If and when one is warranted, it is recommended that it be installed at this intersection rather than at access point "A".

PEDESTRIANS:

There is an existing sidewalk along 29½ Road adjacent to the site. It is recommended that a sidewalk be installed along North Avenue from 29½ Road to the west property line.

SUMMARY

The NORTH AVENUE MARKETPLACE is a relatively large development and will generate additional traffic in the area. Based on the analyses and recommendations outlined in this report, the traffic impacts of this development can be adequately mitigated. The roadway network in the area should be able to operate at satisfactory Levels Of Service for the foreseeable future.

REVIEW SHEET SUMMARY

FILE NO. #70-91 **TITLE HEADING:** Pace

ACTIVITY: Rezone and Final Plat

PETITIONER: Drychester Retail II, Inc.

REPRESENTATIVE: Don Slack, Slack Ellerman Architects / Mark Sidell, Trammell Crow Company

LOCATION: Northwest corner of North Avenue and 29 1/2 Road

PHASE: Final **ACRES:**

PETITIONER'S ADDRESS: 7995 E. Prentice Ave, Ste 300
Englewood, Colorado 80111-2716
Slack Ellerman 220-8900
Trammell Crow Co 220-0900

STAFF REPRESENTATIVE: Kathy Portner

NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS IS REQUIRED A MINIMUM OF 48 HOURS PRIOR TO THE FIRST SCHEDULED PUBLIC HEARING.

TRANSPORTATION ENGINEER 11/01/91
Dave Tontoli 244-1567

1. 29 1/2 Road improvements be made to include east curb returns curb, gutter and sidewalk to accommodate westbound access.

2. The proposed two full access be denied, due to level of service, and only right-in, right-out, and left-in be granted.

3. Signalization at 29 1/2 Road be installed or studied for warrant do to new generation.

4. Acceleration/deceleration lanes at all entry/exits.

5. 29 1/2 Road entry/exit requirements per Don Newton.

6. Median design at proposed access on North Avenue to disallow left-outs.

7. All necessary signing installations.

8. Street lighting.

CITY PARKS AND RECREATION DEPARTMENT 11/07/91
Don Hobbs 244-1542

We will need a certified appraisal so open space fees can be calculated.

BUILDING DEPARTMENT 10/29/91
TDR 244-1655

No problems with rezone.

CITY UTILITIES ENGINEER 10/30/91
Bill Cheney 244-1590

1. Average water and sewer demand appear to be high. If water usage is as high as indicated, the "Plant Investment Fee" for sewer should be re-evaluated to reflect usage. One E.Q.U. equals 280 gallons per day which results in a E.Q.U. of 334 instead of 52.5 based on building footage.

2. Sewer is through Fruitvale Sanitation and water through Ute Conservancy District so they will need to be contacted for technical information relating to flow and capacity.

COUNTY PLANNING 11/12/91
Keith Fife 244-1650

Why is this application not for a rezone to Planned Commercial? Such zoning would allow greater flexibility and means to better design. Such a massive development. Additional on-site landscaping should be required to break-up the "sea-of-asphalt" parking lot. Why is sod proposed as ground cover? Recommend low-water demand plants and turf.

All adjacent roads should be included in area to be annexed. An additional three feet of right-of-way for the west half of 29 1/2 Road should be dedicated to meet County standards (if road not annexed).

Very poor traffic circulation plan. (See County Engineering comments):

Recommend denial as submitted due to:

- Incompatibility with residential zoning and the school to the north (scale of proposal).
- Excess commercial zoned properties in the vicinity (were other sites, buildings considered?)
- Poor traffic circulation plan.
- Should be zoned planned commercial.

FRUITVALE SANITATION DISTRICT 11/05/91
Art Crawford 243-1494

North Avenue marketplace meets the requirements of Fruitvale Water and Sanitation District as presented in the drawings and summary forms.

STATE HIGHWAY DEPARTMENT 10/31/91
D. Dunn, R. Perske, J. Nall, W. Spanicek 248-7232

The Department of Transportation offers the following comments:

Access permits are required. Speed change lanes and traffic signals may be warranted. The number of approaches may be limited to one depending on access review. Building needs to be set back more to provide and protect approach site distance at 29 1/2 Road. Sidewalks should be provided. 29 1/2 Road may need to be widened for additional traffic.

UTE WATER 10/30/91
Gary R. Matthews 242-7491

NO OBJECTIONS.

Ute Water has no objections to the proposed plans. Enclosed you will find a list of current rates, charges and a drawing of the fire line system which could cut the cost considerably.

POLICIES AND FEES IN EFFECT AT THE TIME OF APPLICATION WILL APPLY.

(See attached)

GRAND JUNCTION DRAINAGE 11/05/91
John L. Ballagh 242-4343

The Grand Junction Drainage District is legal successor to the Grand Valley Drainage District. The easement should be updated. The GJDD licensed surveyor will prepare the legal descriptions. Book and page notification as shown on the proposed plat will be the preferred format. The major tile extension must be in accordance with GJDD policy. Easement and agreement for tiling must be executed and in hand before work begins on adding tile. The developer or his representative needs to contact the Drainage District.

Specific technical questions/concerns.

1. Where is the TBM? Request all final drawings be tied into Grand Junction's bench elevations, closest point is 29 at North Avenue.

2. Provide details of the type 13 inlet.

3. Move the inlets from directly over the tile line. The inlets should be over an inlet box which is then tied into a manhole over the tile line.

4. Calculations showing who limited release is going to be accomplished are needed.

5. Ownership and suggested maintenance of this private storm sewer lines needs to be spelled out in the final documents.

6. Details and similar maintenance recommendations on the "trench drain" must be part of final submittal.

7. Finish floor elevation of the "pad" in the south west corner should be at least 1.0 foot above the elevation of the center medians in North Avenue.

8. Identify the erosion control measures to be taken during construction.

9. Design inlet boxes as grease, sand traps.

PUBLIC SERVICE COMPANY 10/31/91
Herb Tinkle, Electric and Carl Barnkow, Gas 244-2658

ELECTRIC: Some additional easements may be required for the relocation of poles on North Avenue plus the transformer PRI Feed. The existing easement is on a Public Service forma and can be Quitclaimed at the appropriate time of development.

GAS: No objections to rezone & final plat.

CITY FIRE DEPARTMENT 10/31/91
George Bennett 244-1400

We do not have a problem with the rezone.

A fire flow survey will need to be completed prior to construction to determine the required flow. Fire hydrants are to be spaced no greater than 300 feet apart. A full set of building plans is required to be submitted for review to determine compliance with Codes and standards.

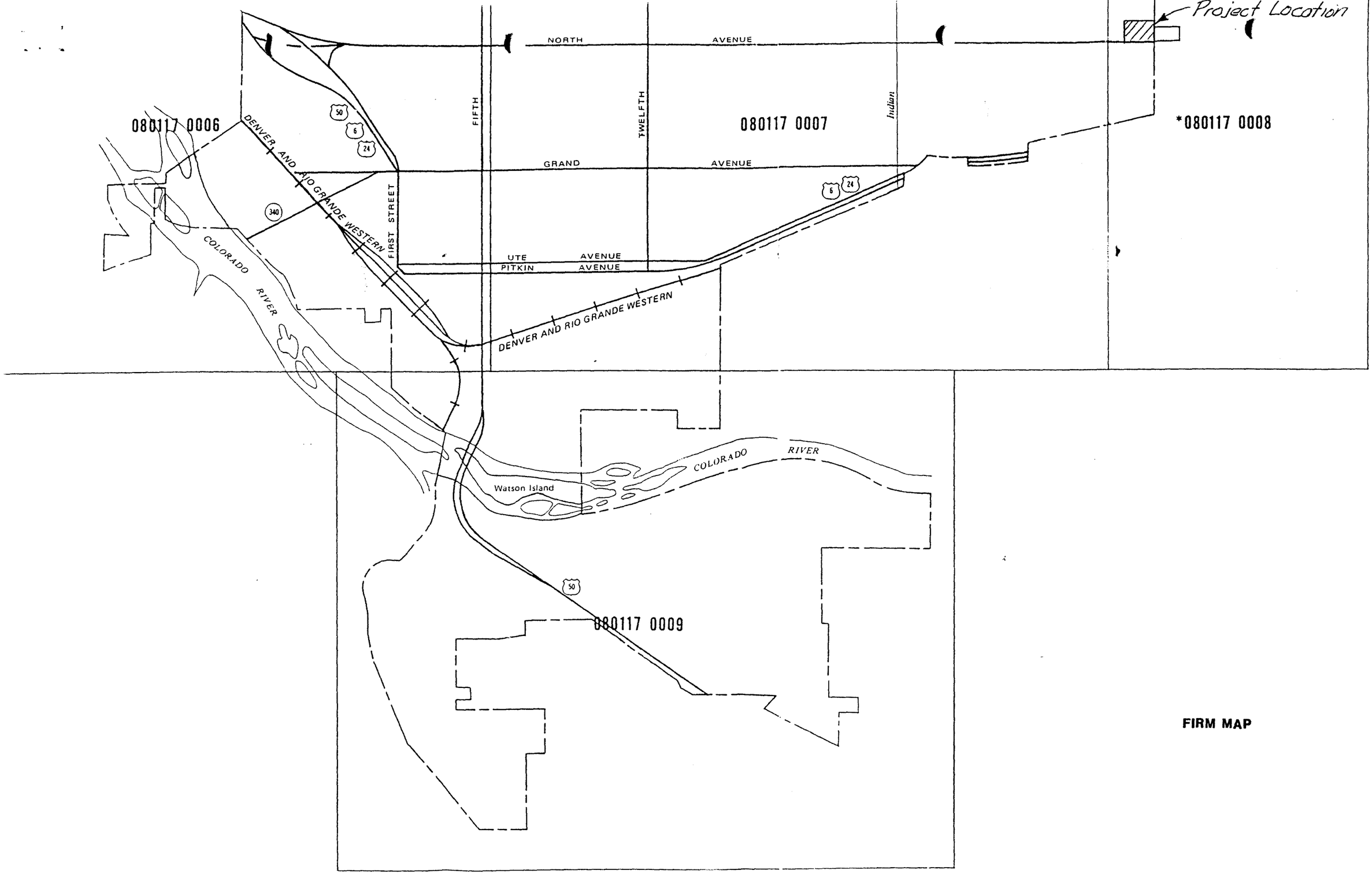
If you have any questions contact our office.

MISSING COMMENTS FROM:

City Police Department
Grand Valley Irrigation
US West
City Property Agent
City Attorney
Corps of Engineers

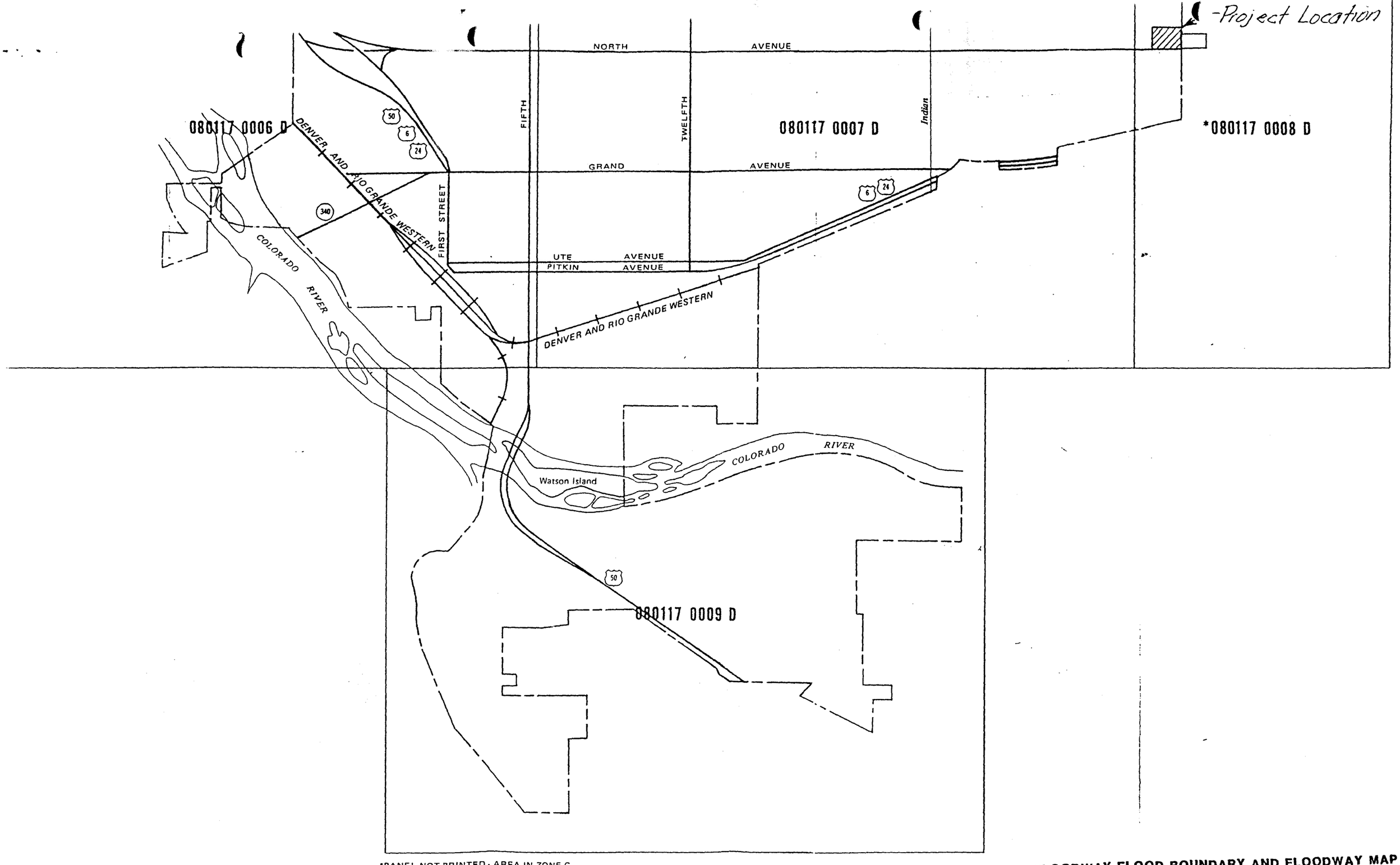
FLOOD ANALYSIS

The North Avenue Marketplace is located at the northwest corner of North Avenue and 29 1/2 Road. It is in the SW1/4 of Section 8, Township 1 South, Range 1 East, of the Ute Meridian, Mesa County, Colorado. The project is located in an area of minimal flood hazard and is in zone C. This data is from the FEMA maps: FIRM Map Index, City of Grand Junction, Colorado, Mesa County and Floodway Flood Boundary and Floodway Map, Community Panel Numbers 080117 0001-0009.



*PANEL NOT PRINTED - AREA OF MINIMAL FLOOD HAZARDS

FIRM MAP



*PANEL NOT PRINTED - AREA IN ZONE C

FLOODWAY FLOOD BOUNDARY AND FLOODWAY MAP

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

November 4, 1991

Ms. Katherine Portner, AICP
Senior Planner
CITY OF GRAND JUNCTION
Community Development Department
250 North 5th Street
Grand Junction, Colorado 81501

Receipt #4719

Dear Kathy:

Thank you for taking time to meet with me last week in your office. I appreciate the opportunity to have previewed our submittal package with you and found the information you shared with me concerning the process to be quite beneficial.

As we discussed during the City Council Meeting, attached please find check #091894 in the amuont of $350.00 to cover the acerage fee outlined in your letter of October 28,1991.

We are enthusiastic about the opportunities that Grand Junction presents for our tenant and I look forward to hearing you again soon.

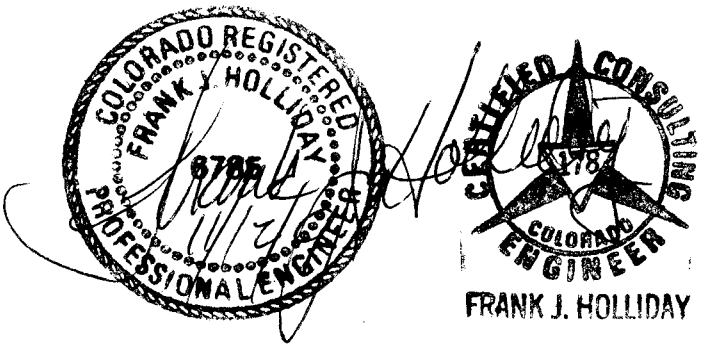
Sincerely,

TRAMMELL CROW COMPANY

Mark. H. Sidell
Marketing Principal

CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

GEOTECHNICAL INVESTIGATION FOR PACE WAREHOUSE SITE AND PRELIMINARY GEOTECHNICAL INVESTIGATION FOR FOR FUTURE DEVELOPMENT AREA
NORTH AVENUE AND 29-1/2 ROAD
GRAND JUNCTION, COLORADO



Prepared For:

Trammell Crow Company
7995 East Prentice Avenue
Englewood, Colorado 80111-2716

Attention: **Mr. Mark Sidell**

Job No. 18,248

November 12, 1991

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SCOPE

This report presents the results of our Geotechnical Investigation for the proposed Pace Warehouse site and Preliminary Geotechncial Investigation for the planned future development area located northwest of the intersection of North Avenue and 29-1/2 Road in Grand Junction, Colorado (Fig. 1). The purpose of this investigation was to evaluate the subsurface conditions at the Pace site and provide foundation and pavement recommendations for the proposed stores and preliminary opinions regarding the future development area. The investigation was conducted in general conformance with our Proposal dated October 4, 1991.

This report includes descriptions of subsoil and groundwater conditions encountered in our borings, recommended foundation systems, design pavement sections, and recommended details for construction influenced by the subsoils for the proposed stores. The report was prepared from data developed from our field and laboratory investigations and our experience. Our recommendations were developed based upon our understanding of the proposed construction as indicated in the discussions and figures presented in the report. Changes in the planned construction may affect these recommendations. We should be contacted should plans change. A summary of our findings and conclusions is presented below. Detailed recommendations for design and construction are presented in the text of the report.

SUMMARY OF CONCLUSIONS

1. The generalized soil profile consisted of 26 feet to 37.5 feet of stiff to soft silty clays, overlying dense clean to clayey, sandy gravels. The clays are lower density and compressible with a tendency to collapse when wetted under load.

2. Groundwater was measured during drilling and up to eleven days after drilling at 18.5 to 23 feet deep in building areas.

3. Founding the Pace Warehouse store with piling driven into the dense sandy gravels is recommended. Driven piles are also a foundation alternative for the Retail "A" store as is a post-tensioned slab-on-grade foundation as discussed herein.

4. The near surface clay soils tested were generally low expansive to slightly compressive and we believe they present low risk of floor slab movement.

SITE CONDITIONS

The site planned for development is currently unoccupied. The southeast corner of the site is an abandoned arcade building and cart track. We identified an excavated underground storage tank and existing fill north of the arcade building. Further investigation concerning the underground storage tank is addressed in our concurrent environmental site assessment (CTL/Thompson, Inc. Job No. 18,247). Scattered remanent foundations and large tree stumps were identified along the south end of the site. An irrigation supply canal was located near the midpoint of the site, running in the north-south direction (Fig. 2). The western portion of the site was mostly vacant. The middle portion of the site was strewn with dumped debris. The eastern portion of the site was covered with trees and the abandoned building mentioned above. Residential and commercial developments existed south, east and west and undeveloped land to the north.

The site planned for future development is vacant and includes approximately 20 acres adjacent to the north boundary of the Pace Warehouse site. The majority of the future development site is open field sparsely overgrown with weeds. Several piles of organic debris including tree branches and grass clippings were identified along the west property line. A pile of soil fill (approximately 3 feet tall) was located along the north property line from the west end to the midpoint. An irrigation supply canal bisects the property, in the north-south direction (Fig. 2). There are trees scattered across the east portion of the site. Five residential type electric services were located in the north-east corner of the site. Residential developments existed east and west, a middle school was located north and vacant land was located to the south.

PROPOSED CONSTRUCTION

As we understand, the project will include development of the site and construction of a Pace Warehouse and Retail "A" store. Development will include pavements for on-site parking, access drives and loading dock areas. The 20 acre parcel located north of the planned store sites will be developed at a later date.

The locations of proposed buildings are shown on Fig. 2. The buildings will be one-story slab-on-grade structures with tilt-up concrete exterior walls and steel frames. We understand total wall loads of 4 to 5 kips per lineal foot and column loads of 80 to 85 kips are anticipated. An at grade loading dock with depressed access ramp is anticipated on the north side of the Pace building. It is our understanding the only below grade construction planned for this site consists of less than 5 feet at the access ramp.

Subsurface Condtions

Subsurface conditions were investigated by drilling fifteen test holes in the Pace and Retail "A" building areas to depths of 7.5 to 35 feet. Six shallow (4 feet) tests holes were drilled in pavement areas. Four test holes were drilled in the future development area to depths of 34 to 37.5 feet. The locations of the test holes are shown on Fig. 2. The tests holes were drilled using a 4-inch diameter solid stem power auger. The drilling operations were directed by our field representative who logged the soils found in the test holes and obtained samples. Graphic logs of the test holes and field penetration resistance test results are presented on Figs. 3 through 5.

The generalized soil profile consisted of clays underlain by gravels. The depth to the gravels ranged from 26 to over 37.5 feet across the site. Fill was encountered in several test holes at depths of 0 to 6 feet within the Pace Warehouse building area. (The concurrent environmental site assessment identifies fill to a depth of 21 feet within the underground storage tank excavation.) We also identified fill on the site at locations as noted on Fig. 2.

Subsoils found at this site were 26 feet to 37.5 feet of stiff to soft, silty clays overlying dense clean to clayey, sandy gravels. The clays are lower density and compressible with a tendency to collapse when wetted under load. Figure 7 shows estimated contours of gravel surface. The results of laboratory testing are presented in Appendix A and summarized in Table A-1.

Groundwater was measured during drilling and two to eleven days after drilling at depths of 18.5 to 23 feet (elevation 74 to 79.5 feet) in building areas. Estimated groundwater surface elevations are shown on Fig. 6.

SITE DEVELOPMENT RECOMMENDATIONS

We believe the primary concerns for development of this site will involve existing fill and remanent foundations. The following paragraphs present our recommendations for site development.

The site should be cleared and stripped to remove existing fill, organic and deleterious soils. The thickness of the stripping required will be variable. We estimate the depth of stripping required will vary from 0 to 4 feet (estimate existing fill depth at localized points) in the Pace building areas and may not be necessary in the Retail "A" store area. These estimates are based upon review of test hole data and visual observations. The bidding contractors should estimate stripping requirements based upon their own site inspections and investigation they believe appropriate.

The trees, bushes, and rootmat material should be cleared and grubbed and all remanent foundations including the arcade building should be removed prior to site grading. Removal of the large tree stumps and remanent foundations noted in the "Site Conditions" section will likely leave holes that will require filling with compacted fill that should be placed as discussed below. A representative of our firm should be present on site during the grading phase to confirm all existing fill, deleterious soils, tree stumps and remanent foundations are removed prior to fill placement.

It is our understanding soils will probably be imported to construct fill planned to raise portions of the Pace Warehouse building pad. Our recommendations for this fill material are discussed later under the "Floors" section.

Fill Placement

Fill placed in building, pavement, or utility trench areas consisting of the on-site clayey soils should be placed in 8 inch maximum loose lits at optimum to 3 percent above optimum moisture content and compacted to at least 95 percent of the standard Proctor maximum dry density (ASTM D 698). The use of sands, sandy gravels or gravels are discussed in the "Floor Slab" section. Prior to placing fill, the subgrade should be scarified, moisture conditioned and compacted as outlined above. Rocks, concrete rubble, or other building debris greater in diameter than 6 inches should be removed prior to compacting the fill. Placement and compaction of fill should be observed and tested by our representative during construction.

Excavation Slopes

Where sloped excavation or trenching is performed, OSHA regulations will control the excavation slopes. We anticipate the clay soils will classify as a Type B or possibly Type C soil. OSHA recommends a maximum slope of 1:1 (horizontal to vertical) for Type B soils. The Contractor should evaluate the soils exposed in excavations as part of the Contractor's safety procedures. OSHA requires slopes greater than 20 feet tall to be designed by a registered engineer. Surcharge loads due to equipment or spoil piles should be located away from the top edge of the slope a minimum distance equal to 1/2 the height of the slope.

BUILDING FOUNDATIONS

We have considered spread footings on the natural soils or structural fill and driven piling to found the Pace Warehouse and Retail "A" buildings. Spread footings are usually less costly than driven piling even when footings are placed on structural fill. However, the risk of damaging settlement of a footing founded building at this site is, in our opinion, high, therefore, we recommend the buildings be founded with driven piling as discussed below.

Piling. We considered concrete piles, wood piles, steel "H" piles and closed end concrete filled steel pipe piles for the Pace building. We believe steel "H" or closed end, concrete filled steel pipe piles are better for the Pace building. Both type piles are used in Grand Junction and should be readily available. Wood piles are not a good alternative because they have much lower load carrying capacity and will broom when driven into the dense gravels. Concrete piles are usually not readily available.

We recommend steel "H" piles or closed end, concrete filled steel pipe piles be installed using the following criteria:

1. The piles can consist of the sections shown on Figure 8. The pipe piles should be driven closed end down and filled with concrete after driving.

2. Estimated design pile axial load capacity and length based on the strengths of the subsoils is presented on Fig. 8 for HP 10 x 42, HP 12 x 53 and 10-inch and 12-inch diameter pipe piles. If pipe piling is used we recommend the piling section be thick walled. If other types of piles are used we should be contacted to estimate their design capacity. We have assumed piling will be at least 35 feet long and penetrate the gravels 5 feet for our analysis. No piling should be stopped less than 5 feet into the gravel. If the 5 foot minimum gravel penetration cannot be met during driving we should be contacted to evaluate the pile capacity. We suggest the following driving control criteria for the piling considered during construction:

Hammer Energy (ft-lb) (delivered to pile head)	Number of Blows for the Bottom Foot of Pile			
	HP-12 x 53	HP-10 x 42	12-inch Diameter	10 inch Diameter
20,000	20	17	17	11
30,000	12	10	10	7
40,000	8	7	7	5

3. Lateral resistance to horizontal loads can be provided by battered piles. It is normal to assume a battered pile can resist the same axial load as a vertical pile of the same type and size and driven to the same elevation. The vertical and horizontal components will depend upon the batter. Batters should not exceed 1:4 (horizontal to vertical). Lateral load capacity of vertical piles is discussed below.

4. Groups of piles placed closer than 3 diameters, center to center, should be evaluated to determine their reduced capacity.

5. The contractor should select a driving hammer and cushion combination which is capable of installing the selected piles without over-stressing the pile. The contractor should submit the pile driving plan and the pile hammer/cushion combination to the engineer for evaluation of the driving stress in advance of the pile installation.

6. The hammer for pile driving should be operated at manufacturers recommended stroke and speed. The efficiency of the hammer and impact should be monitored during driving.

7. All pile driving operations should be observed and records kept of penetration resistance, pile length, and other factors which could affect the performance of the foundation.

Piling can be designed to resist lateral loads applied to the building through wind and lateral earth pressures. Several methods are available to analyze laterally loaded piles. With a pile length to diameter ratio of 7 or greater, we believe the method of analysis developed by Matlock and Reese is most appropriate. The method is an iterative procedure using applied lateral load, moment, vertical load and pile diameter to develop deflection and moment versus depth curves. Our firm has a computer program developed by Reese which can be used to calculate deflections for the various piles and loading conditions anticipated by

the structural engineer. Moment versus depth curves are developed from these analyses. If you desire, we can perform these analyses after the structural engineer has developed loading criteria.

Other procedures require input of horizontal Modulus of Subgrade Reaction (K_h). For purposes of design, we believe the clays can be assigned a uniform value equal to:

$$K_h = 30/d \text{ (tons/ft}^3\text{)}$$

Post-Tensioned Slab-on-Ground. A post-tensioned slab-on-ground foundation alternative could be used for the Retail "A" building. This foundation type is designed to "float" on the near-surface soils. We believe a post-tensioned slab-on-ground foundation would be preferable because of potential soil collapse risk. This foundation alternative would also reduce (but not eliminate) the occurance of cracking in floor slabs. If used in the Pace Warehouse building the slab-on-ground design would have to consider concentrated interior column loads and heavy slab loads in delivery and storage areas. For those reasons the post-tensioned slab-on-ground foundation may not be economical for the Pace building.

We assumed a post-tensioned slab-on-ground foundation would be designed using the methods developed by the Post-Tensioning Institute (PTI, Design and Construction of Post-Tensioned Slab-on-Ground, 1980). We understand this design method was developed primarily from data and experience with Texas expansive soils. The soils in Colorado are somewhat different. Our experience indicates PTI method produces a more flexible slab than is desired. Therefore, we recommend stiffening the PTI designed slab using conventional reinforcing within stiffening beams. The following criteria should be used for design:

1. The post-tensioned slab should be designed with a maximum allowable soil bearing pressure of 3,000 psf.

2. Edge moisture variation distance:
   a. Center lift = 5.5 feet
   b. Edge lift = 2.5 feet

3. Differential heave (or settlement due to subsidence)
   a. Center lift = 2.0 inches
   b. Edge lift = 1.5 inches

4. All stiffening beams should be provided with at least two No. 5, Grade 60 bars at the bottom to stiffen the slab system and provide strength in the event of edge lift or center settlement.

5. Soils beneath the edge beams should be protected from freezing. A cover depth of 3 feet is usually assumed in this area for protection against freezing of soils beneath exterior stiffening beams.

FLOOR SLABS

As now planned about 3 to 4 feet of compacted fill will be needed to raise the south site elevation to the desired floor subgrade elevation. The compacted fill can be constructed of on-site or similar off-site silty, sandy clays free of deleterious and organic materials. Off-site soils can be sands or, gravelly sands or sandy gravels with no sizes larger than 3 inches and a maximum of 15 percent passing the No. 200 sieve. The clays should be moisture conditioned to optimum to 3 percent above optimum moisture content and the sands or gravels to 2 percent below to 2 percent above optimum moisture content. All compacted fill should be placed in 8-inch maximum loose lifts and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698).

The risk of heave caused slab damage is low but we believe a 4-inch gravel layer can be used under the slab to break capillary rise. In our opinion, however, it would be prudent to take the following precautions with a slab-on-grade floor:

1. Compact fill beneath floor slabs as discussed above;

2. Separate the floor slabs from exterior walls and interior bearing members with a joint which allows free vertical movement of the slab;

3. Eliminate slab bearing partitions. At least a 2-inch space should be provided under interior partitions to permit vertical movement of the slabs. Stairwells and doorways should be designed for this movement to reduce structural damage in the event of movement;

4. Eliminate underslab plumbing where feasible. Where such plumbing is unavoidable it should be pressure tested for leaks during construction. Plumbing and utilities which pass through the floor slabs should be isolated from the slabs and should be constructed with flexible couplings. If heating or air conditioning systems are slab supported, heating ducts or overhead water and gas lines should be constructed with sufficient flexibility to allow at least 4 inches of movement.

5. Separate exterior slabs from the building. These slabs should be reinforced to function as independent units. Movement of exterior slab should not be transmitted to the foundations;

6. Provide frequent control joints in the slab to reduce the problems associated with shrinkage. The American Concrete Institute (ACI) recommends a maximum panel size of 15 feet to 20 feet.

RETAINING WALL

The loading dock will be at near ground level. Retaining walls will be needed for the access ramp. The horizonal earth pressure on a retaining wall depends on the height of the wall, type of backfill, slope of backfill surface, and allowable horizontal movement of the wall at the top. Walls which can move enough at the top to mobilize the internal strength of backfill with the associated cracking of the ground surface behind the wall can be designed for "active" equivalent fluid backfill density. If the top of the retaining walls can not move, they must be designed for the "at rest" equivalent fluid backfill density. We have assumed the backfill will be on-site soils and its surface level. We suggest assuming in design calculations an "active" equivalent fluid density of 35 pcf for

walls separated from the building foundation and an "at rest" equivalent fluid density of 50 pcf for walls connected to the building foundations. Hydrostatic pressure and surcharge should be added where applicable. We suggest assuming a "passive" equivalent fluid density for densely compacted backfill of 270 pcf. The hydrostatic pressure behind retaining walls can be relieved by using weep holes. We suggest weep holes at least 2 inches in diameter and no more than 10 feet between. Drain details are provided on Fig. 9.

Construction of the drain should be inspected by a representative of our firm. In the depressed access ramp area, a drain should be provided to collect water to eliminate ponding and remove the water from the low area.

CONCRETE

Four samples of the overburden clay soils were tested for soluble sulfates with results ranging from 0.06 to 1.8 percent measured. The tests indicate concrete which comes into contact with the soils will be subject to severe sulfate exposure. We recommend use of cement meeting Type V requirements with a maximum water cement ratio of 0.45 and 5 to 7 percent entrained air. Floor slabs and drives should be properly detailed to account for expansion and contraction. We recommend use of de-icing salts be minimized the first year after construction.

PAVEMENT

The subgrade soils beneath proposed pavements were investigated by obtaining drive samples and auger cuttings from the six pavement test holes. The results of laboratory testing are presented in Appendix C and summarized in

Table C-1. Our design calculations for pavement sections are presented in Appendix B.

Subgrade soils classified as A-6 and A-4. Representative samples of subgrade soils were combined to form Group I for pavement design. The results of classification testing and identification of soils combined for Group I are shown on Table C-1.

The Group I soils classified as A-6 and A-4 with group indices ranging from 4 to 21, with one group index of 12. Classification data for the Group I soils is summarized on Table C-1. The Group I soils had a maximum dry density of 111.0 pcf at an optimum moisture content fo 15.5 percent when compacted using the standard Proctor procedure (ASTM D 698). The group index test results indicated a design CBR value of 4 should be used.

The parking areas and access drives thickness design was performed using Design Traffic Numbers (DTN) of 2 for parking areas with low traffic, 5 for parking areas with heavy traffic and 30 for fire lanes and truck drives. The nomographs and pavement thickness calculations are shown on Figs. B-1 through B-7.

Full-depth sections usually perform best in areas where trucks turn at slow speeds, such as loading docks, entrances, and trash dumpster pads. For these areas 6-inch concrete section is recommended. The full-depth concrete alternative is strongly recommended in loading dock ares and trash collection areas.

The following is a summary of the recommended pavement sections:

Location	Asphalt and Asphalt	Base Course	Concrete
Parking Stalls - Low Traffic	5.0"	3.0" + 6.0"	5"
Parking Areas - Heavy Traffic	5.5"	3.0" + 8.5"	5"
Fire Lanes and Truck Drives	7.5"	5.0" + 8.5"	6"
Dumpster and Loading Zones	--	--	6"

The section thicknesses presented above are based upon the CBR value determined for the native clay soils. Import soils should be tested to confirm the suitability of the soils and confirm the recommendations. We should be contacted to provide additional recommendations.

Any existing fill materials in planned pavement areas should be removed and replaced to full-depth as discussed above in the "Site Development Recommendations" section. Figure 1 identifies trench backfill adjacent to the irrigation supply canal. We are not aware this fill was properly placed and therefore is subject to possible future settlement problems if left in place. We are available to further comment on the risk of pavement distress in these areas if requested.

Prior to paving, the subgrade should be scarified, moisture conditioned to 2 percent below to 2 percent above optimum moisture content and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698, AASHTO 180). The area to be paved should be proof-rolled with a heavy, pneumatic-tired vehicle (i.e., a loaded 10-wheel dump truck). Subgrade that is pumping or deforming excessively should be removed and recompacted.

Performance of pavement is dependent upon the quality of materials used. Aggregate base course should be moisture stable and be compacted to at least 95 percent of maximum modified Proctor dry density (ASTM D 1557) within

3 percent of optimum moisture content. Asphaltic concrete should have a minimum R of 90 or Marshall stability of 1650 and be compacted to at least 95 percent of maximum laboratory density. Placement and compaction of base course and asphalt should be observed and tested to confirm that adequate density is achieved.

Colorado Department of Highways Class P type concrete is recommended. The use of deicing salts is not recommended within the first year after construction. Control joints should be provided in separate concrete pavements into panels with a maximum dimension of 15 to 20 feet as recommended by ACI.

LANDSCAPING

Generally, backfill around the building foundations is comparatively more permeable than the surrounding soils. Irrigation of landscaping located too close to the building can cause water infiltration through the backfill and wetting of the foundation soils. We recommend areas of landscaping which require considerable watering be located at least 5 feet away from the building foundations. Irrigated landscaping "islands" in pavement and irrigated areas adjacent to pavements are often a source of water which causes pavement failures. When preparing the plans, the designer should provide for rapid runoff of surface water away from buildings and pavements. We recommend consideration of Xeriscaping all areas requiring landscaping around the proposed building and in the parking lot to improve pavement performance.

SURFACE DRAINAGE

Performance of pavements, concrete flat work, and foundations is influenced by the subgrade moisture conditions. Risk of wetting of the subsoils can be reduced by carefully planned and maintained surface drainage. We recommend the following precautions be observed during construction and maintained at all times after the construction is completed.

1. Wetting or drying of the open foundation excavation should be avoided.

2. The ground surface surrounding the exterior of the building should be sloped to drain away from the building in all directions. We recommend a minimum slope of at least 12 inches in the first 10 feet. Sidewalks and pavement should slope at least 4 inches in the first 10 feet.

3. Backfill around foundation walls should be moistened and compacted to at least 90 percent of standard Proctor maximum dry density (ASTM D 698). In areas which will receive pavement, we recommend the top 3 feet of backfill be compacted to at least 95 percent of standard Proctor maximum dry density.

4. Roof downspouts and drains should discharge well beyond the limits of all backfill. Splash blocks and downspout extenders should be provided.

5. Landscaping which requires considerable watering and lawn sprinkler heads should be located at least 5 feet from the foundation walls. Trickler or bubbler type irrigation heads are not recommended.

6. Irrigated landscaped islands in the pavements and irrigated areas adjacent to pavements should be designed to limit, if not eliminate, moisture infiltration beneath the pavement. Curb and gutter should be backfilled with compacted clayey soils.

7. Plastic membranes should not be used to cover the ground surface immediately surrounding the building. These membranes tend to trap moisture and prevent normal evaporation from occurring. Geotextile fabrics can be used to limit weed growth and allow for evaporation.

8. Surface water should not be allowed to pond over pavements or adjacent to the proposed building.

PRELIMINARY GEOTECHNICAL INVESTIGATION

A portion of our investigation included drilling four test holes located within the approximate 20 acre parcel north of the area currently planned for development (Fig. 2). The scope of our preliminary investigation was to develop conceptual opinions about suitability of this site for future construction. The discussion presented in the following paragraphs was developed considering conditions disclosed by widely spaced test holes, a comparison with those subsurface conditions found at the adjacent Pace Warehouse site and our experience. A design level geotechnical investigation should be performed to provide site specific design criteria for foundations and pavements.

Our test holes (Figs. 3, 4 and 5) showed the site is generally overlain by silty, slightly sandy clays underlain by sandy gravels as discussed earlier in the "Subsurface Conditions" section. Test hole data indicates the depth to gravel surface increases at the northwest corner of the site. Figures 6 and 7 show estimated groundwater surface contours and estimated gravel surface contours, respectively. These soils behave like most soils in the Grand Junction area.

Post-tensioned slab-on-ground and driven piling foundations have been recommended to support planned construction at the Pace Warehouse site and would be reasonable to use for similar size and type stores in the future area. Footings bearing on structural fill replacing the natural soils might be an alternative but it should be specifically investigated for the specific building(s) planned. The final foundation type selected will depend on the planned building size and loading, the lowest floor elevations, and the specific planned site and the acceptable risk of foundation movement.

In our opinion a slab-on-grade floor can be used at the site but to do so will involve taking the risk of some differential movement floor slab. The impact of floor slab distress on building frames and housed equipment can be mitigated by following special design and construction techniques. The techniques include separation of floor slabs from bearing members and hanging interior partitions from above. The risk of floor movement from heave can be eliminated by using a structural floor supported by the foundation system and providing a crawl space under the floor. This is however, expensive and commonly not economically feasible for commercial structures.

The site subgrade soils are suitable for the support of pavements. The existing fill is a poor subgrade as discussed above the "Pavement" section. We believe that a pavement design performed on soils from this site will result in recommended pavement sections similar to those given for the Pace Warehouse site.

LIMITATIONS

Our test holes were spaced to obtain a reasonably accurate picture of the subsurface conditions. The test holes are representative of conditions only at the exact test hole location and conditions between test holes may vary. The report was prepared using methods and procedures consistent with other professionals practicing in geotechnical engineering in this area at this time. No other warranty, express or implied is made. The placement and compaction of fill, utility trench backfilling, foundation installation, and pavement construction should be inspected.

If we can be of further service in discussing the contents of this report, or in the analysis of the influence of the subsurface conditions on the design of the buildings, please call.

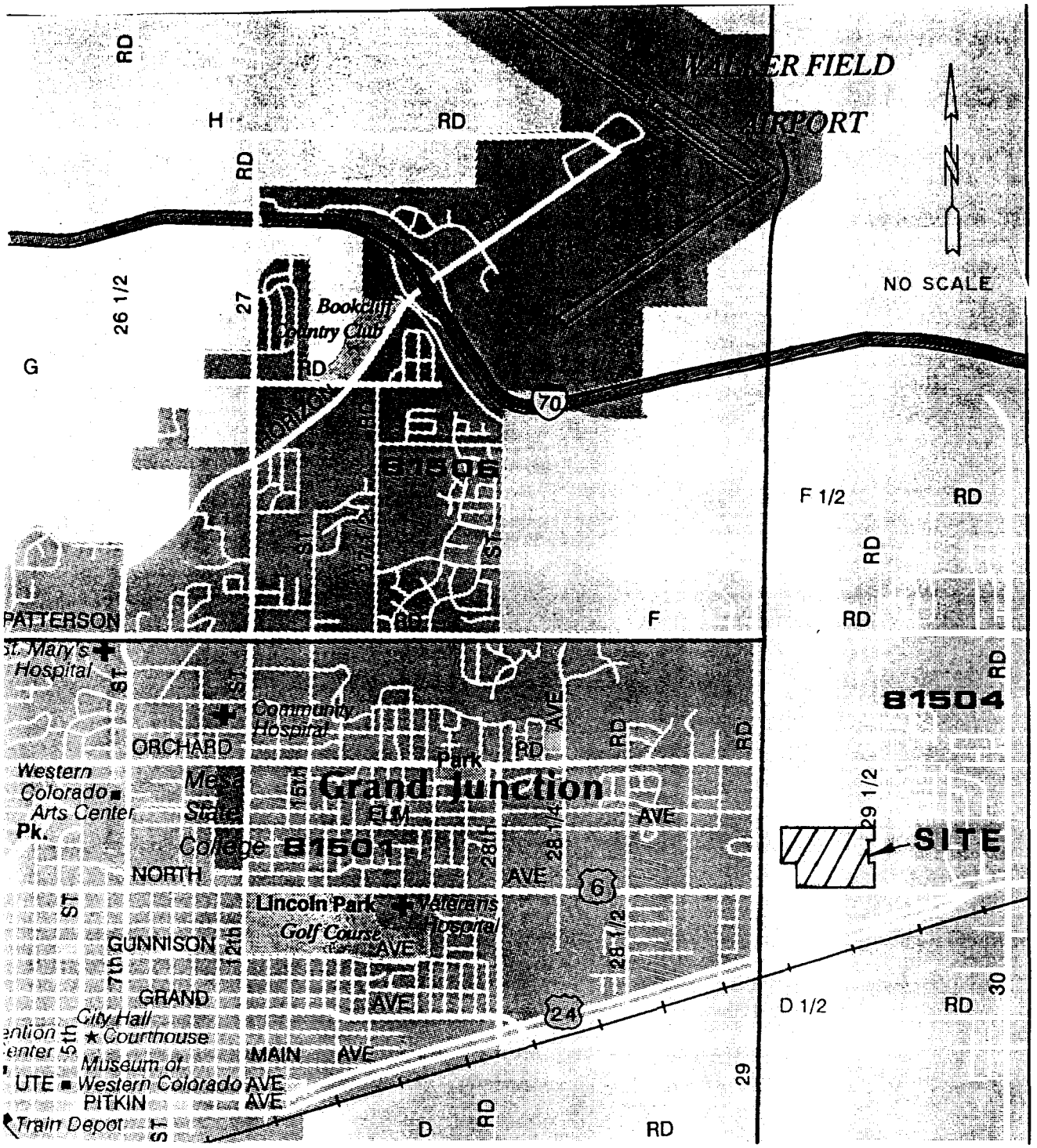
CTL/THOMPSON, INC.

John P. Withers
Geotechnical Staff Engineer

Reviewed by:

Frank J. Holliday, P.E.
Principal

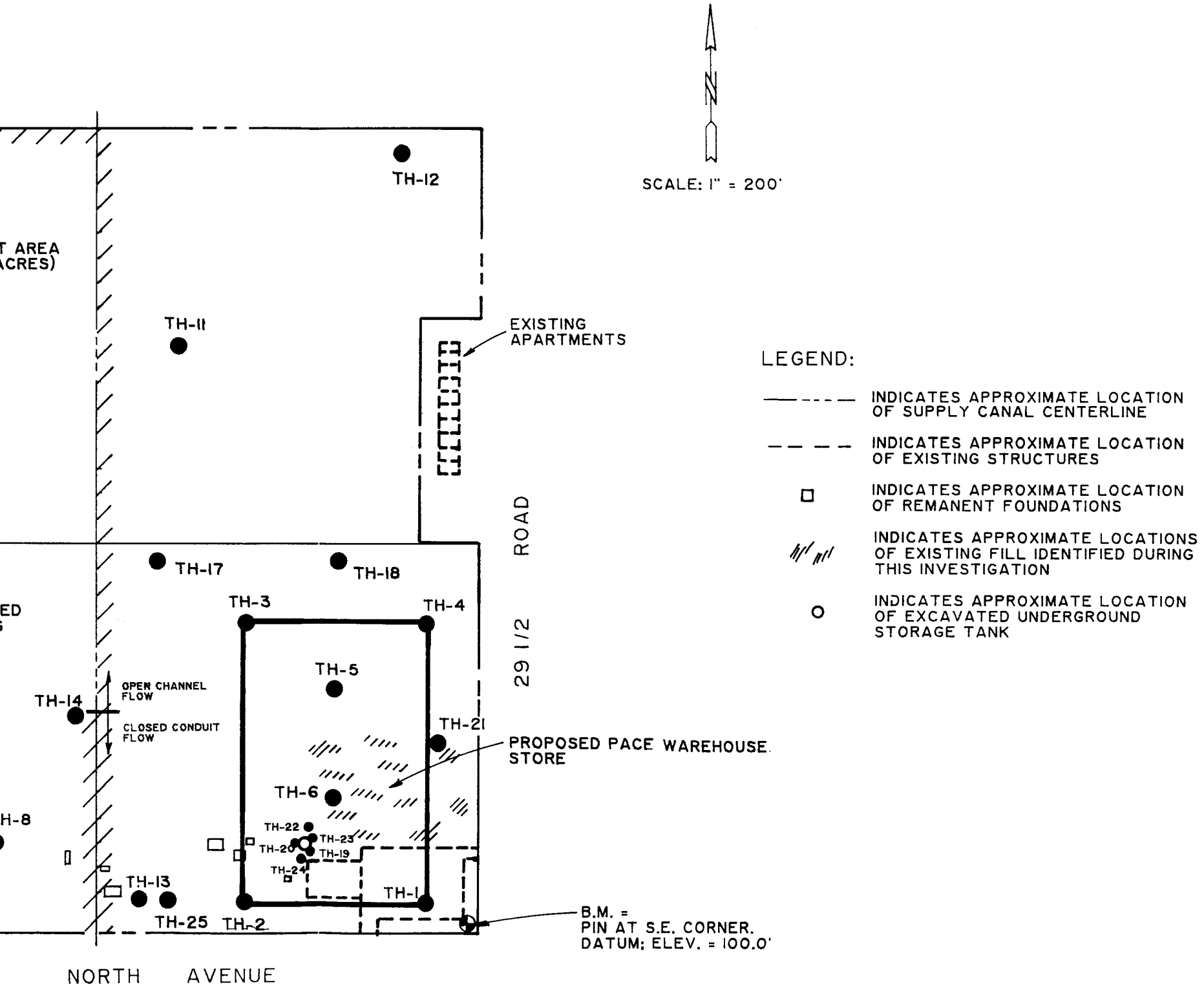
JPW:FJH:kbo
(6 copies sent)

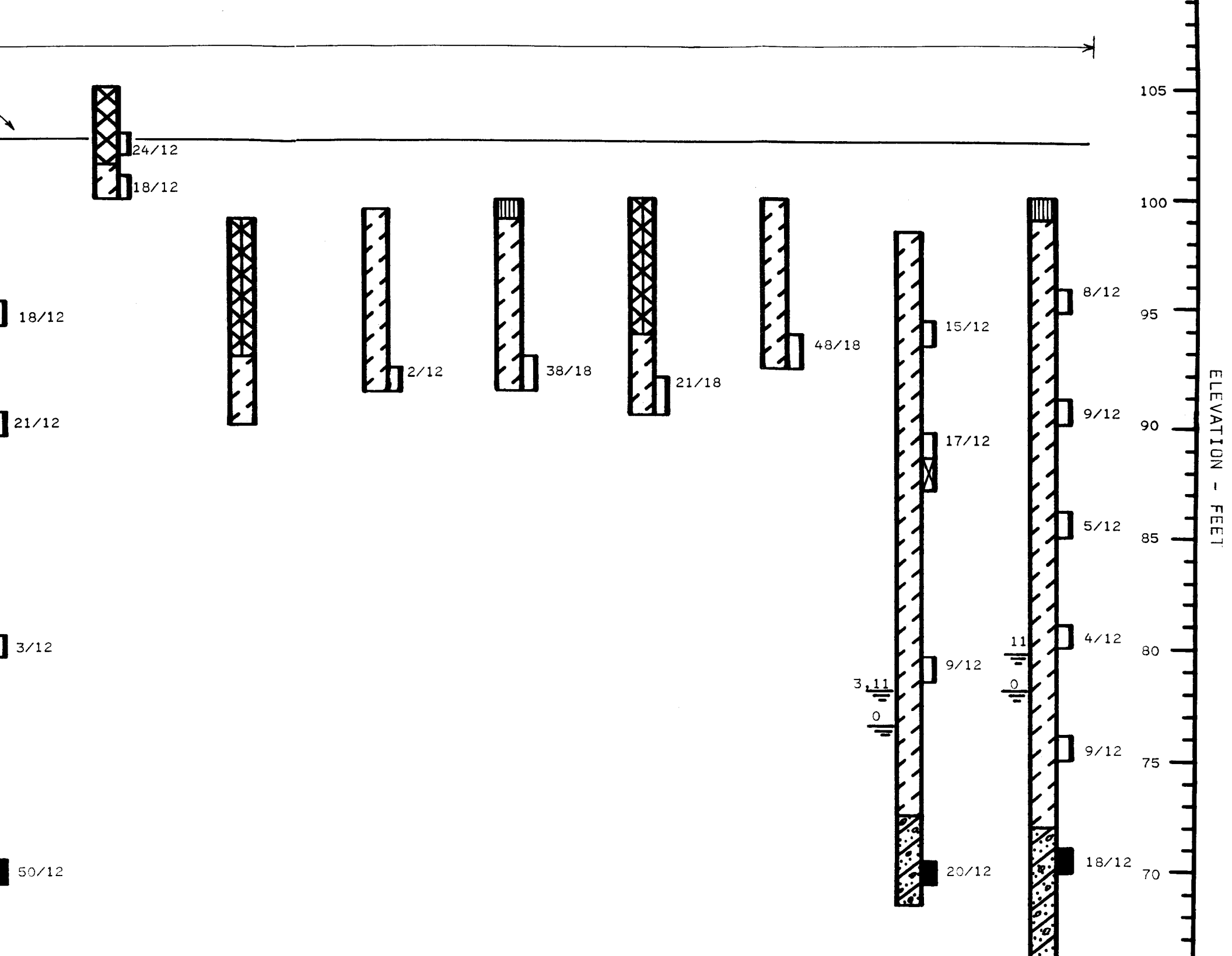


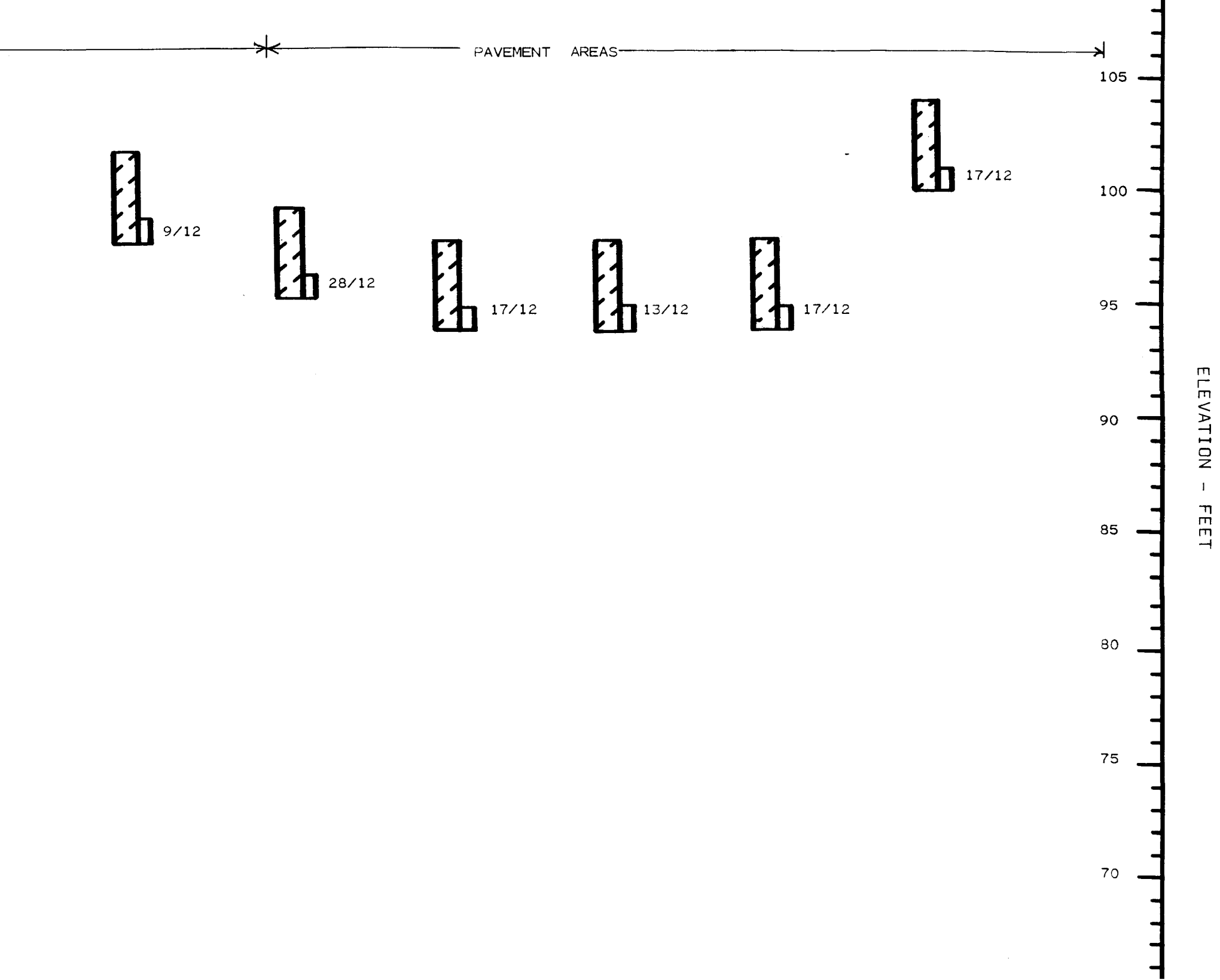
VICINITY MAP

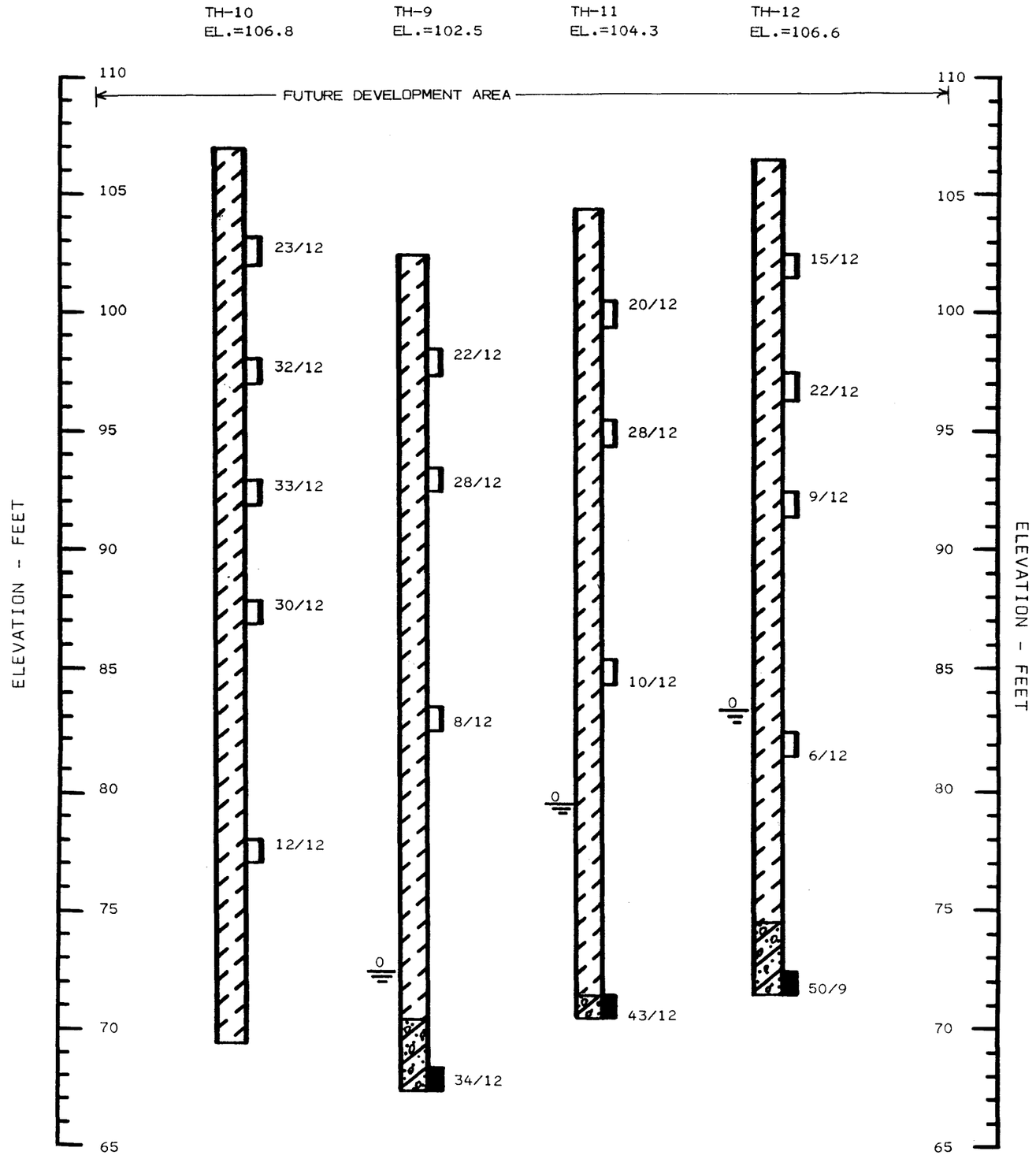
JOB NO. 18,248

FIG. 1


N
SCALE: 1" = 200'
T AREA
ACRES)
TH-12
TH-11
EXISTING
APARTMENTS
ROAD
29 1/2
TH-17
TH-18
ED
TH-3
TH-4
TH-5
TH-14
OPEN CHANNEL
FLOW
CLOSED CONDUIT
FLOW
TH-21
PROPOSED PACE WAREHOUSE
STORE
TH-6
H-8
TH-22
TH-23
TH-20
TH-19
TH-24
TH-13
TH-1
TH-25
TH-2
B.M. =
PIN AT S.E. CORNER.
DATUM; ELEV. = 100.0'
NORTH AVENUE
LEGEND:
INDICATES APPROXIMATE LOCATION OF SUPPLY CANAL CENTERLINE
INDICATES APPROXIMATE LOCATION OF EXISTING STRUCTURES
INDICATES APPROXIMATE LOCATION OF REMANENT FOUNDATIONS
INDICATES APPROXIMATE LOCATIONS OF EXISTING FILL IDENTIFIED DURING THIS INVESTIGATION
INDICATES APPROXIMATE LOCATION OF EXCAVATED UNDERGROUND STORAGE TANK


24/12
18/12
18/12
21/12
3/12
50/12
2/12
38/18
21/18
48/18
15/12
17/12
9/12
3
11
0
20/12
8/12
9/12
5/12
11
4/12
0
9/12
18/12
105
100
95
90
85
80
75
70
ELEVATION - FEET


PAVEMENT AREAS
9/12
28/12
17/12
13/12
17/12
17/12
105
100
95
90
85
80
75
70
ELEVATION - FEET



LEGEND:

ASPHALT AND BASE COURSE PAVEMENT

FILL, CLAY, SILTY, VERY STIFF, DRY, LIGHT BROWN, NO TRASH OR DEBRIS NOTED IN TEST HOLES.

FILL, GRAVEL, SANDY, PIT RUN-TYPE MATERIAL, DRY, TAN, BROWN, RUST

CLAY, SILTY, SANDY WITH SAND, CLAYEY LENSES; VERY STIFF TO SOFT, DRY TO WET, AND LIGHT BROWN TO BROWN WITH DEPTH; CALCAREOUS, THIN HORIZONTAL LAYERS, AND SOME POROSITY IN SHALLOW SAMPLES NOTED (CL)

GRAVEL, SANDY TO VERY SANDY, CLEAN TO CLAYEY, MEDIUM DENSE TO DENSE, WET, TAN, BROWN, RUST (GP-GC)

DRIVE SAMPLE. THE SYMBOL 16/12 INDICATES THAT 16 BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES WERE REQUIRED TO DRIVE A 2.5-INCH O.D. SAMPLER 12 INCHES.

DRIVE SAMPLE. THE SYMBOL 16/12 INDICATES THAT 16 BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES WERE REQUIRED TO DRIVE A 2.0-INCH O.D. SAMPLER 12 INCHES.

BULK OR GRAB SAMPLE.

0,2,3,10,11 INDICATES FREE WATER LEVEL. NUMERAL INDICATES NUMBER OF DAYS AFTER DRILLING MEASUREMENTT WAS TAKEN

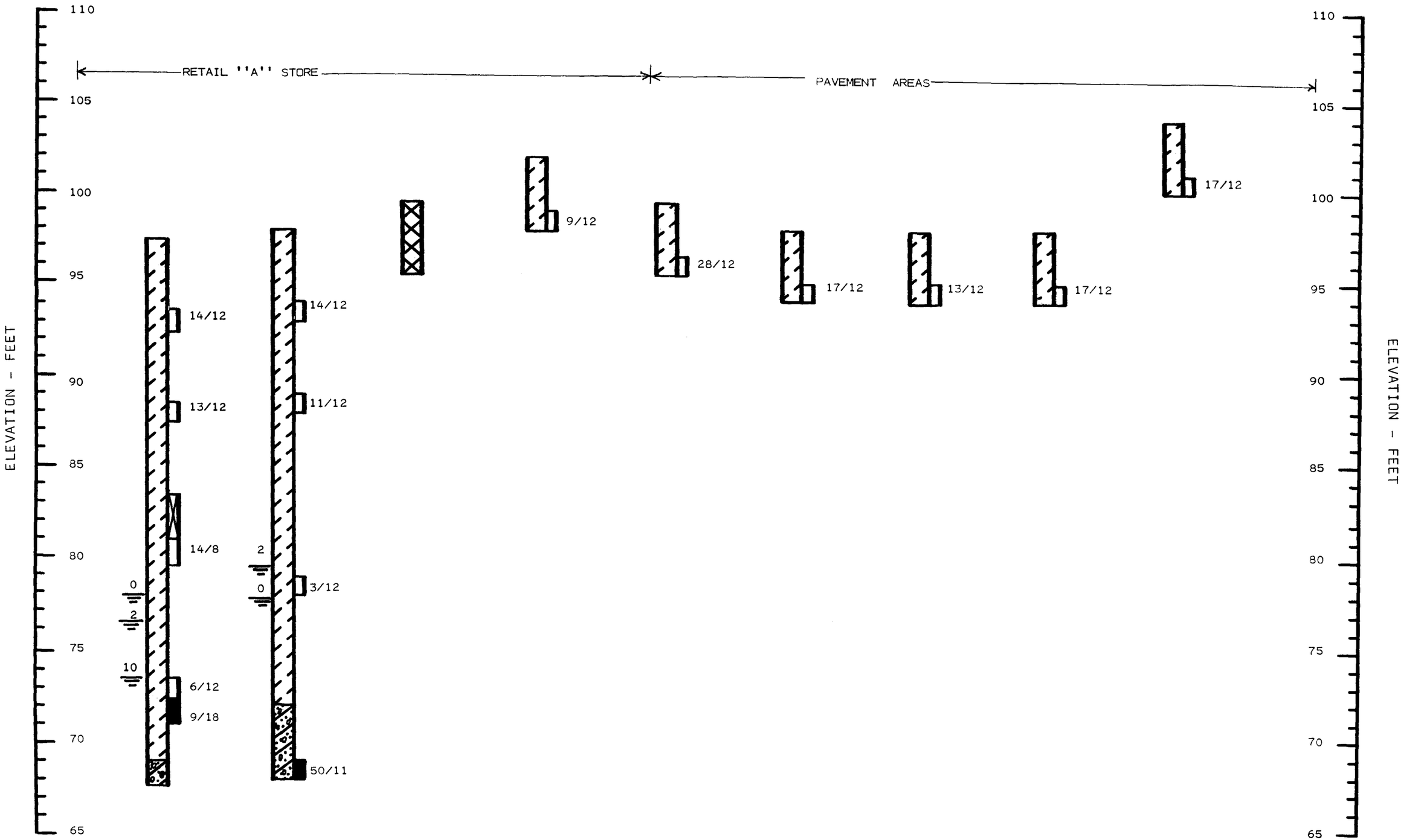
NOTES:

1. THE BORINGS WERE DRILLED OCTOBER 22,23 AND 24, 1991 WITH A 4-INCH DIAMETER CONTINUOUS FLIGHT POWER AUGER.
2. THESE LOGS ARE SUBJECT TO THE EXPLANATIONS AND CONCLUSIONS AS CONTAINED IN THIS REPORT.
3. ELEVATIONS WERE DETERMINED USING AN AUTOMATIC LEVEL AND THE BENCHMARK SHOWN ON FIG. 1.

SUMMARY LOGS OF TEST HOLES

JOB NO. 18,248

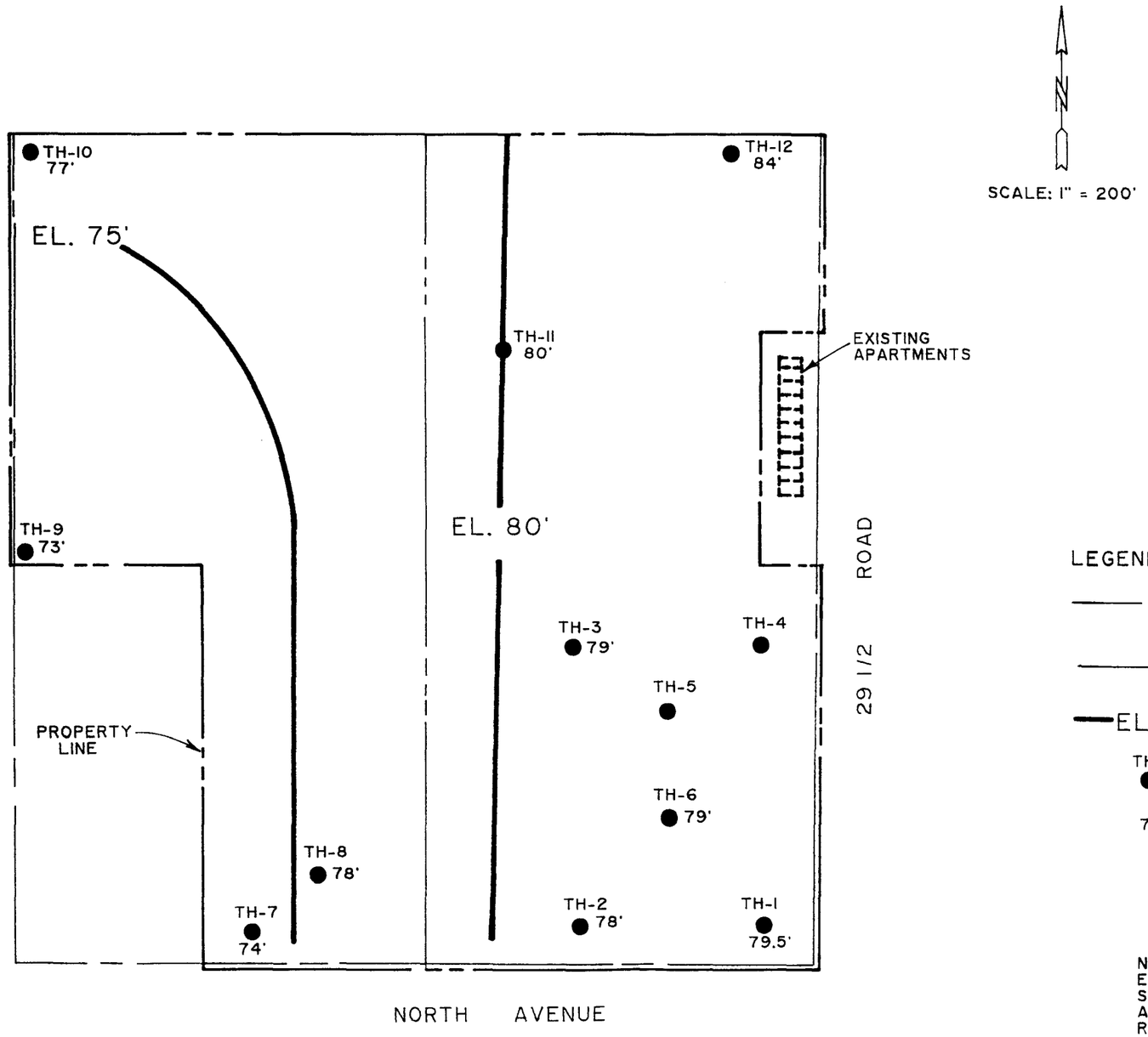
FIG. 5



JOB NO. 18,248

SUMMARY LOGS OF TEST HOLES

FIG. 4



SCALE: 1" = 200'

LEGEND:

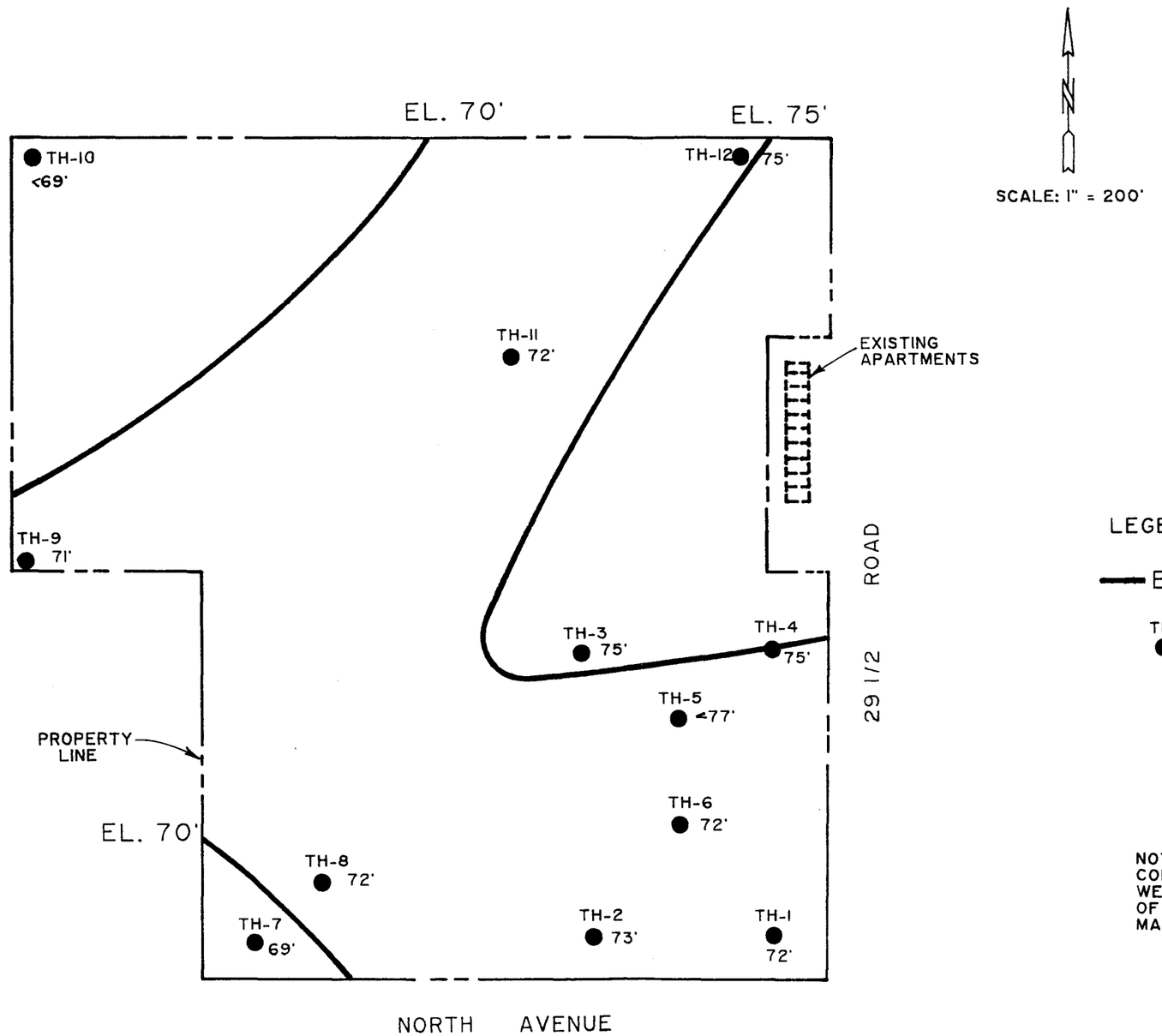
- ——— --- ——— INDICATES APPROXIMATE LOCATION OF SUPPLY IRRIGATION CANAL CONTAINING WATER
- ——— — — ——— INDICATES APPROXIMATE LOCATION OF IRRIGATION DITCH CONTAINING WATER
- —EL. 75' INDICATES APPROXIMATE ELEVATION OF GROUNDWATER SURFACE (FEET)
- TH-1 ● INDICATES APPROXIMATE LOCATION OF TEST HOLE, TH-1
- 79.5' INDICATES APPROXIMATE ELEVATION OF GROUNDWATER SURFACE MEASURED AT THE TEST HOLE

NOTE:
ESTIMATED CONTOURS OF GROUNDWATER SURFACE WERE BASED UPON A SUBJECTIVE ANALYSIS OF TESTHOLE DATA AND DO NOT REFLECT LOCAL VARIATIONS.

ESTIMATED CONTOURS OF GROUNDWATER SURFACE

JOB NO. 18,248

FIG. 6



SCALE: 1" = 200'

LEGEND:

EL. 75' — INDICATES APPROXIMATE ELEVATION OF GRAVEL SURFACE (FEET)

TH-6 ● — INDICATES APPROXIMATE LOCATION OF TEST HOLE

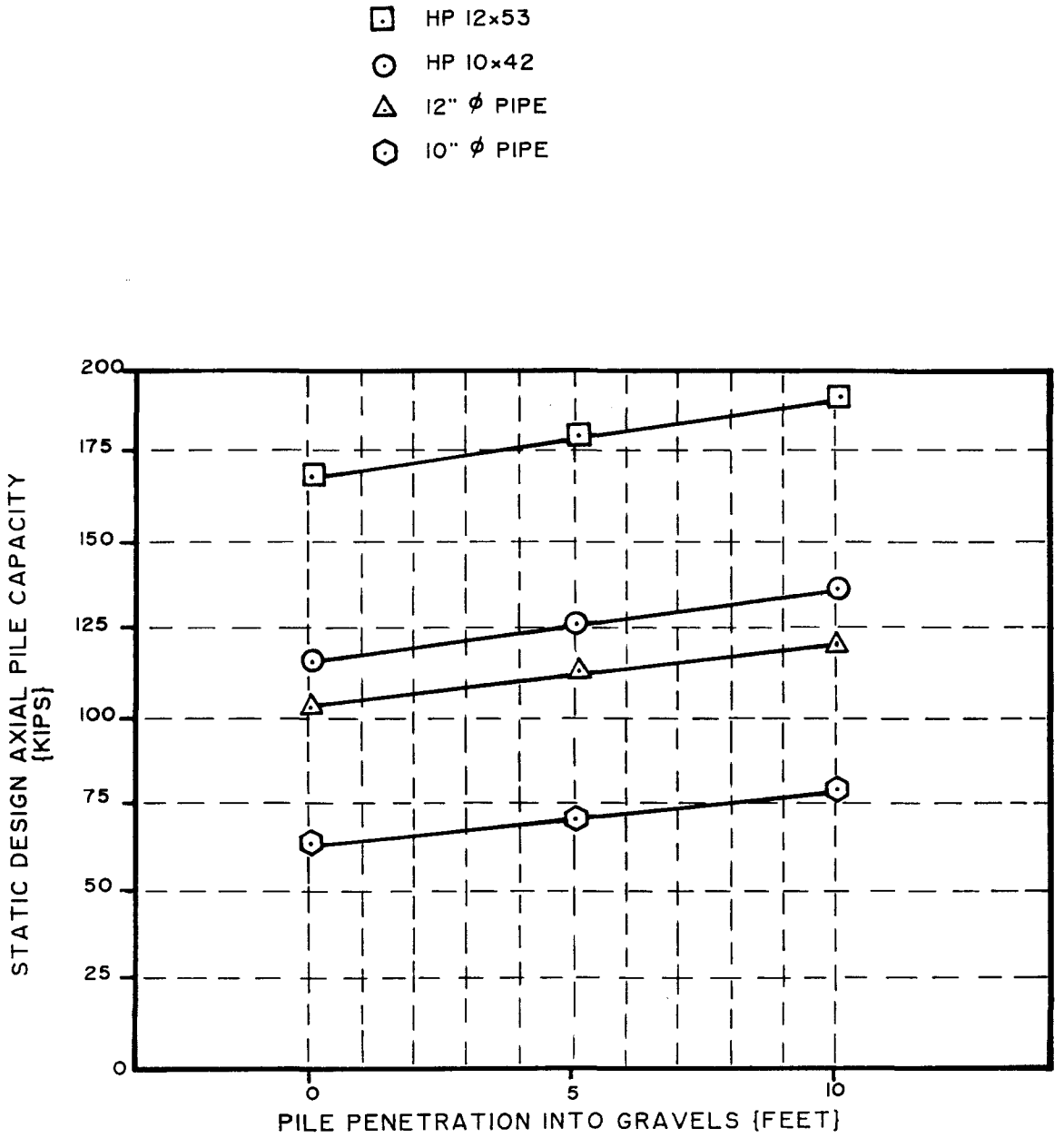
72' — INDICATES APPROXIMATE ELEVATION OF GRAVEL SURFACE MEASURED AT THE TEST HOLE

NOTE:
CONTOURS OF GRAVEL SURFACE ELEVATION WERE BASED ON A SUBJECTIVE ANALYSIS OF TEST HOLE DATA. LOCAL VARIATIONS MAY EXIST.

APPROXIMATE ELEVATION OF GRAVEL SURFACE CONTOURS

JOB NO. 18,248

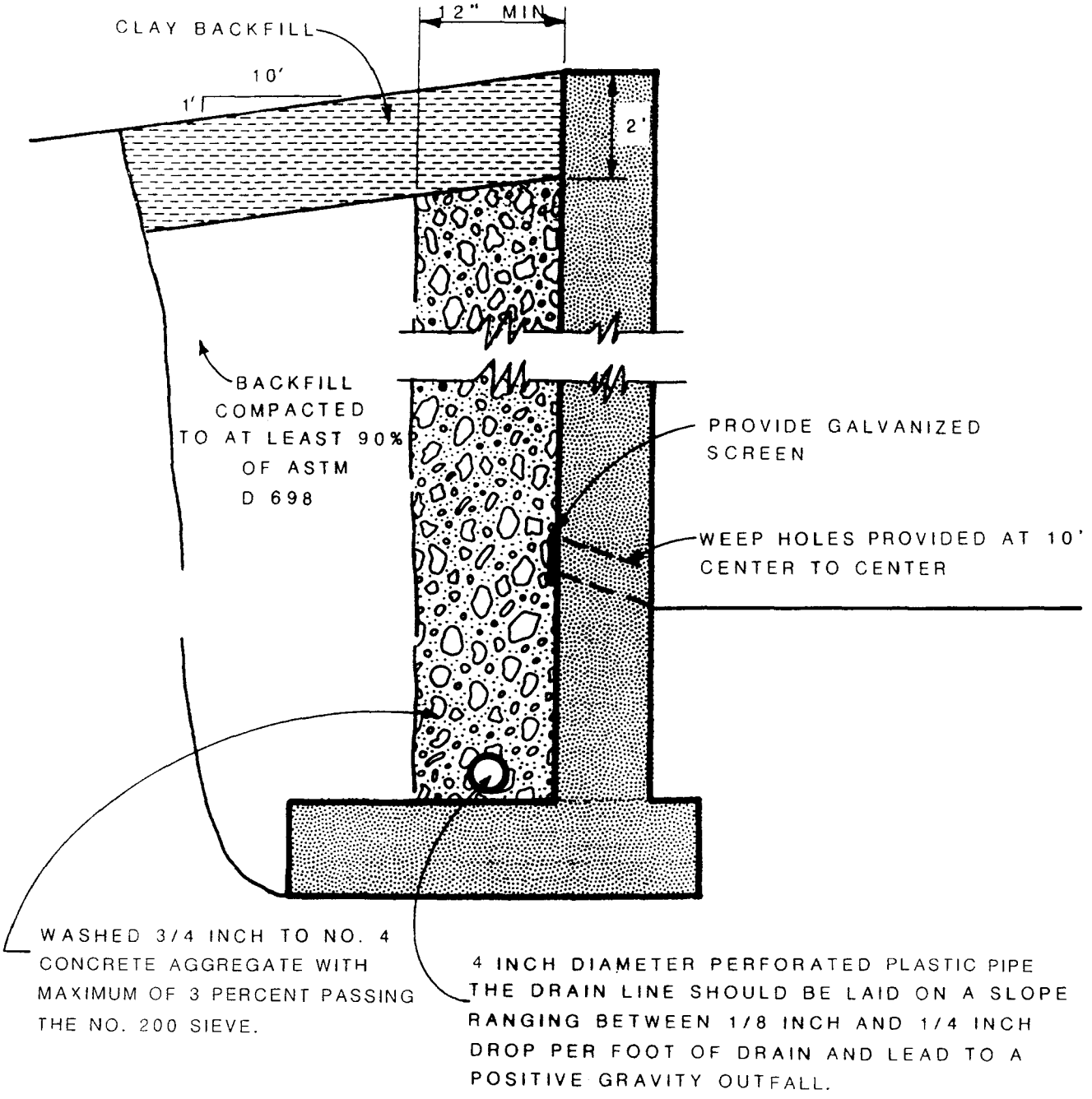
FIG. 7



ESTIMATED DESIGN PILE AXIAL LOAD CAPACITY

JOB NO. 18,248

FIG. 8



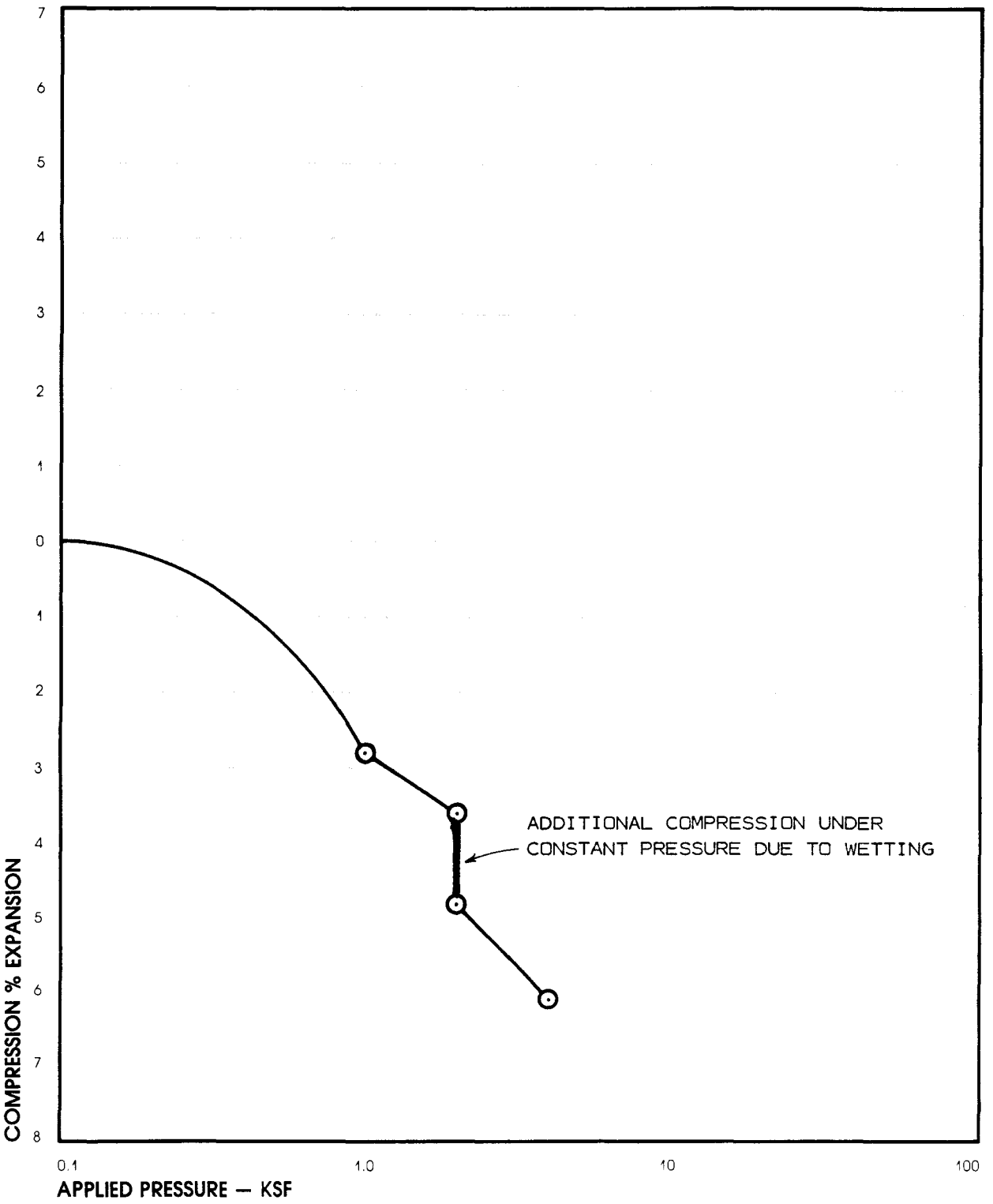
TYPICAL EARTH RETAINING WALL DETAIL

JOB NO. 18,248

FIG. 9

APPENDIX A

LABORATORY TEST RESULTS



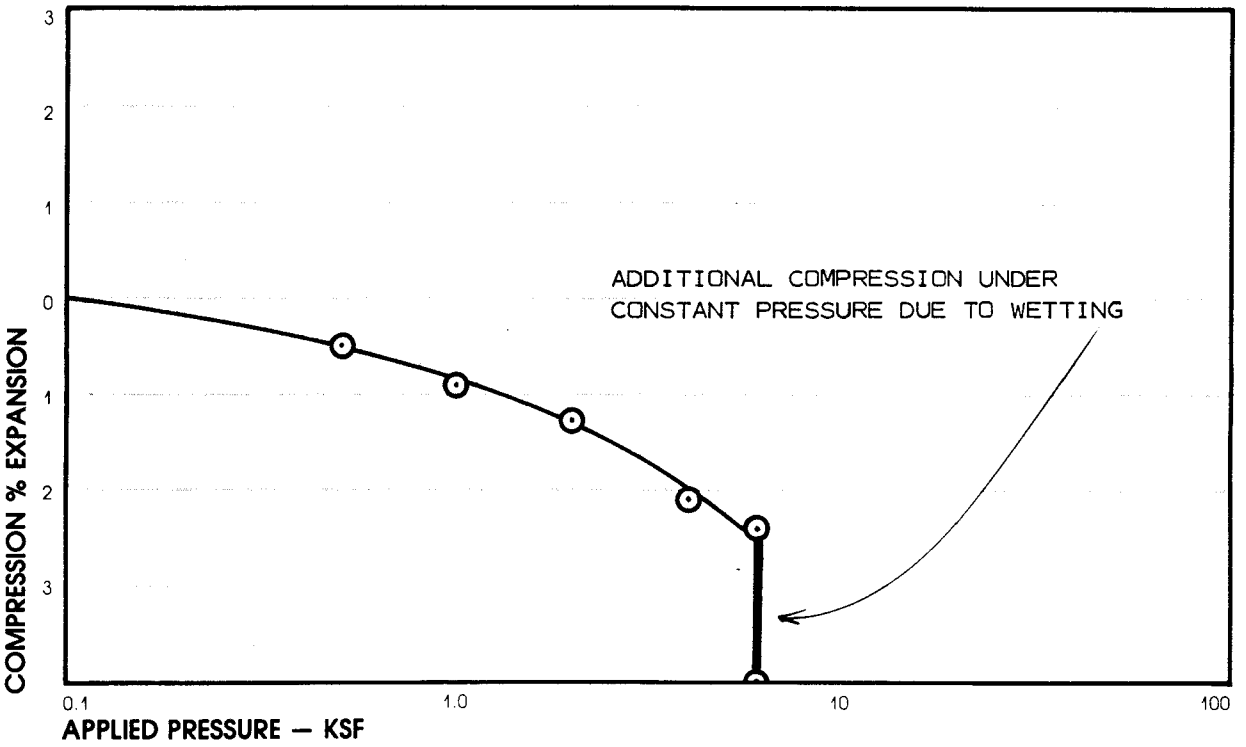
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-1 AT 4 FEET

NATURAL DRY UNIT WEIGHT = 110 PCF
NATURAL MOISTURE CONTENT = 15.0 %

Swell Consolidation Test Results

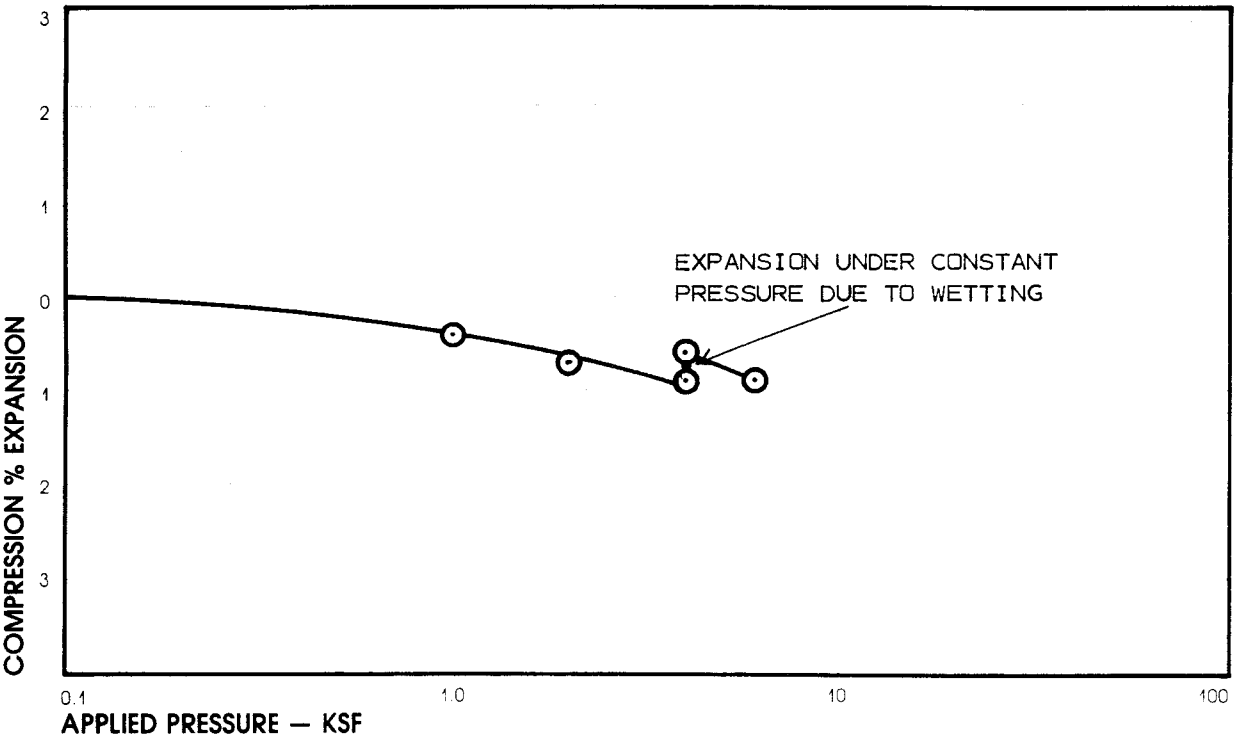
JOB NO. 18,248

FIG. A-1



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-3 AT 4 FEET

NATURAL DRY UNIT WEIGHT = 114 PCF
NATURAL MOISTURE CONTENT = 6.5 %



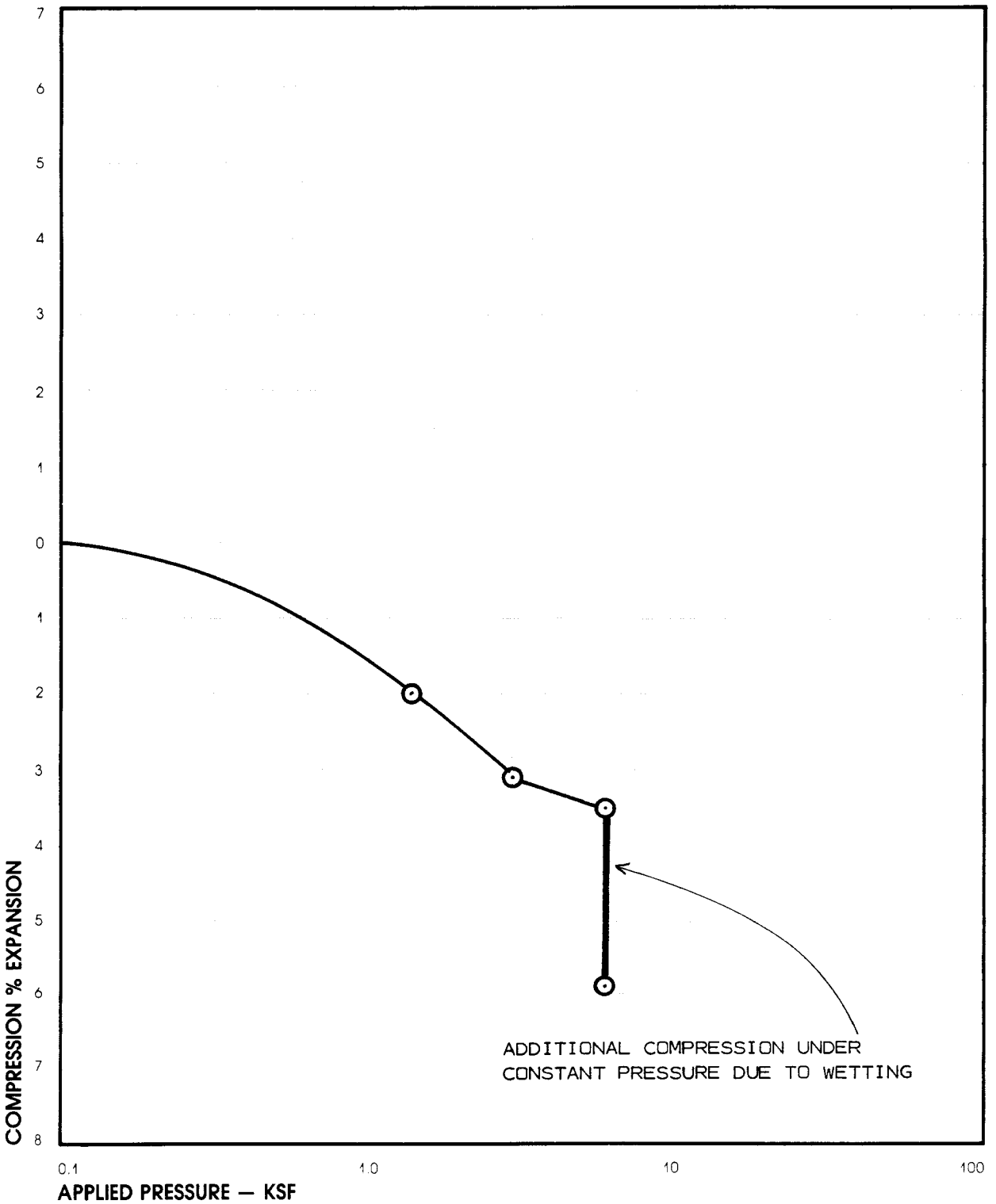
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-3 AT 9 FEET

NATURAL DRY UNIT WEIGHT = 120 PCF
NATURAL MOISTURE CONTENT = 7.8 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-2



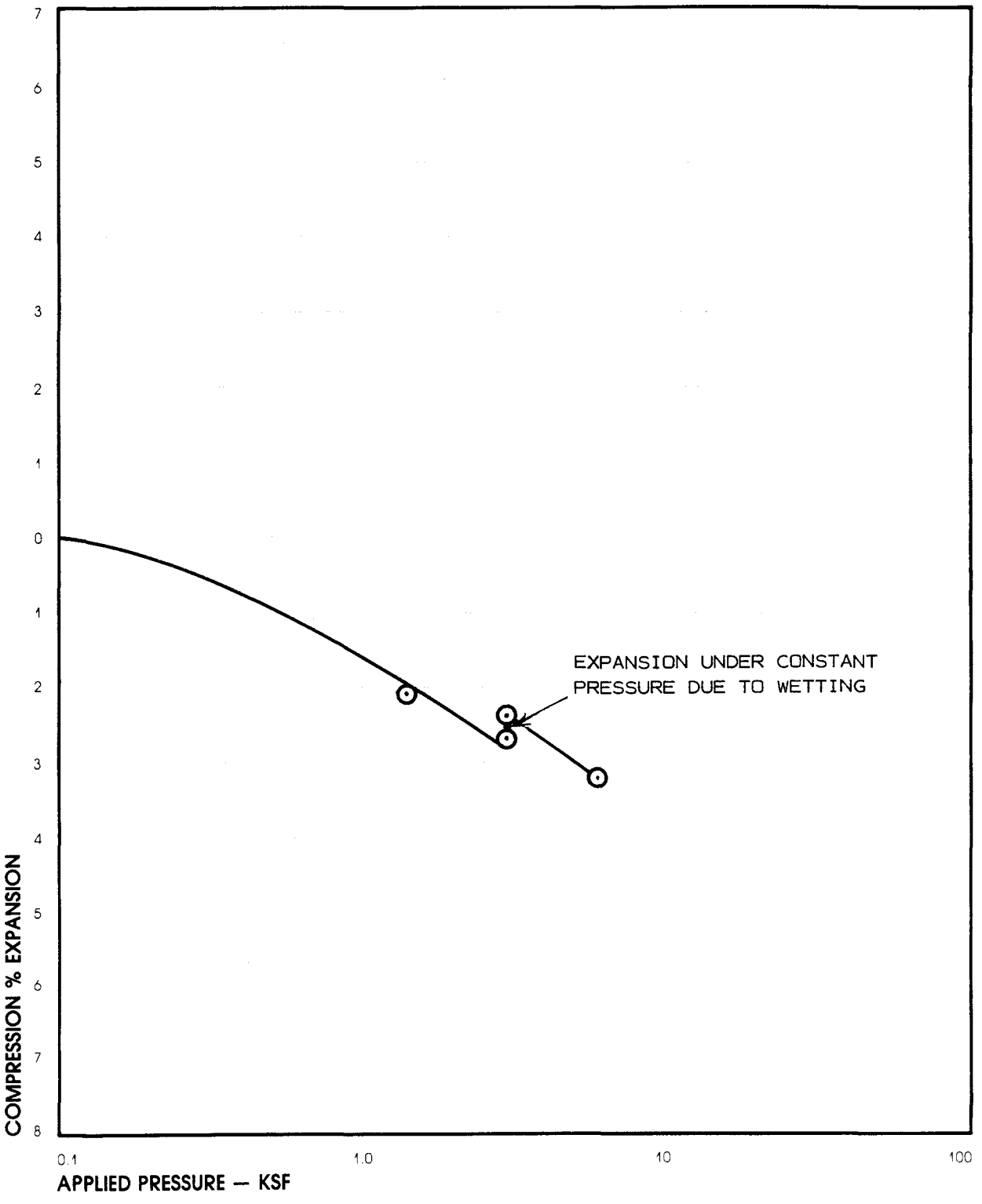
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-3 AT 14 FEET

NATURAL DRY UNIT WEIGHT = 115 PCF
NATURAL MOISTURE CONTENT = 11.8 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-3



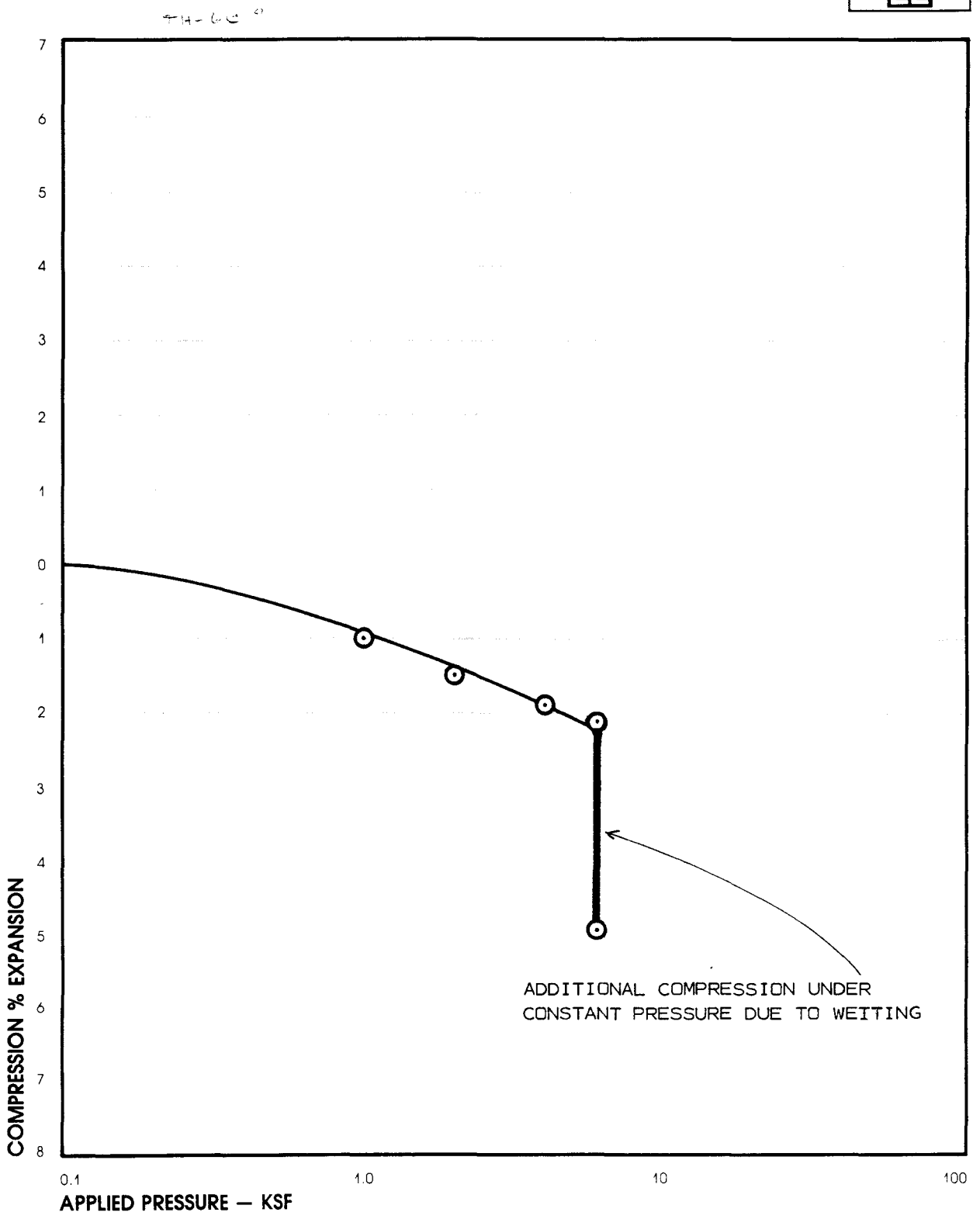
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-4 AT 14 FEET

NATURAL DRY UNIT WEIGHT = 119 PCF
NATURAL MOISTURE CONTENT = 7.9 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-4



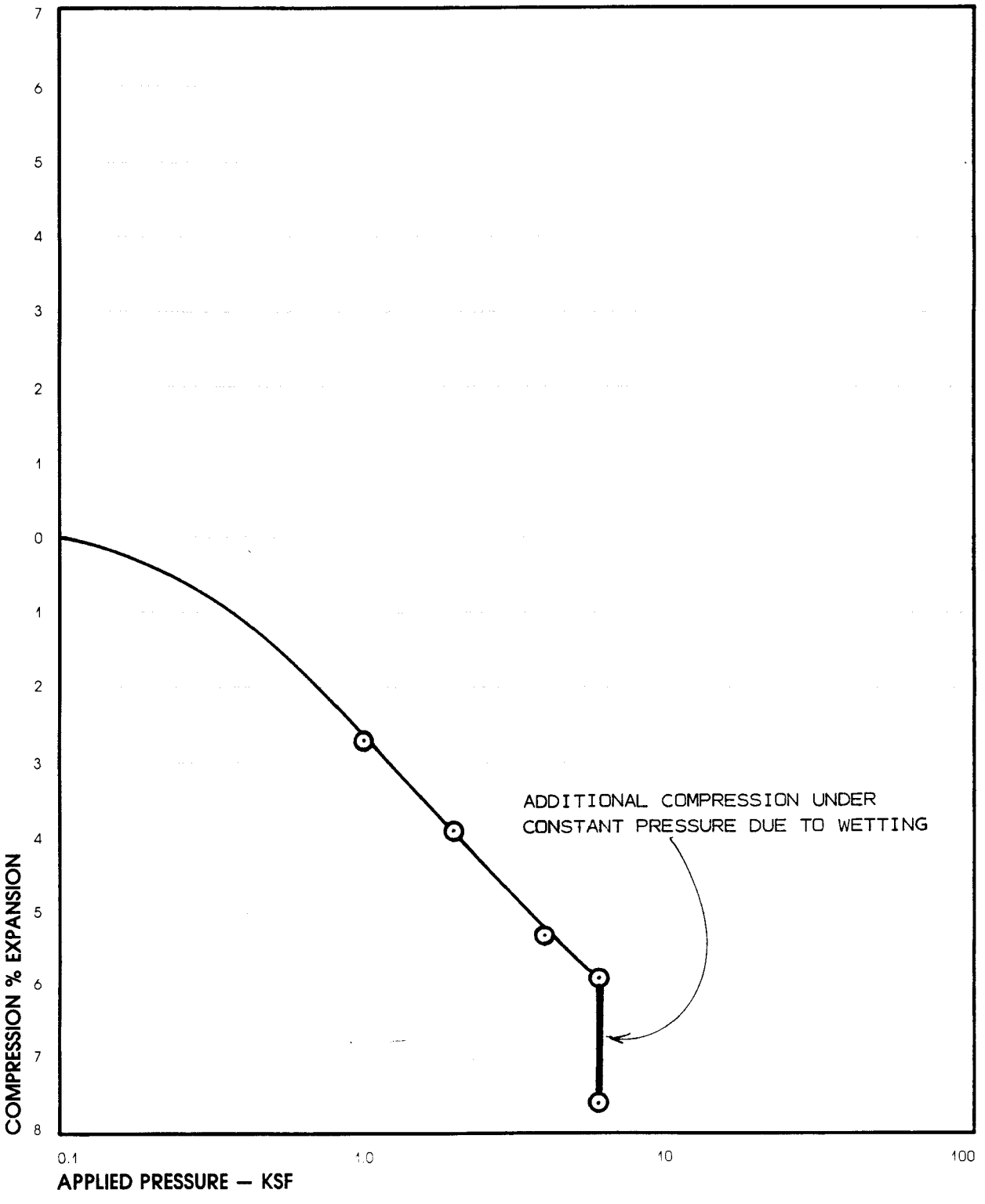
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-6 AT 9 FEET

NATURAL DRY UNIT WEIGHT = 102 PCF
NATURAL MOISTURE CONTENT = 8.1 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-5



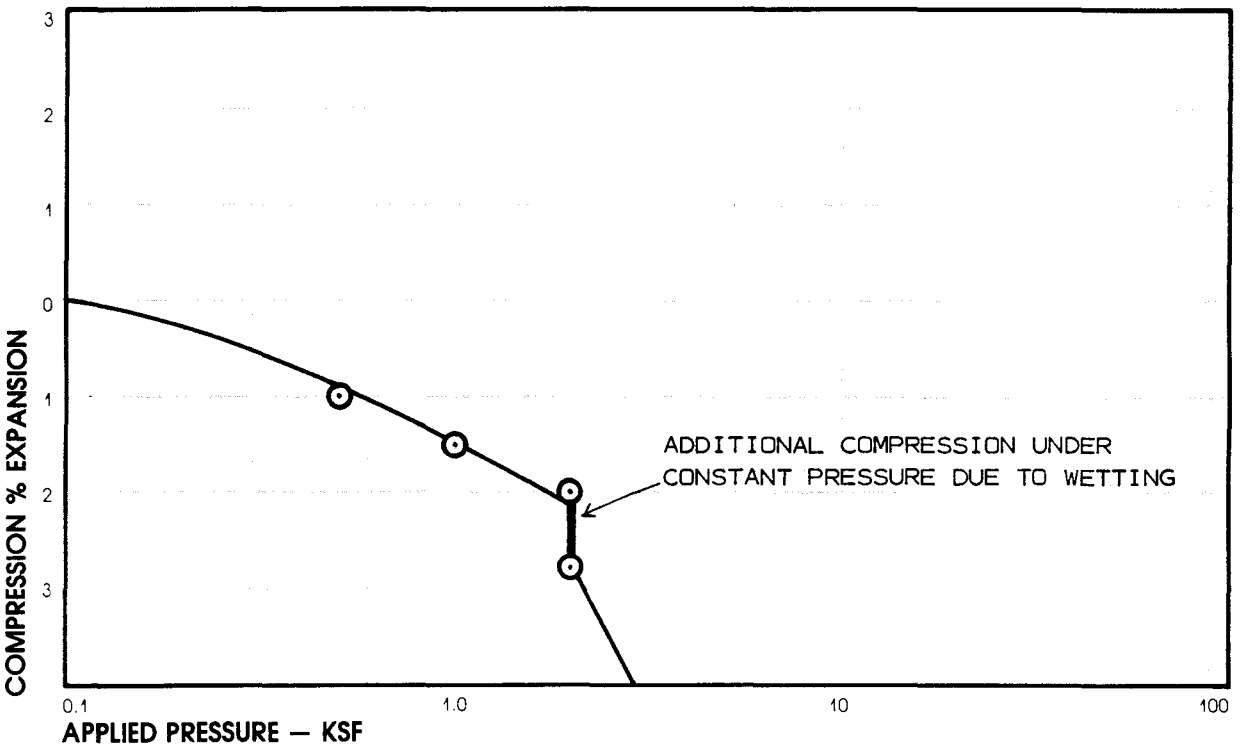
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-8 AT 9 FEET

NATURAL DRY UNIT WEIGHT = 111 PCF
NATURAL MOISTURE CONTENT = 17.3 %

Swell Consolidation Test Results

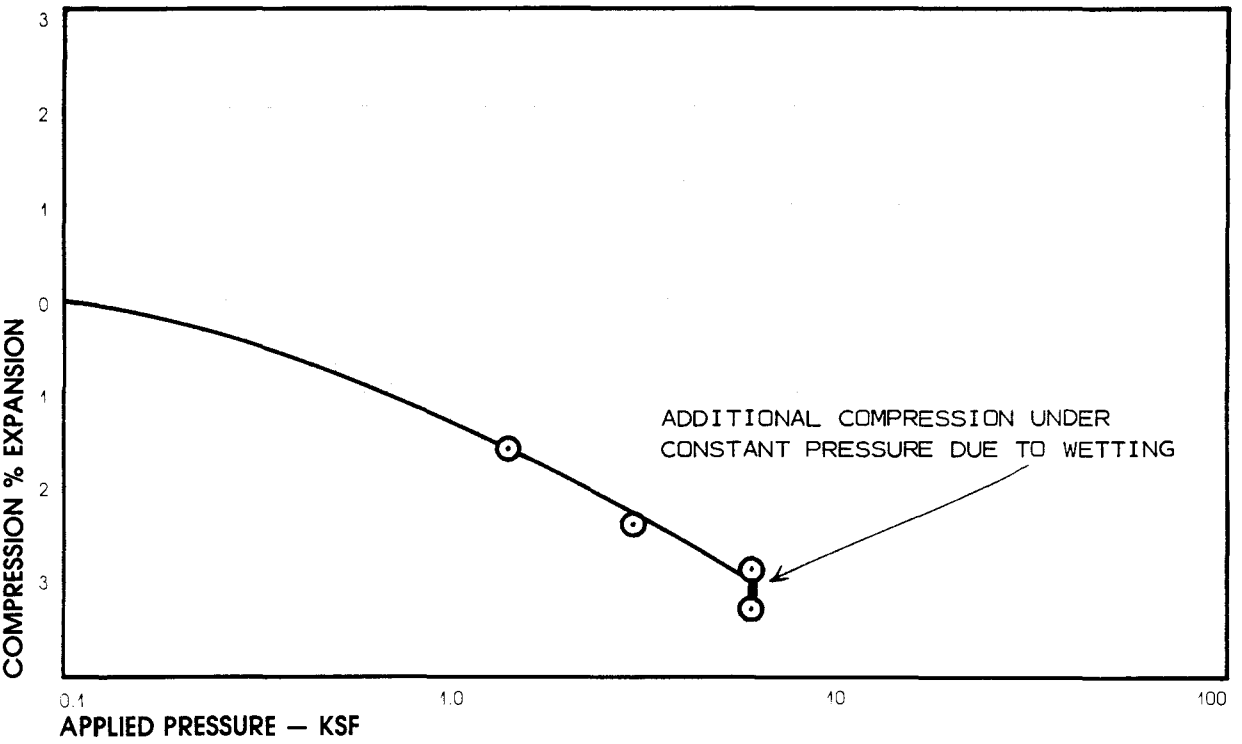
JOB NO. 18,248

FIG. A-6



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-9 AT 4 FEET

NATURAL DRY UNIT WEIGHT = 87 PCF
NATURAL MOISTURE CONTENT = 6.0 %



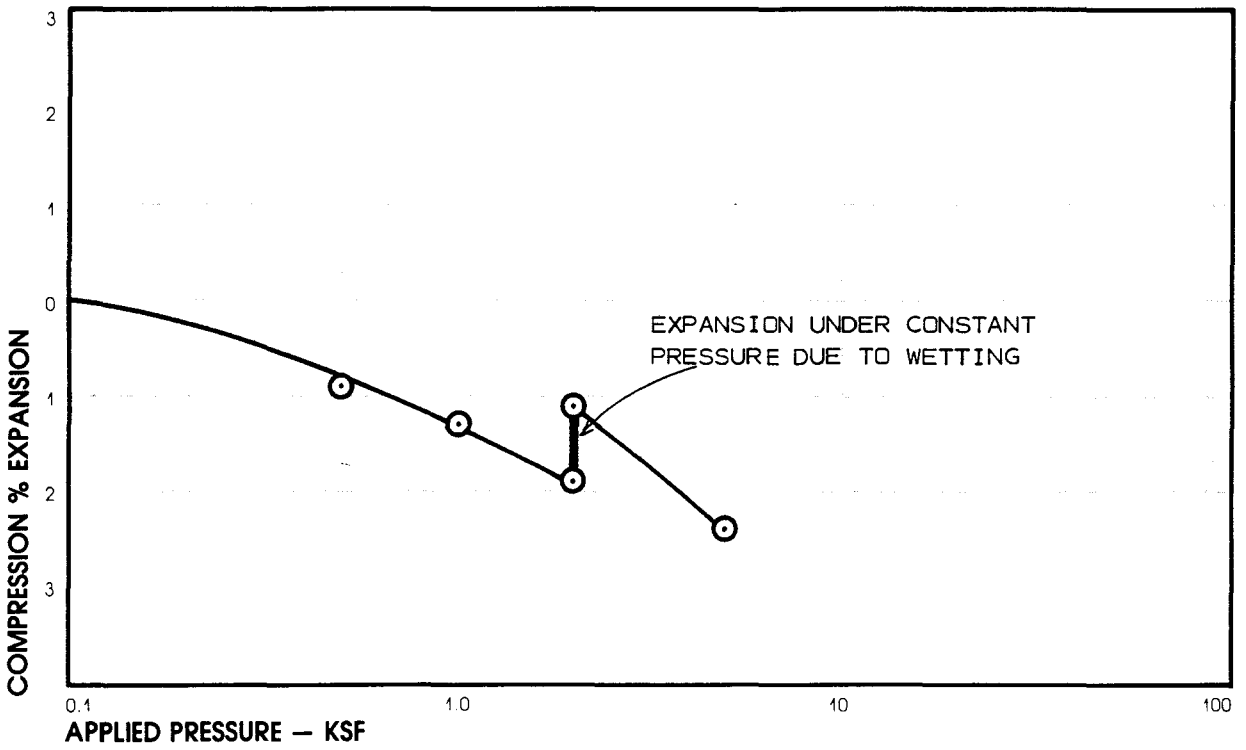
Sample of CLAY, SILTY, SLIGHTLY SAND (CL)
From TH-10 AT 14 FEET

NATURAL DRY UNIT WEIGHT = 113 PCF
NATURAL MOISTURE CONTENT = 6.1 %

Swell Consolidation Test Results

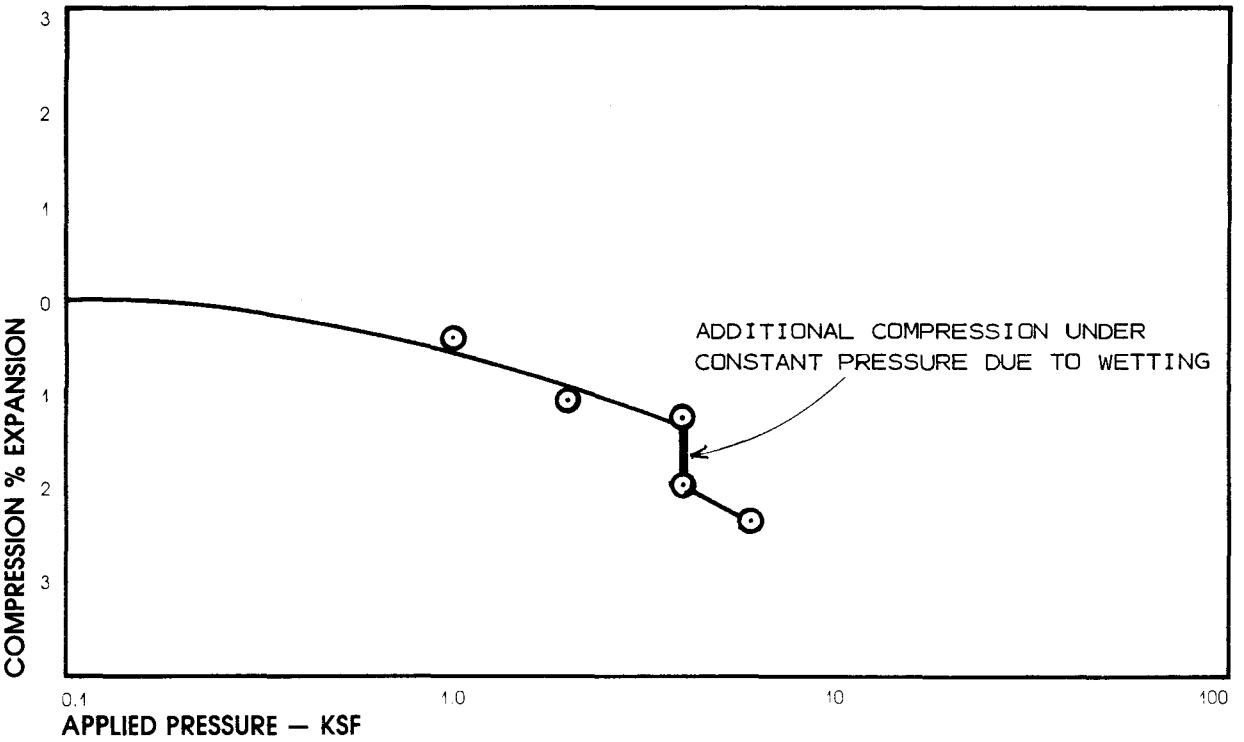
JOB NO. 18,248

FIG. A-7



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-11 AT 4 FEET

NATURAL DRY UNIT WEIGHT = 106 PCF
NATURAL MOISTURE CONTENT = 9.2 %



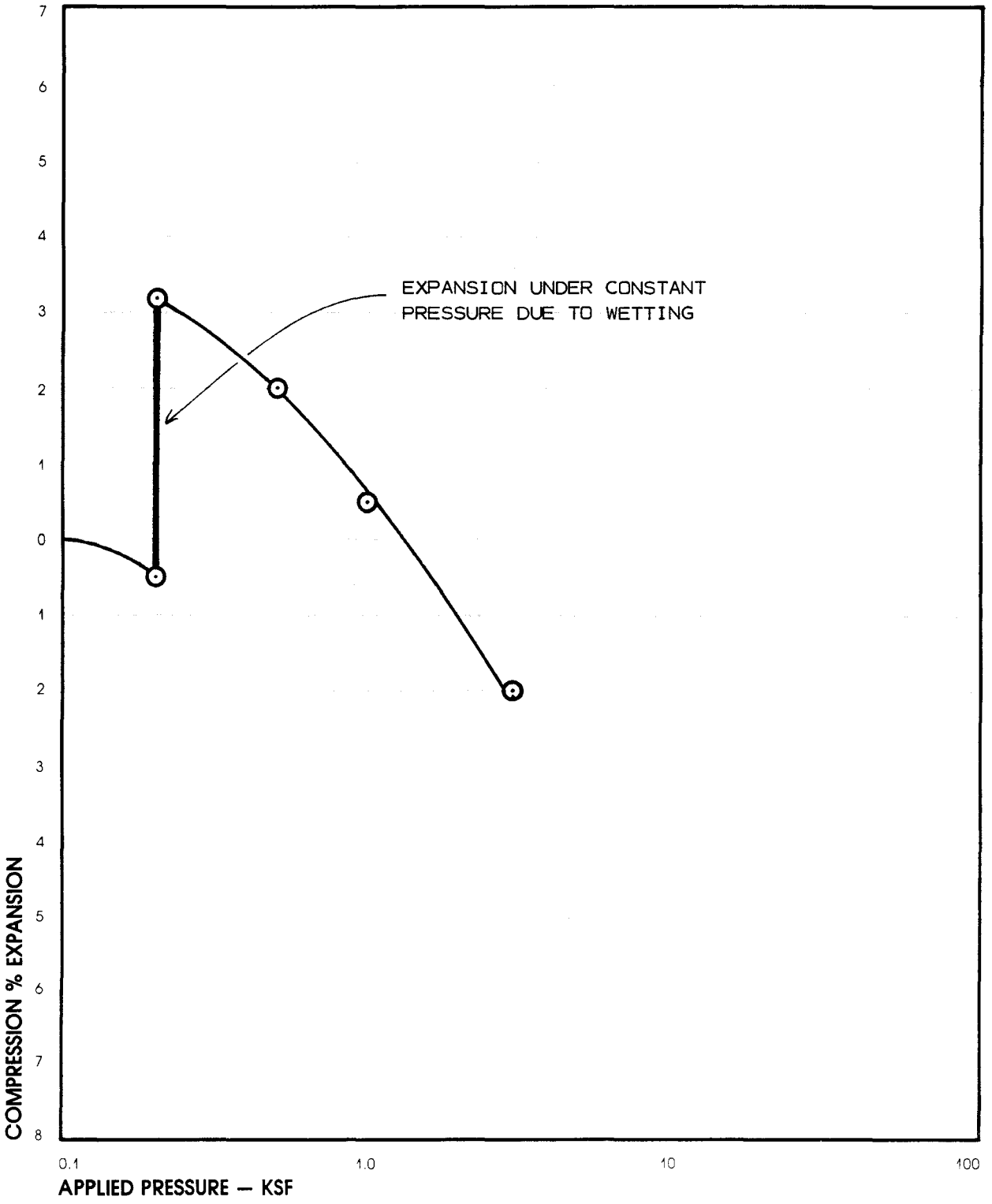
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-12 AT 9 FEET

NATURAL DRY UNIT WEIGHT = 112 PCF
NATURAL MOISTURE CONTENT = 5.7 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-8

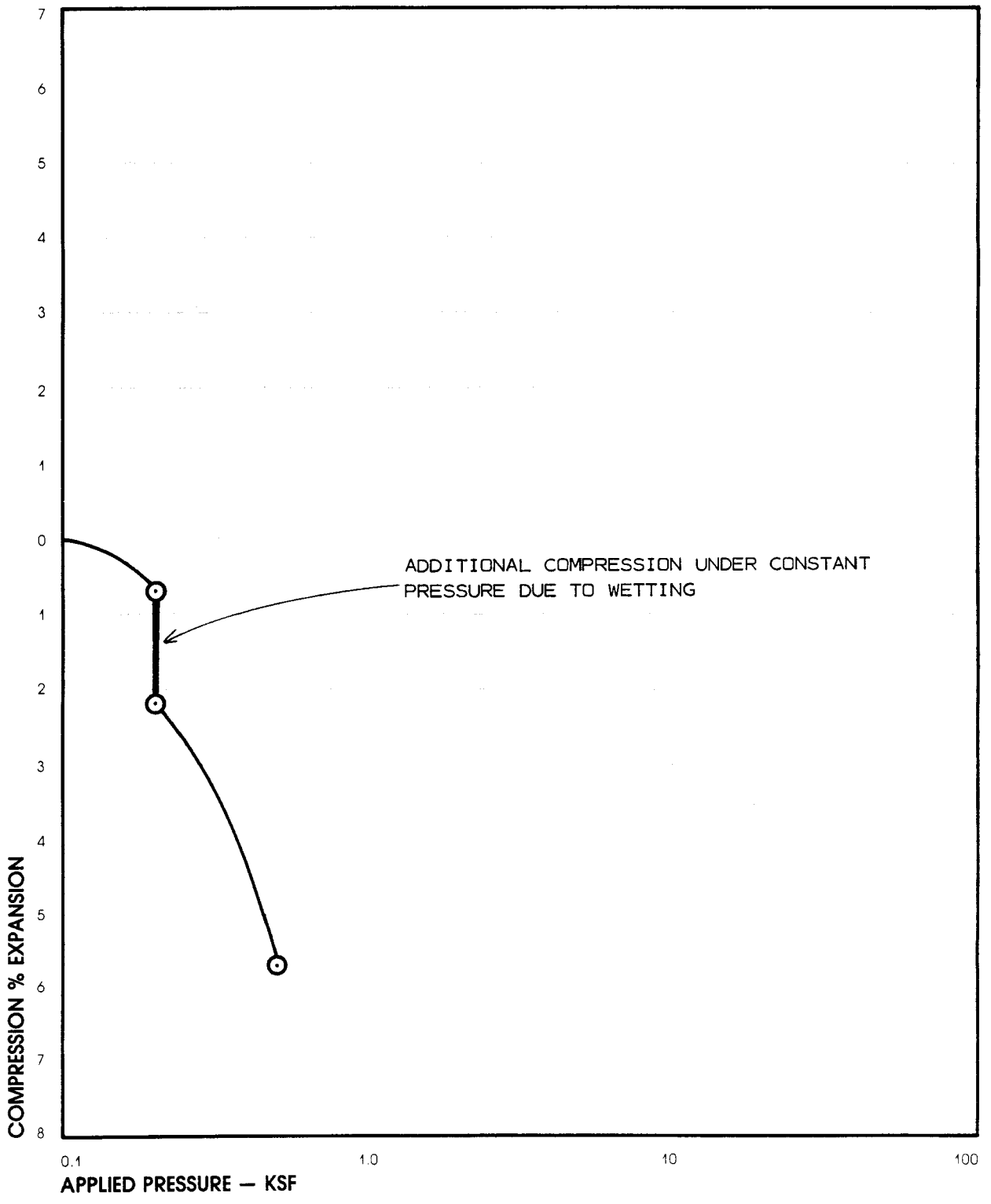


Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-13 AT 3 FEET

NATURAL DRY UNIT WEIGHT = 102 PCF
NATURAL MOISTURE CONTENT = 10.1 %

JOB NO. 18,248

Swell Consolidation Test Results FIG. A-9



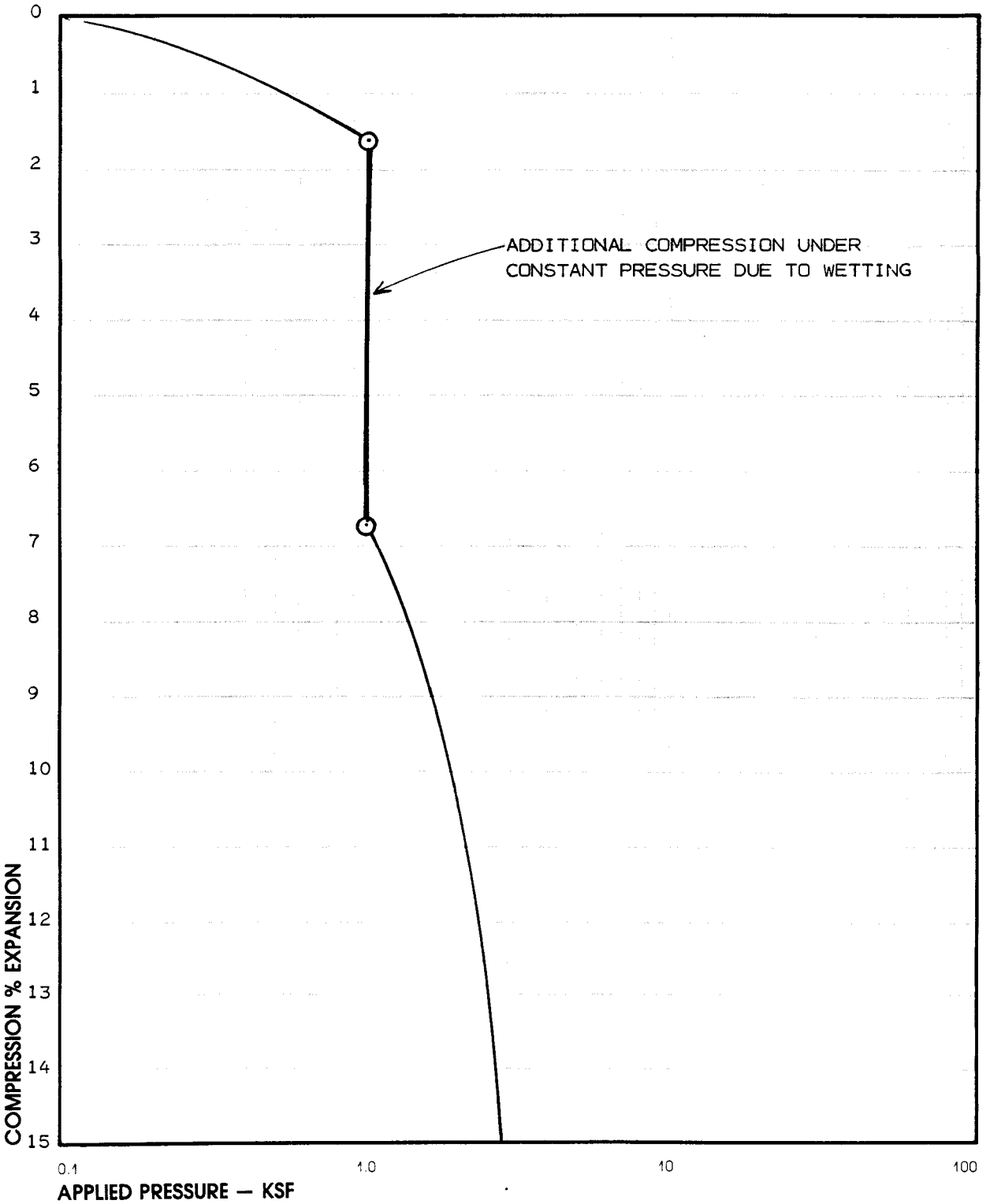
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-16 AT 3 FEET

NATURAL DRY UNIT WEIGHT = 91 PCF
NATURAL MOISTURE CONTENT = 6.8 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-10



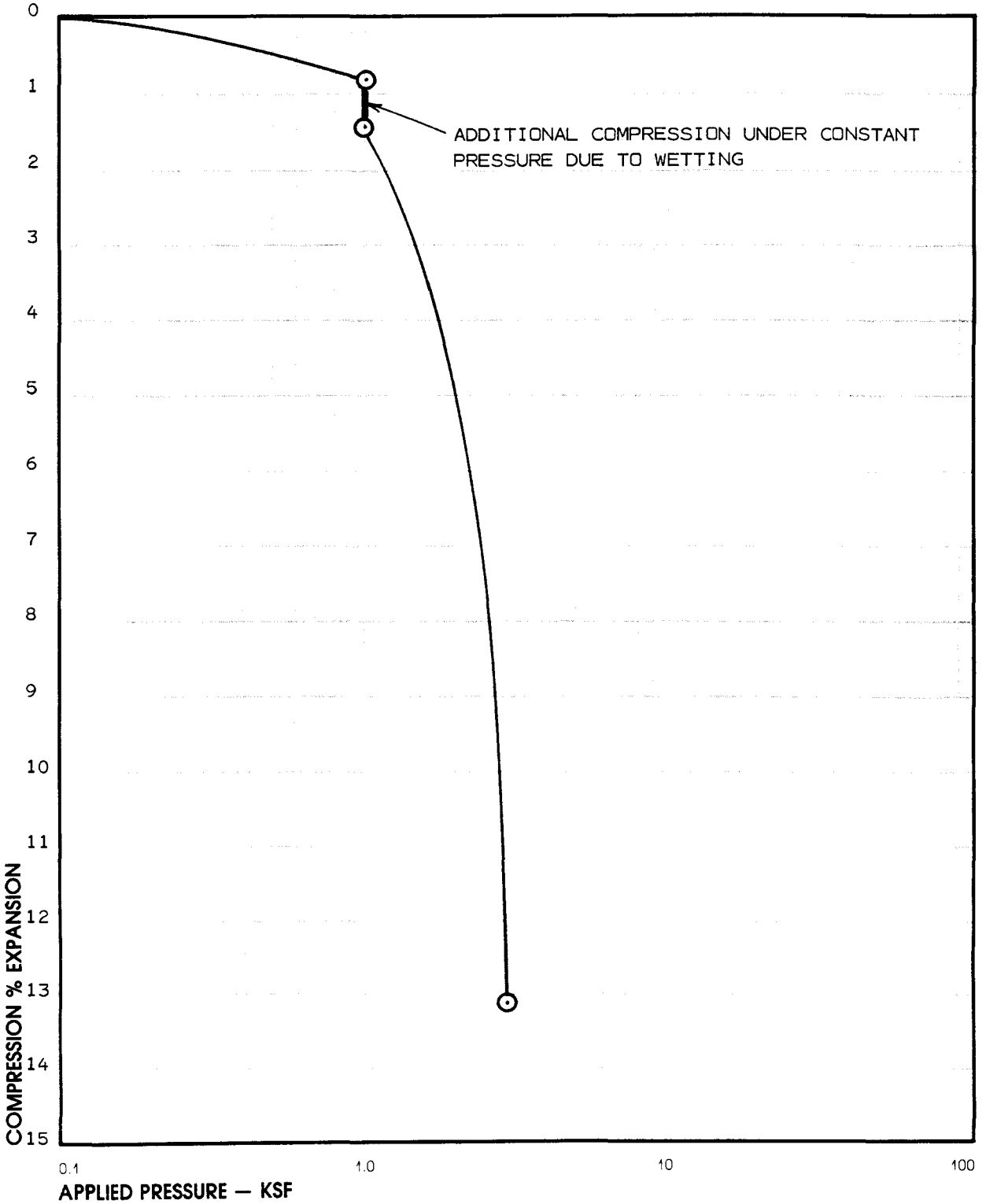
Sample of CLAY, SANDY, SL. SANDY (CL)
From TH-16 AT 3 FEET (LINER NO. 2)

NATURAL DRY UNIT WEIGHT = 93 PCF
NATURAL MOISTURE CONTENT = 7.6 %

Swell Consolidation Test Results

JOB NO. 18,248

FIG. A-11



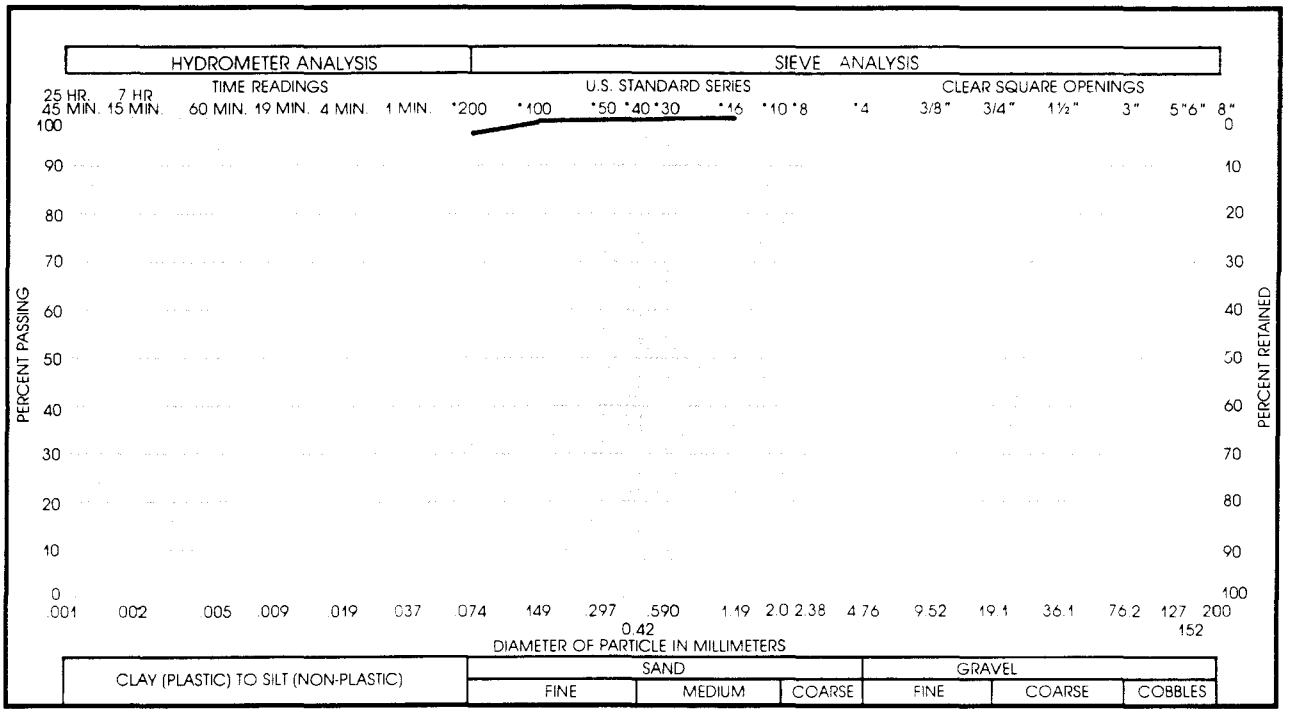
Sample of CLAY, SILTY, SL. SANDY (CL)
From TH-18 AT 3 FEET

NATURAL DRY UNIT WEIGHT = 96 PCF
NATURAL MOISTURE CONTENT = 7.3 %

Swell Consolidation Test Results

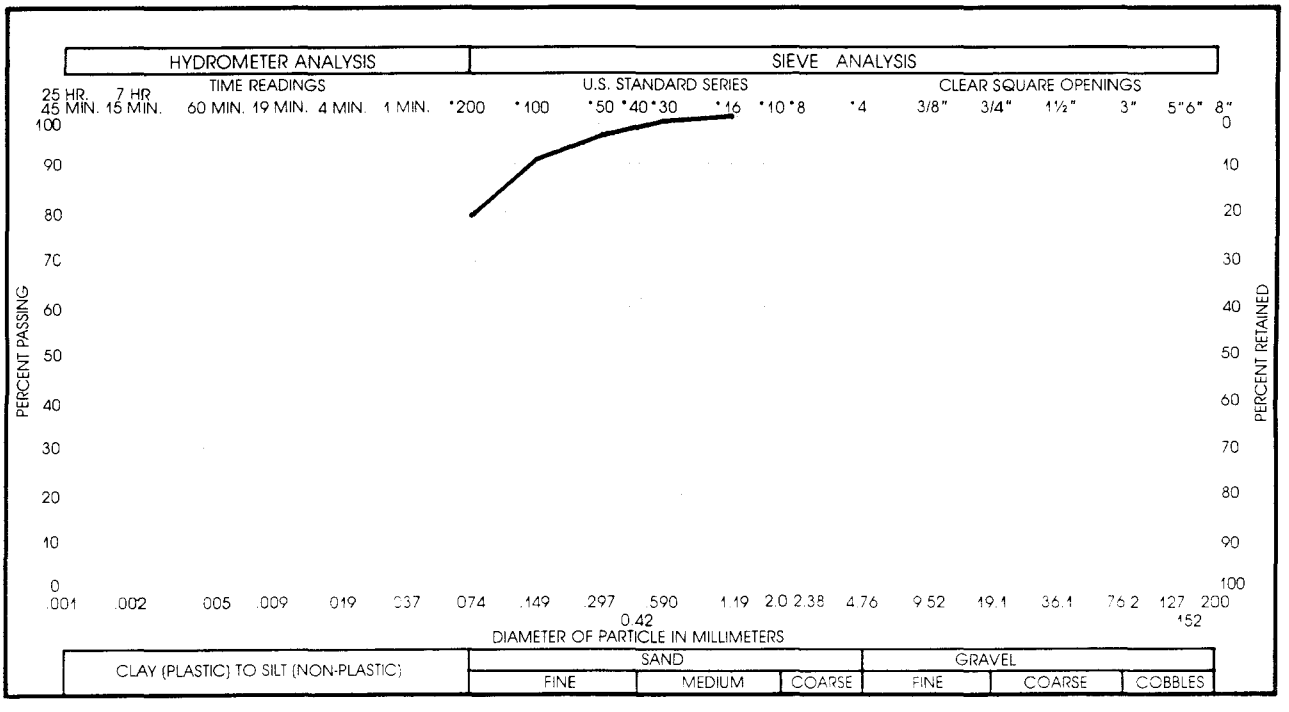
JOB NO. 18,248

FIG. A-12



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-2 AT 19 FEET

GRAVEL 0 % SAND 2 %
SILT & CLAY 98 % LIQUID LIMIT 32 %
PLASTICITY INDEX 16 %



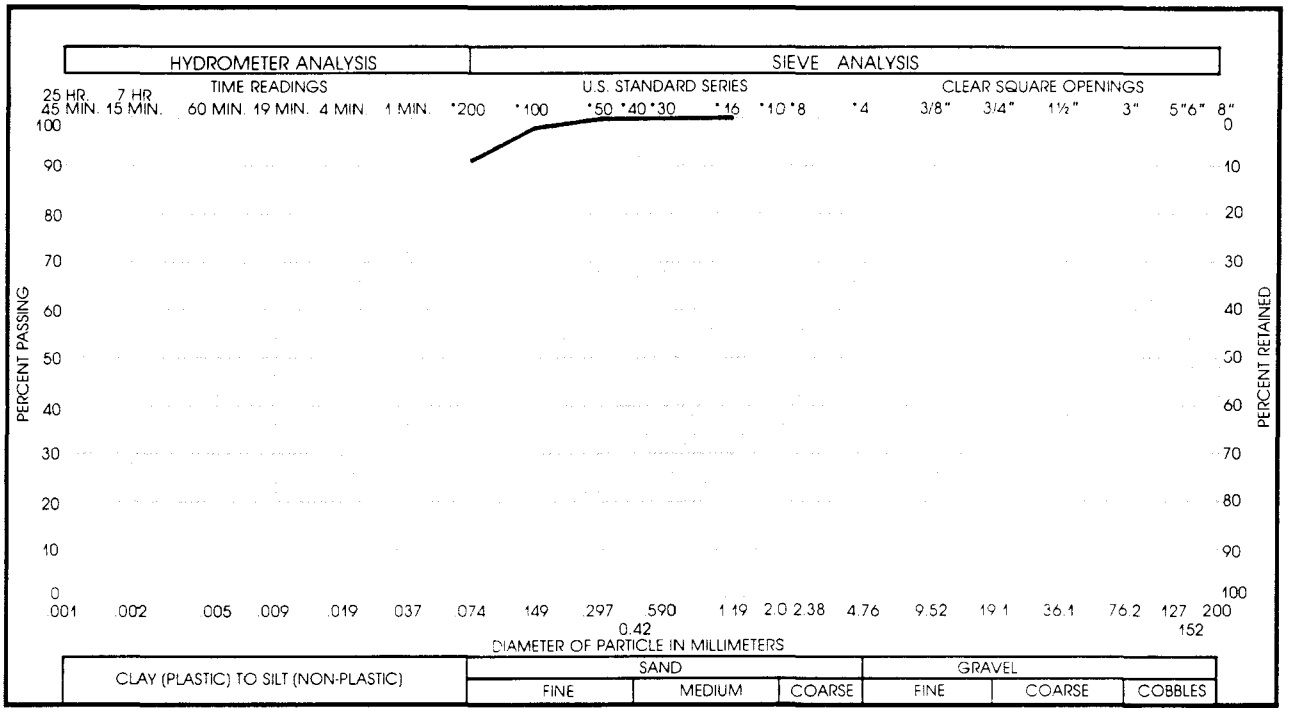
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-4 AT 9 FEET

GRAVEL 0 % SAND 21 %
SILT & CLAY 79 % LIQUID LIMIT 25 %
PLASTICITY INDEX 8 %

Gradation Test Results

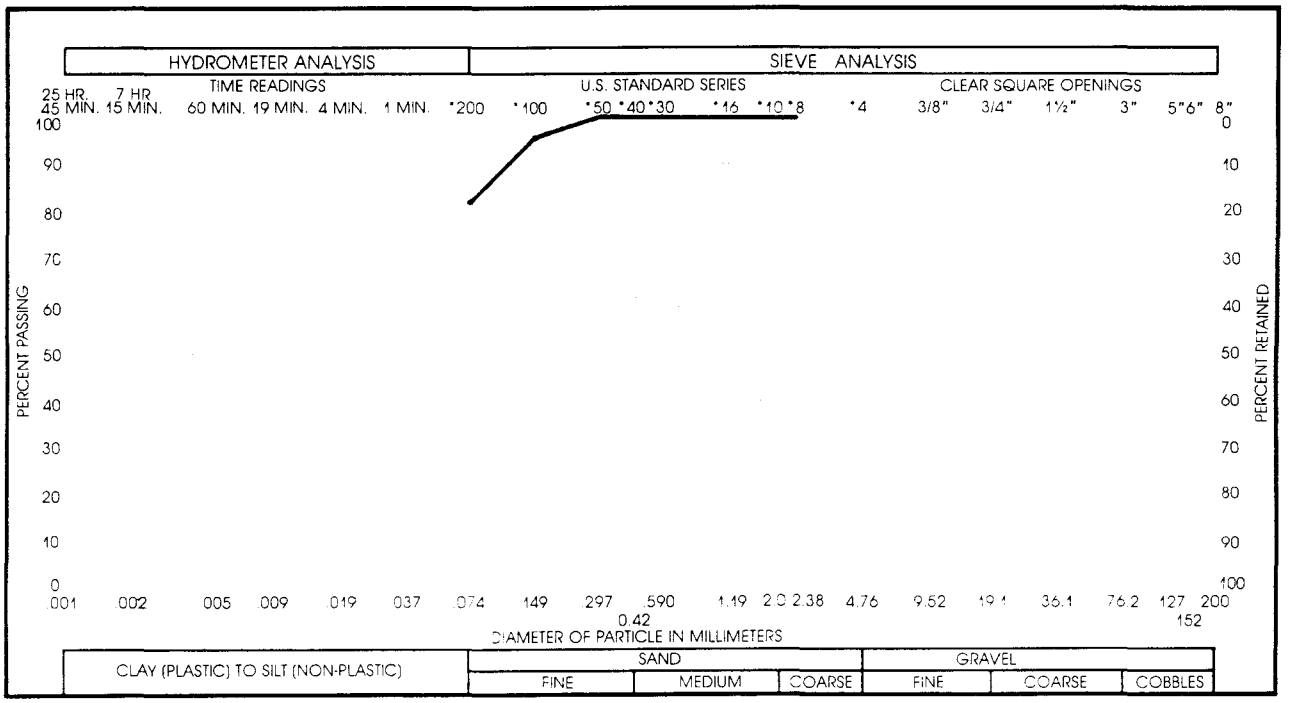
JOB NO. 18,248

FIG. A-13



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH- 6 AT 4 FEET

GRAVEL 0 % SAND 8 %
SILT & CLAY 92 % LIQUID LIMIT 30 %
PLASTICITY INDEX 14 %



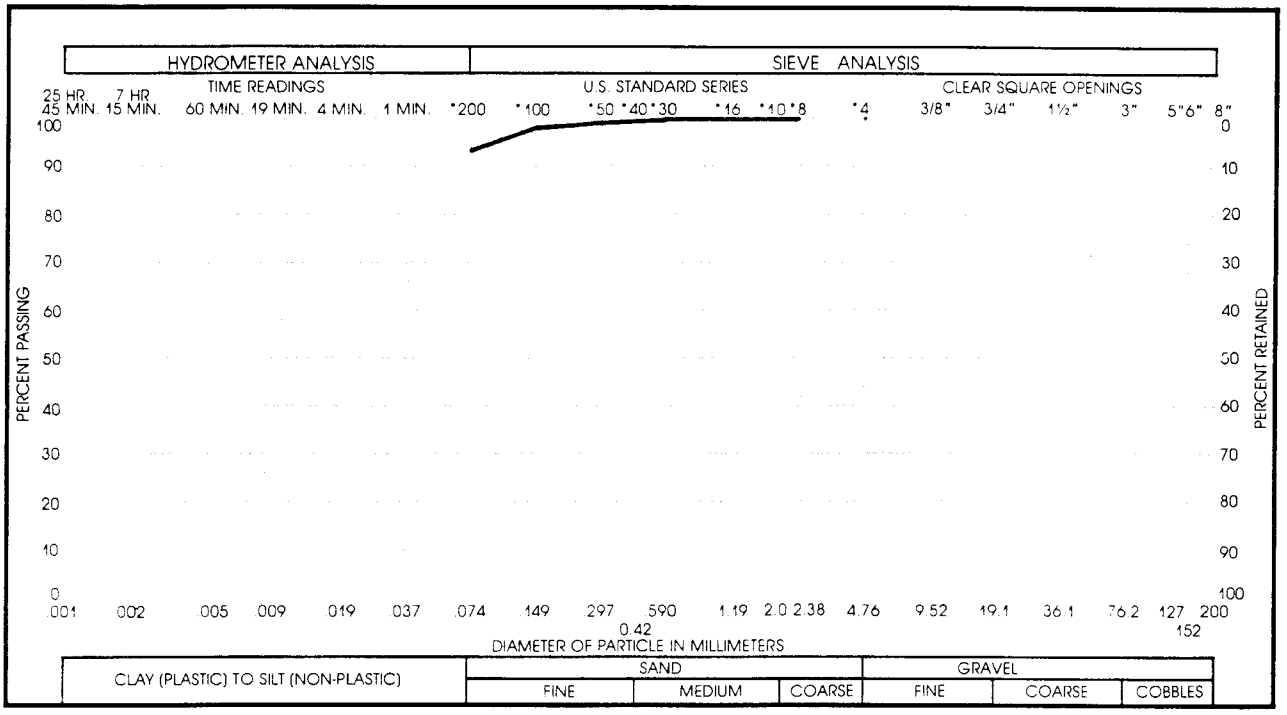
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-7 AT 9 FEET

GRAVEL 0 % SAND 18 %
SILT & CLAY 82 % LIQUID LIMIT 26 %
PLASTICITY INDEX 11 %

Gradation Test Results

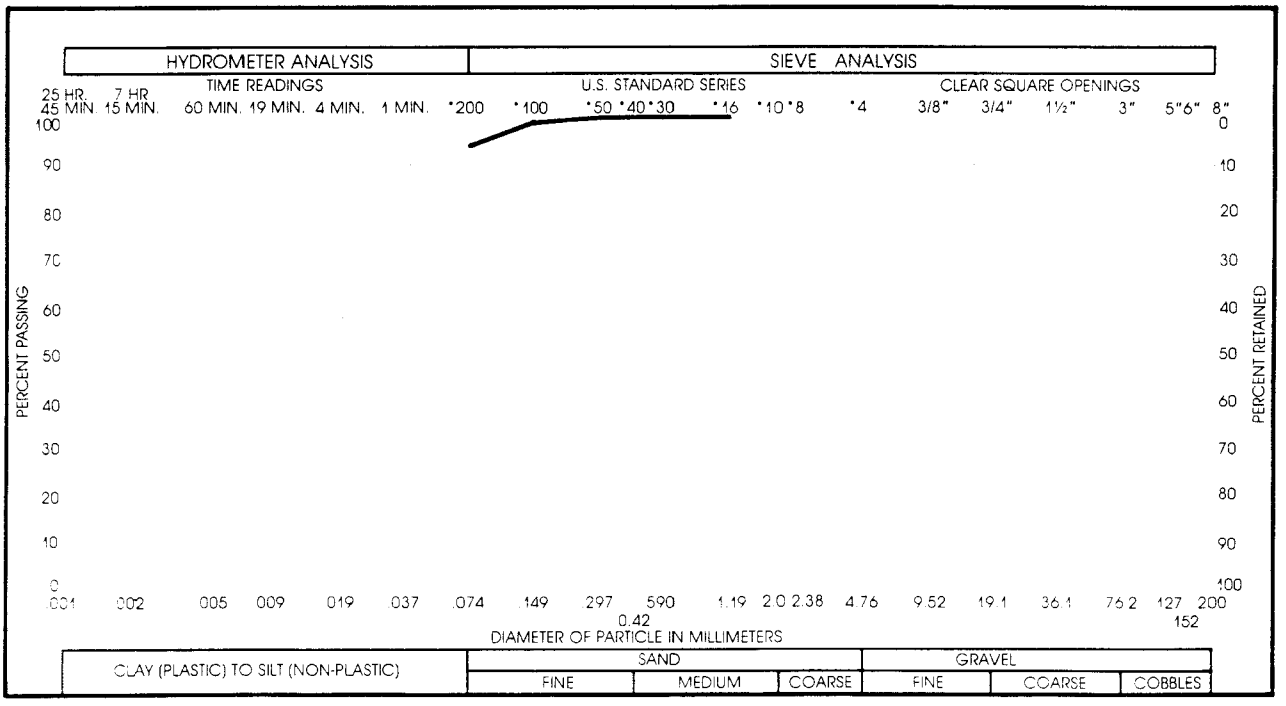
JOB NO. 18,248

FIG. A-14



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-9 AT 19 FEET

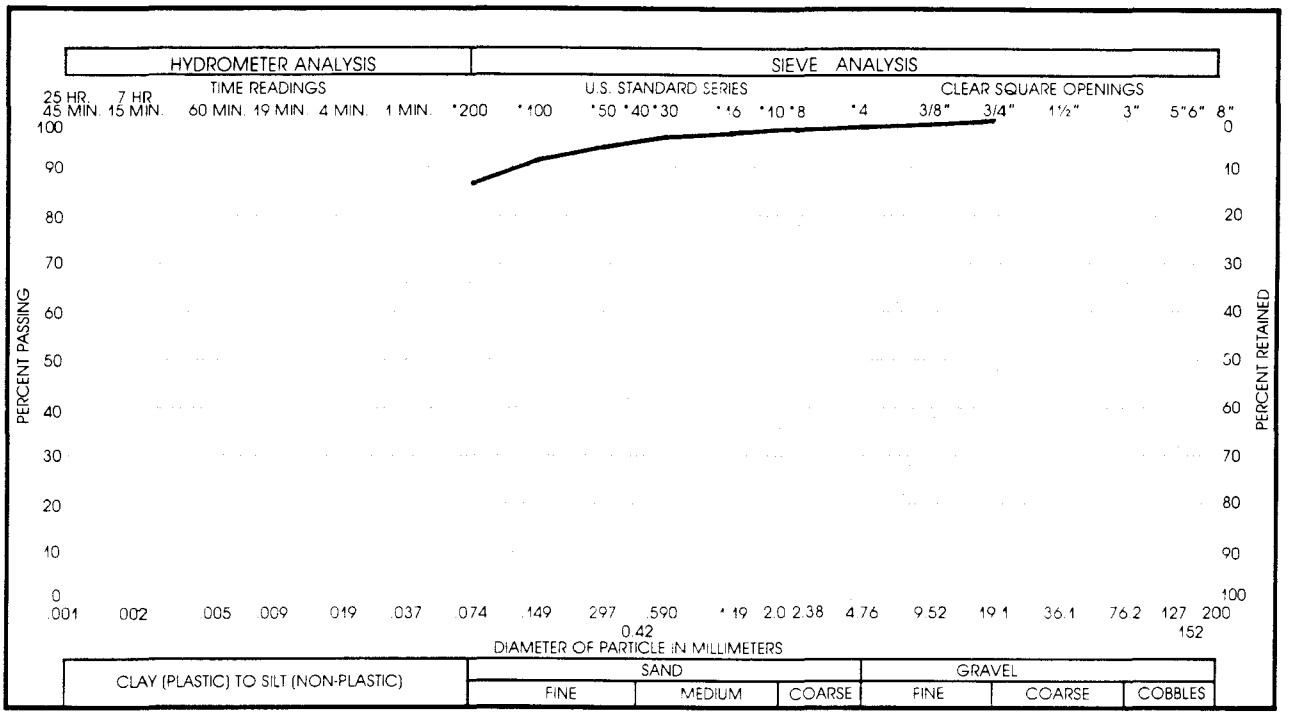
GRAVEL 0 % SAND 6 %
SILT & CLAY 94 % LIQUID LIMIT 28 %
PLASTICITY INDEX 11 %



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-12 AT 4 FEET

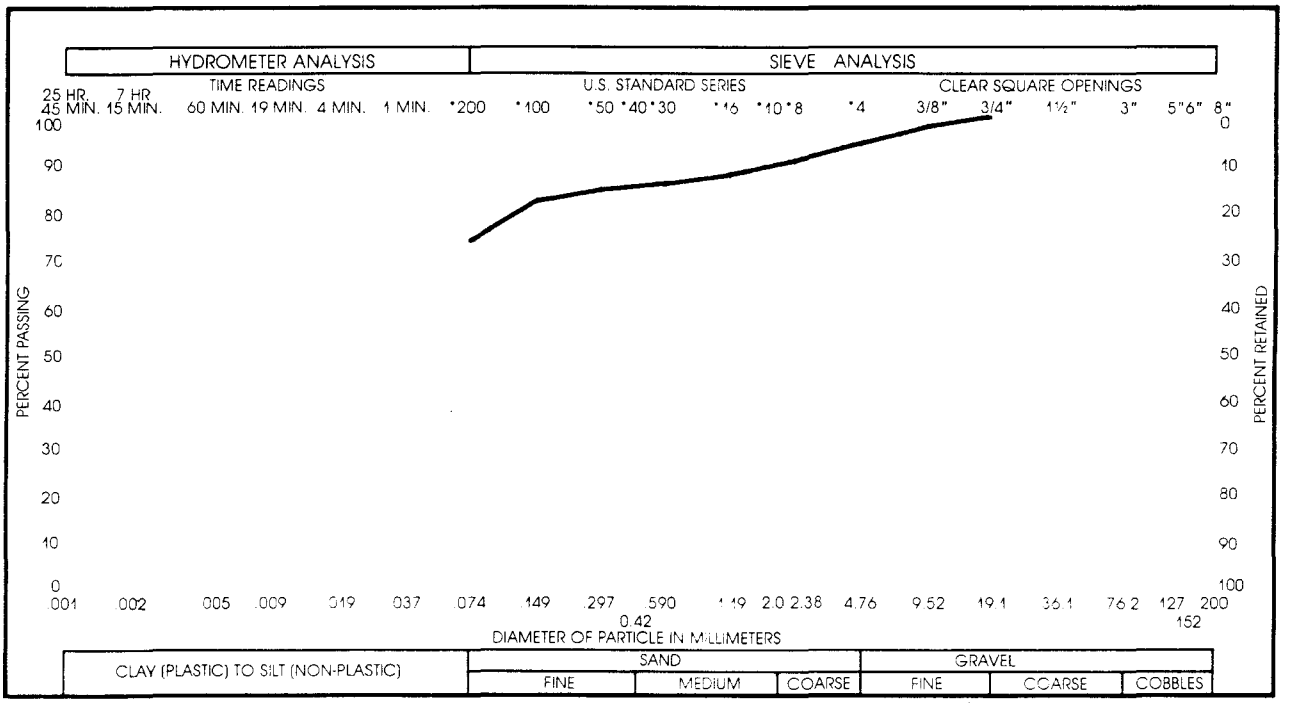
GRAVEL 0 % SAND 6 %
SILT & CLAY 94 % LIQUID LIMIT 31 %
PLASTICITY INDEX 15 %

Gradation Test Results



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-13 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 13 %
SILT & CLAY 87 % LIQUID LIMIT 32 %
PLASTICITY INDEX 14 %



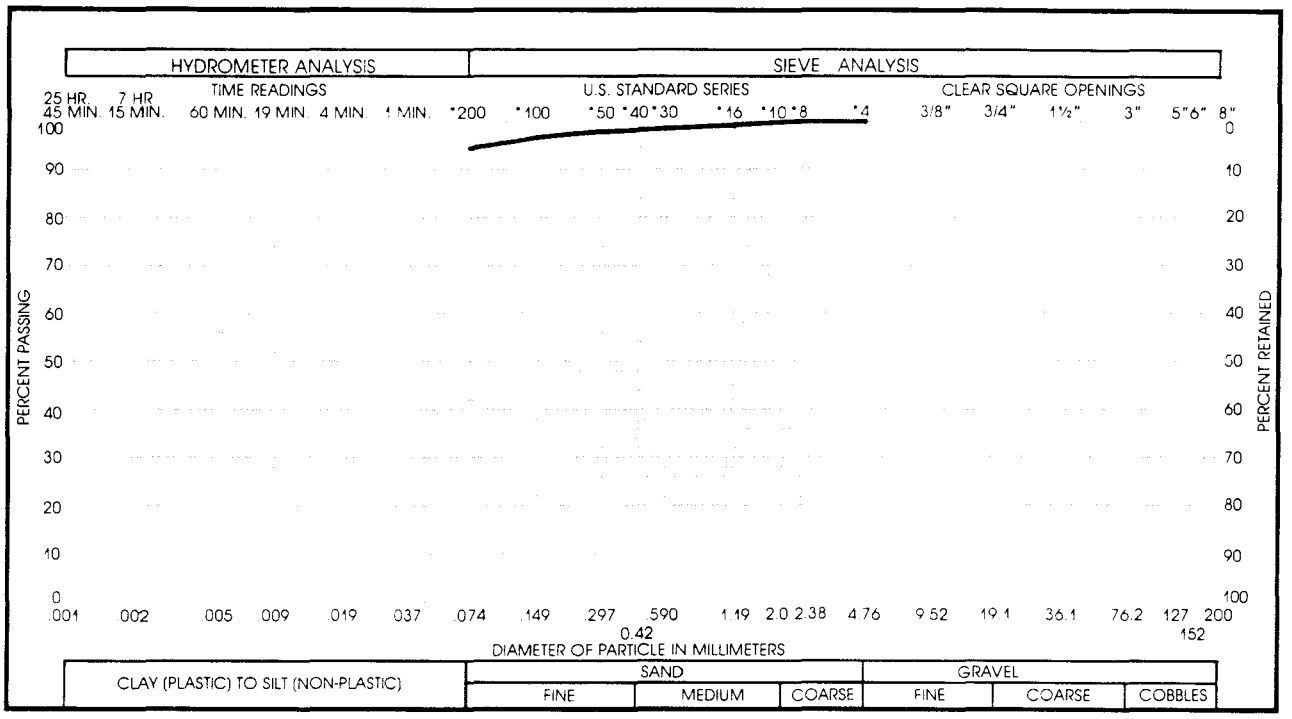
Sample of CLAY, SILTY, SLIGHTLY SANDY, SLIGHTLY GRAVELLY (CL)
From TH-14 AT 0 TO 4 FEET, BULK

GRAVEL 5 % SAND 21 %
SILT & CLAY 74 % LIQUID LIMIT 25 %
PLASTICITY INDEX 9 %

Gradation Test Results

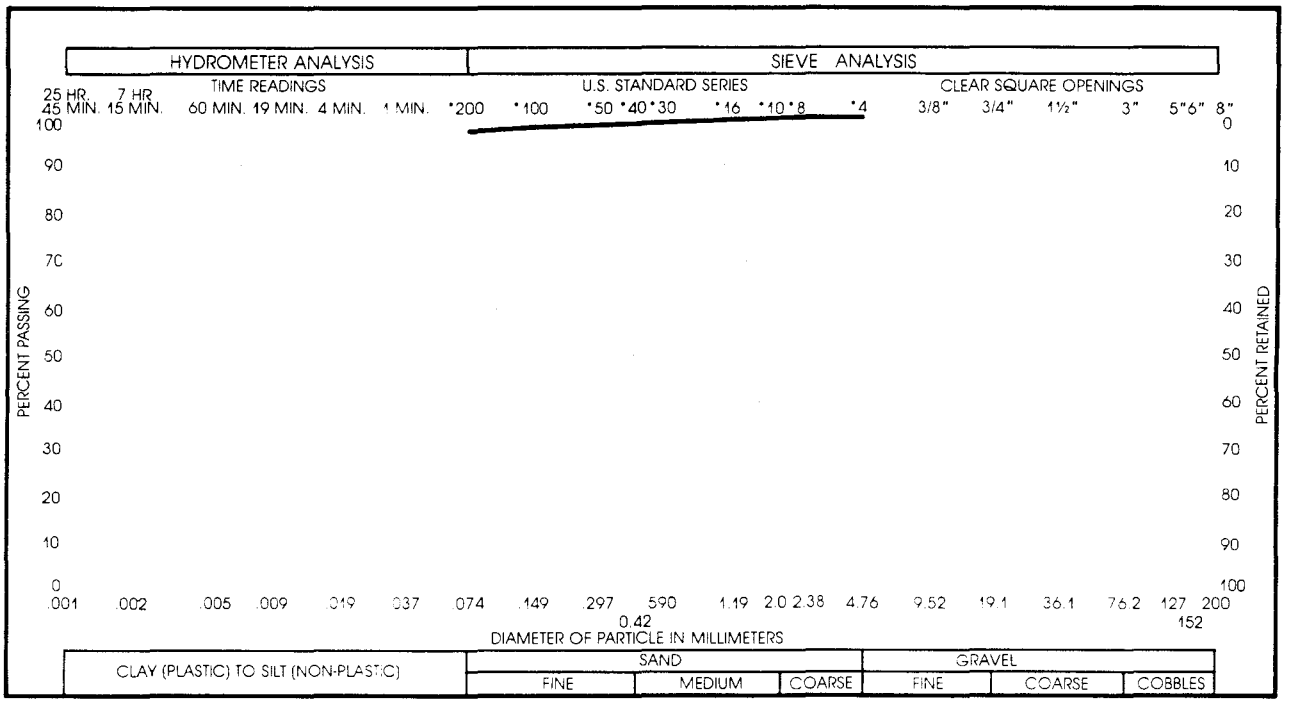
JOB NO. 18,248

FIG. A-16



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-15 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 6 %
SILT & CLAY 94 % LIQUID LIMIT 33 %
PLASTICITY INDEX 16 %



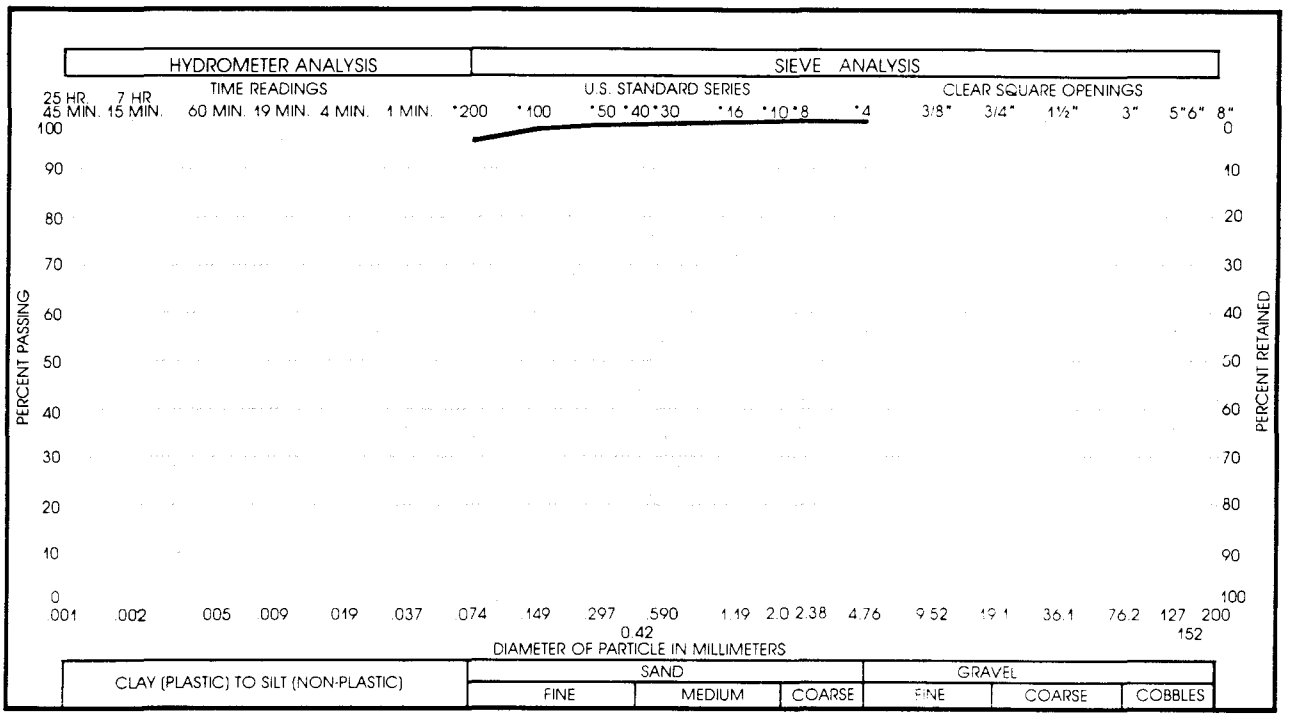
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-16 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 3 %
SILT & CLAY 97 % LIQUID LIMIT 39 %
PLASTICITY INDEX 21 %

Gradation Test Results

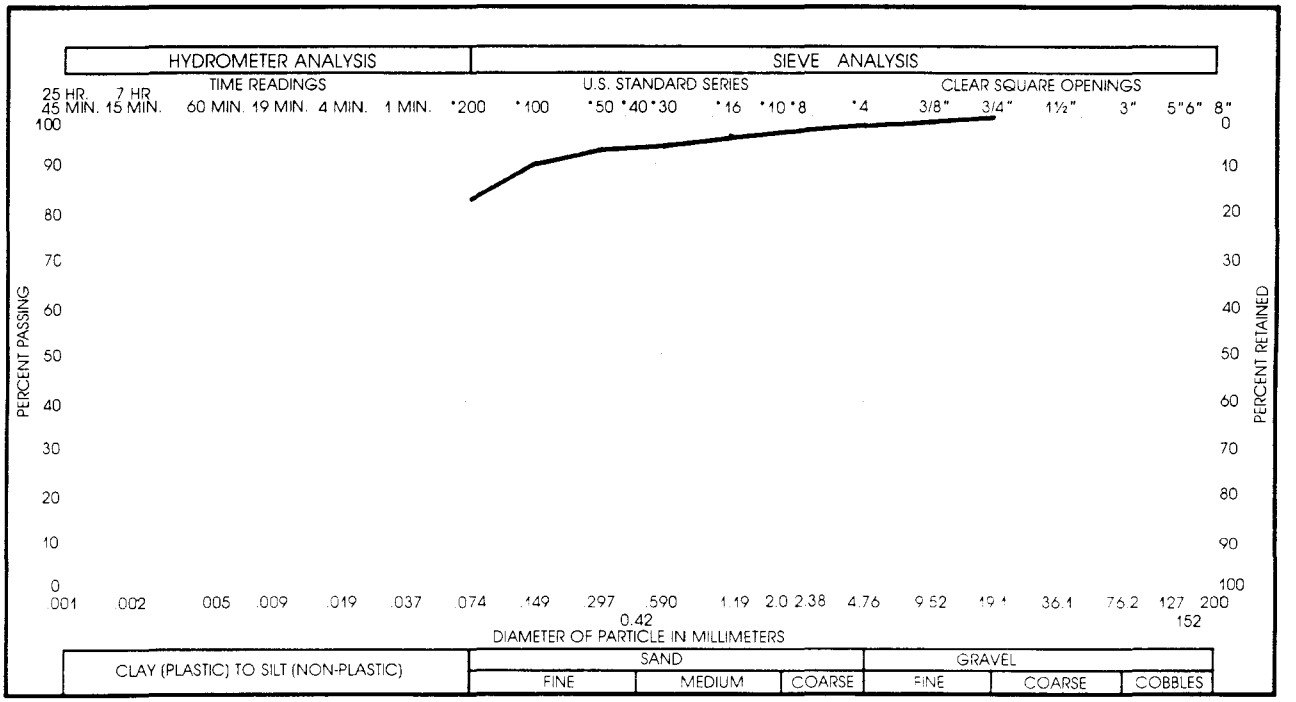
JOB NO. 18,248

FIG. A-17



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-17 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 4 %
SILT & CLAY 96 % LIQUID LIMIT 34 %
PLASTICITY INDEX 17 %



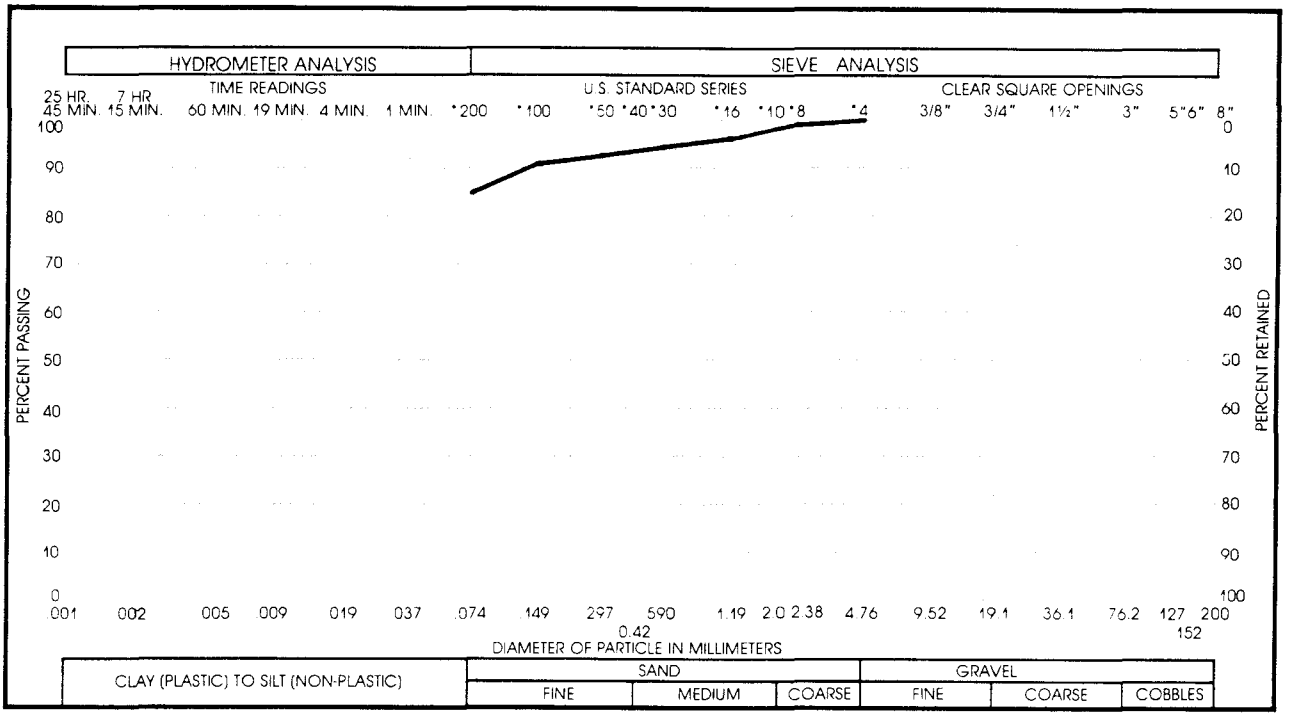
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-18 AT 0 TO 4 FEET, BULK

GRAVEL 2 % SAND 15 %
SILT & CLAY 83 % LIQUID LIMIT 29 %
PLASTICITY INDEX 14 %

Gradation Test Results

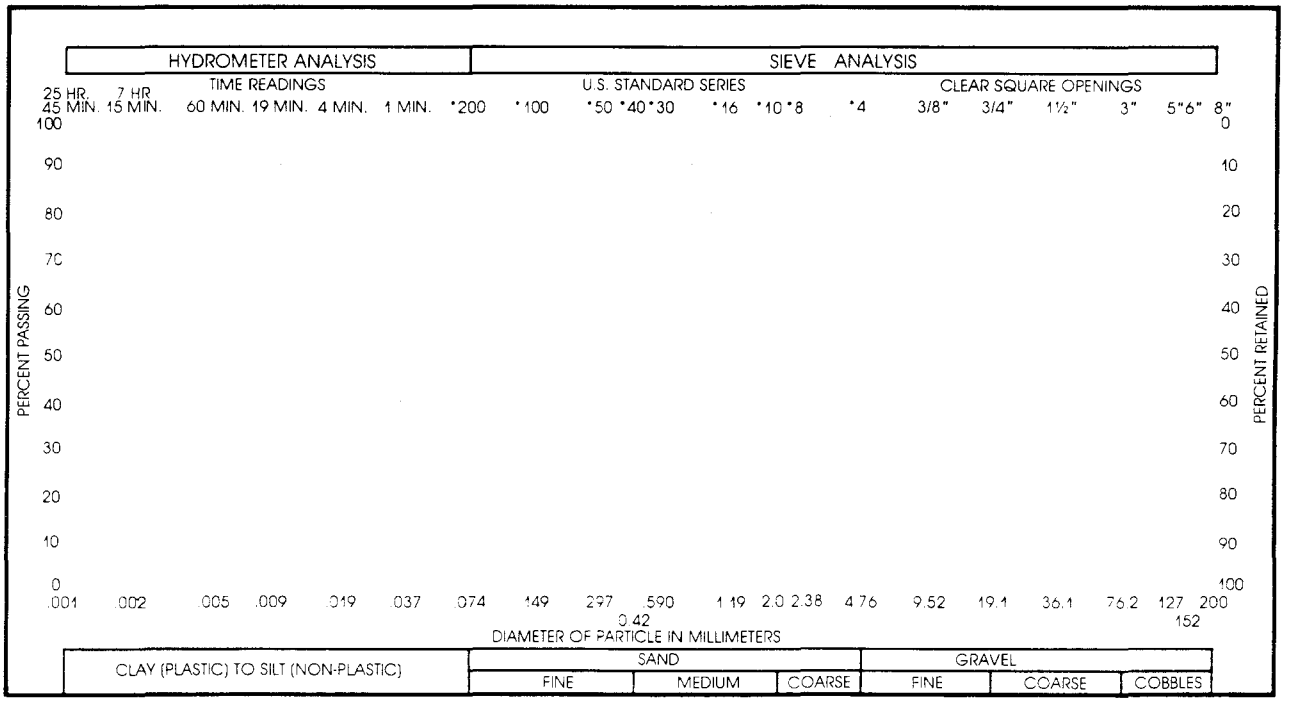
JOB NO. 18,248

FIG. A-18



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-13 THROUGH 18 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 15 %
SILT & CLAY 85 % LIQUID LIMIT 33 %
PLASTICITY INDEX 15 %



Sample of _____
From _____

GRAVEL _____ % SAND _____ %
SILT & CLAY _____ % LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %

Gradation Test Results

JOB NO. 18,248

FIG. A-19

TABLE A-I

SUMMARY OF LABORATORY TEST RESULTS

TEST HOLE NUMBER	DEPTH (FEET)	NATURAL MOISTURE (%)	NATURAL DENSITY (pcf)	ATTERBERG LIMITS		UNCONFINED COMPRESSIVE STRENGTH (psf)	SOLUBLE SULFATES		PASSING NO. 200 SIEVE (%)	SOIL TYPE
				LIQUID LIMIT (%)	PLASTICITY INDEX (%)		(%)	(PPM)		
1	4	15.0	110							CLAY, SILTY, SANDY
	9	17.8								CLAY, SILTY, SANDY
	14	22.2	101			430				CLAY, SILTY, SANDY
	19	25.2	101			340				CLAY, SILTY, SANDY
	24	23.8	102			1560				CLAY, SILTY, SANDY
2	4	11.1	114							CLAY, SILTY, SANDY
	19	23.5	102	32	16				98	CLAY, SILTY, SANDY
3	4	6.5	114							CLAY, SILTY, SANDY
	9	7.8	120							CLAY, SILTY, SANDY
	14	11.8	115							CLAY, SILTY, SANDY
4	4	6.1	98			3180				CLAY, SILTY, SANDY
	9	7.4	106	25	8				79	CLAY, SILTY, SANDY
	14	7.9	119							CLAY, SILTY, SANDY
5	9	8.4	107			9310	1.8			CLAY, SILTY, SANDY
	14	5.1	104			5950				CLAY, SILTY, SANDY
	24	24.1	100			940				CLAY, SILTY, SANDY

TABLE A-I

SUMMARY OF LABORATORY TEST RESULTS

TEST HOLE NUMBER	DEPTH (FEET)	NATURAL MOISTURE (%)	NATURAL DENSITY (pcf)	ATTERBERG LIMITS		UNCONFINED COMPRESSIVE STRENGTH (psf)	SOLUBLE SULFATES		PASSING NO. 200 SIEVE (%)	SOIL TYPE
				LIQUID LIMIT (%)	PLASTICITY INDEX (%)		(%)	(PPM)		
6	4	6.4	85	30	14				92	CLAY, SILTY, SANDY
	9	8.1	102							CLAY, SILTY, SANDY
	19	17.6	103							CLAY, SILTY, SANDY
7	4	10.6	97							CLAY, SILTY, SANDY
	9	7.7	101	26	11	6170			82	CLAY, SILTY, SANDY
	16.5	18.0	107			1310				CLAY, SILTY, SANDY
	24	23.7	100			430				CLAY, SILTY, SANDY
8	4	8.0	100				1.8			CLAY, SILTY, SANDY
	9	17.2	111							CLAY, SILTY, SANDY
	19	24.0								CLAY, SILTY, SANDY
9	4	6.0	87							CLAY, SILTY, SANDY
	9	7.9								CLAY, SILTY, SANDY
	19	8.4	115	28	11				94	CLAY, SILTY, SANDY
10	4	8.4	105			8270				CLAY, SILTY, SANDY
	9	6.8	108			10460	1.2			CLAY, SILTY, SANDY
	14	6.1	113							CLAY, SILTY, SANDY
	19	8.3	117			16440				CLAY, SILTY, SANDY
	29	20.9	106			1420				CLAY, SILTY, SANDY

TABLE A-1

SUMMARY OF LABORATORY TEST RESULTS

TEST HOLE NUMBER	DEPTH (FEET)	NATURAL MOISTURE (%)	NATURAL DENSITY (pcf)	ATTERBERG LIMITS		UNCONFINED COMPRESSIVE STRENGTH (psf)	SOLUBLE SULFATES		PASSING NO. 200 SIEVE (%)	SOIL TYPE
				LIQUID LIMIT (%)	PLASTICITY INDEX (%)		(%)	(PPM)		
11	4	9.2	106							CLAY, SILTY, SANDY
	9	10.9	113							CLAY, SILTY, SANDY
	19	17.3	103							CLAY, SILTY, SANDY
12	4	20.7	94	31	15				94	CLAY, SILTY, SANDY
	9	5.7	112							CLAY, SILTY, SANDY
	14	19.3	102							CLAY, SILTY, SANDY
	24	24.6	99							CLAY, SILTY, SANDY
13	0 TO 4	5.5		32	14				87	CLAY, SILTY, SANDY
	3	10.1	102							CLAY, SILTY, SANDY
14	0 TO 4	4.9		25	9				74	CLAY, SILTY, SANDY
15	0 TO 4	4.8		33	16				94	CLAY, SILTY, SANDY
16	0 TO 4	7.5		39	21				97	CLAY, SILTY, SANDY
	3 NO. 1	6.8	91							CLAY, SILTY, SANDY
	3 NO. 2	7.6	93							CLAY, SILTY, SANDY
17	0 TO 4	8.4		34	17				96	CLAY, SILTY, SANDY

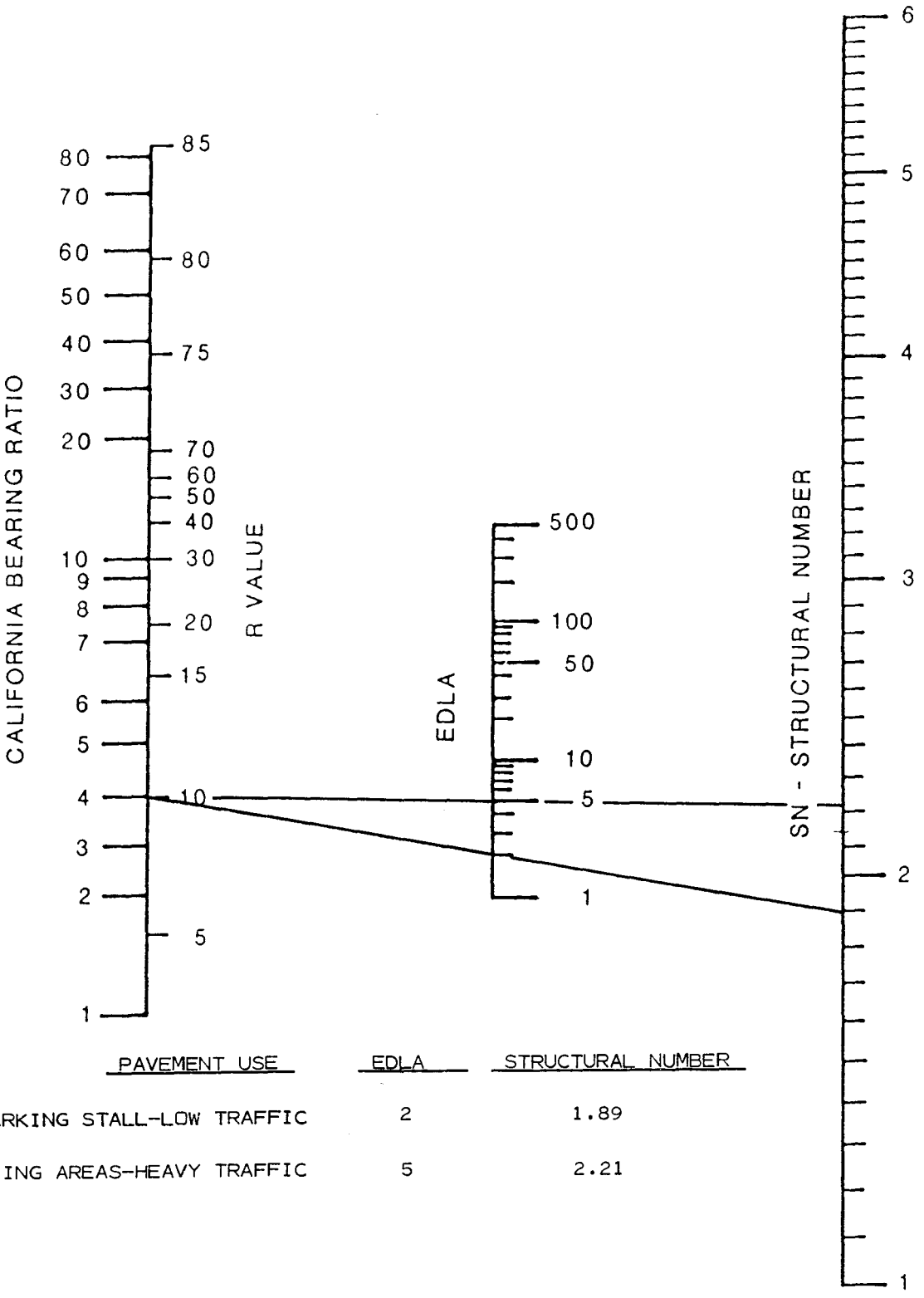
TABLE A-1

SUMMARY OF LABORATORY TEST RESULTS

TEST HOLE NUMBER	DEPTH (FEET)	NATURAL MOISTURE (%)	NATURAL DENSITY (pcf)	ATTERBERG LIMITS		UNCONFINED COMPRESSIVE STRENGTH (psf)	SOLUBLE SULFATES		PASSING NO. 200 SIEVE (%)	SOIL TYPE
				LIQUID LIMIT (%)	PLASTICITY INDEX (%)		(%)	(PPM)		
18	0 TO 4	3.4		29	14				83	CLAY, SILTY, SANDY
	3	7.3	96							CLAY, SILTY, SANDY
13 - 18	0 TO 4	5.0		33	15		1.8		85	CLAY, SILTY, SANDY
COMBINED										

APPENDIX B

DESIGN NOMOGRAPHS AND CALCULATIONS FOR FLEXIBLE PAVEMENTS AND RIGID PAVEMENTS



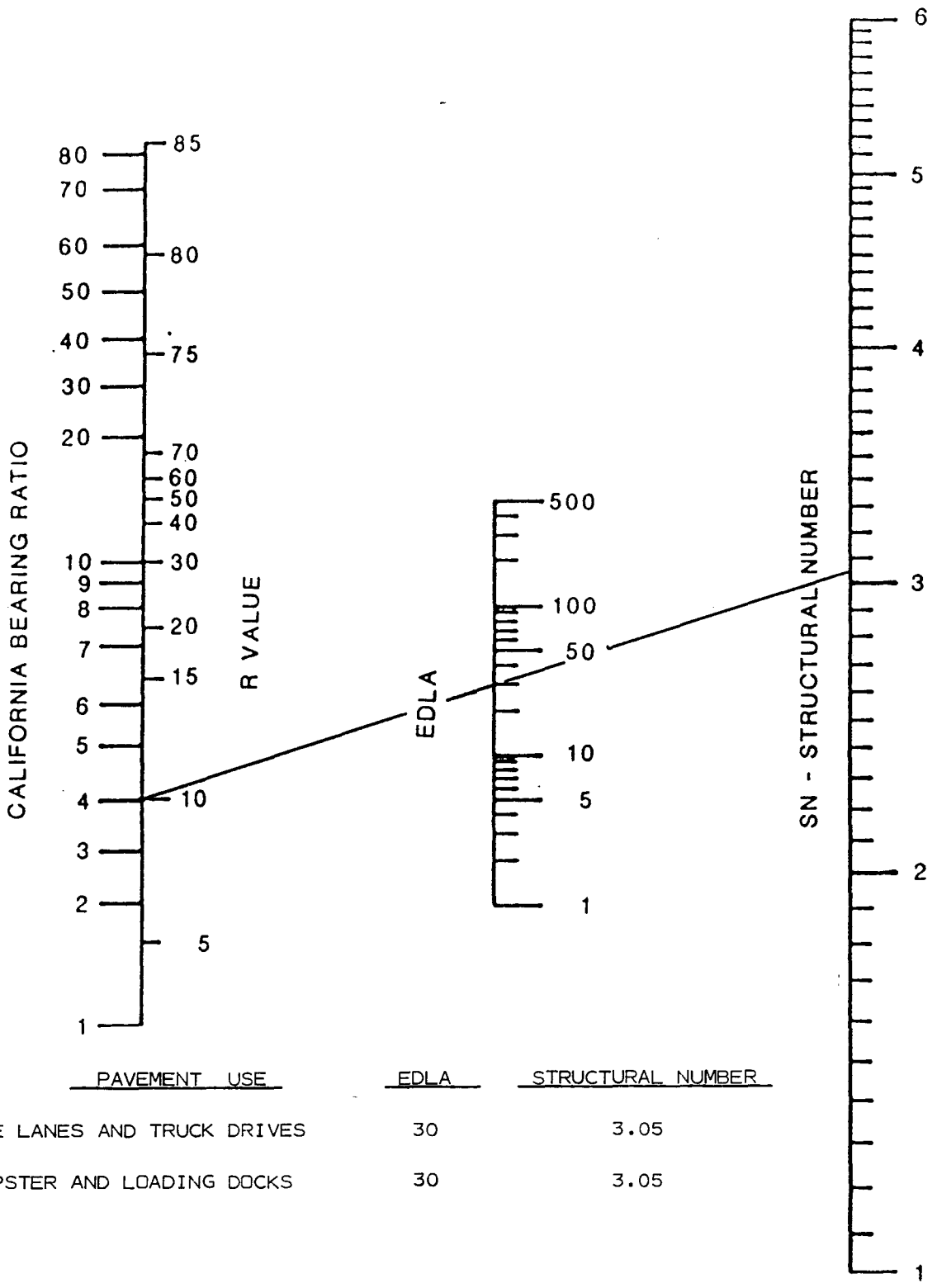
PAVEMENT USE	EDLA	STRUCTURAL NUMBER
PARKING STALL-LOW TRAFFIC	2	1.89
PARKING AREAS-HEAVY TRAFFIC	5	2.21

DESIGN NOMOGRAPH FOR FLEXIBLE PAVEMENTS

SERVICEABILITY INDEX = 2.0

JOB NO. 18,248

FIG. B-1



PAVEMENT USE	EDLA	STRUCTURAL NUMBER
FIRE LANES AND TRUCK DRIVES	30	3.05
DUMPSTER AND LOADING DOCKS	30	3.05

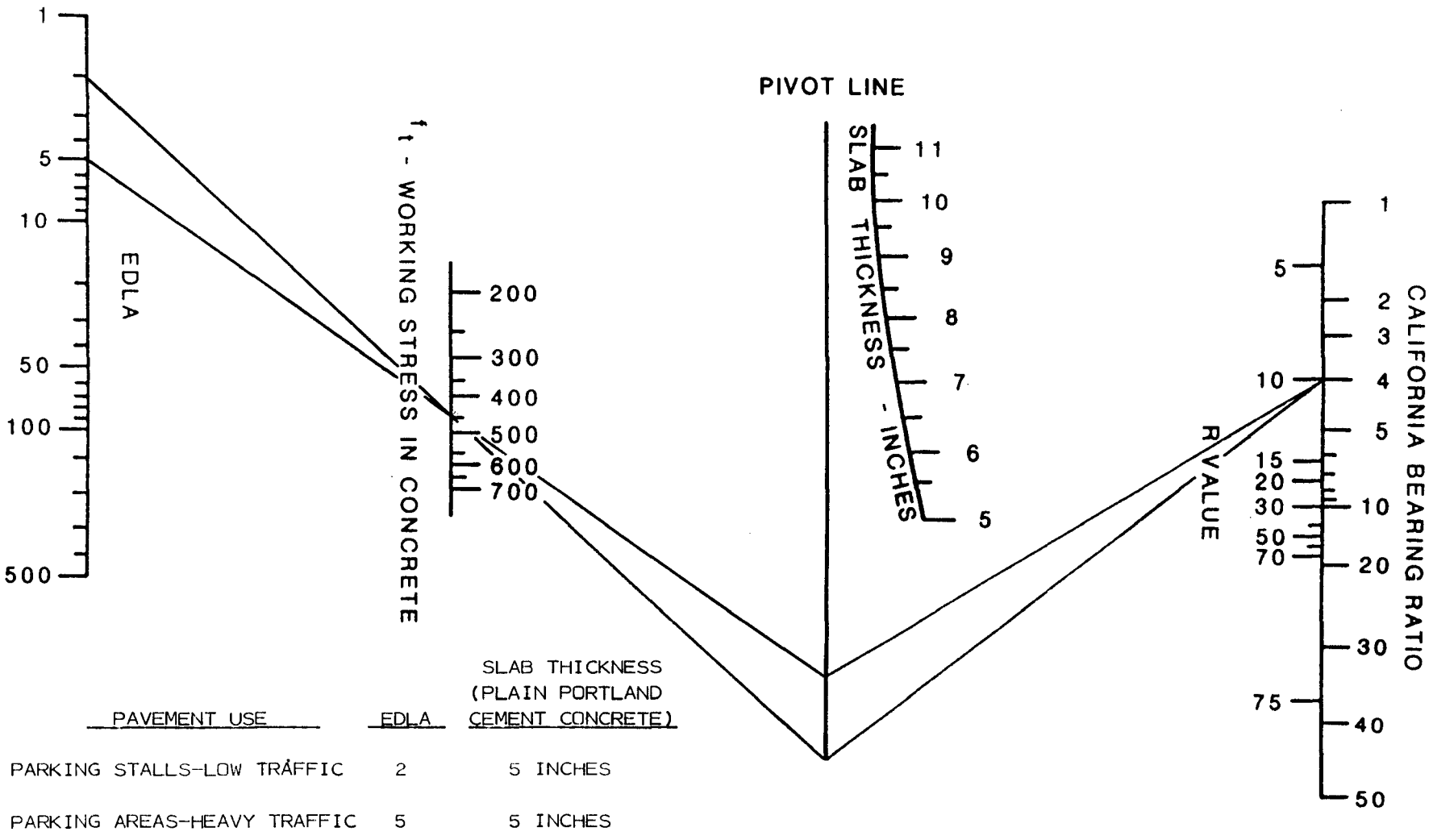
DESIGN NOMOGRAPH FOR FLEXIBLE PAVEMENTS

SERVICEABILITY INDEX = 2.5

JOB NO. 18,248

FIG. B-2

JOB NO. 18,248



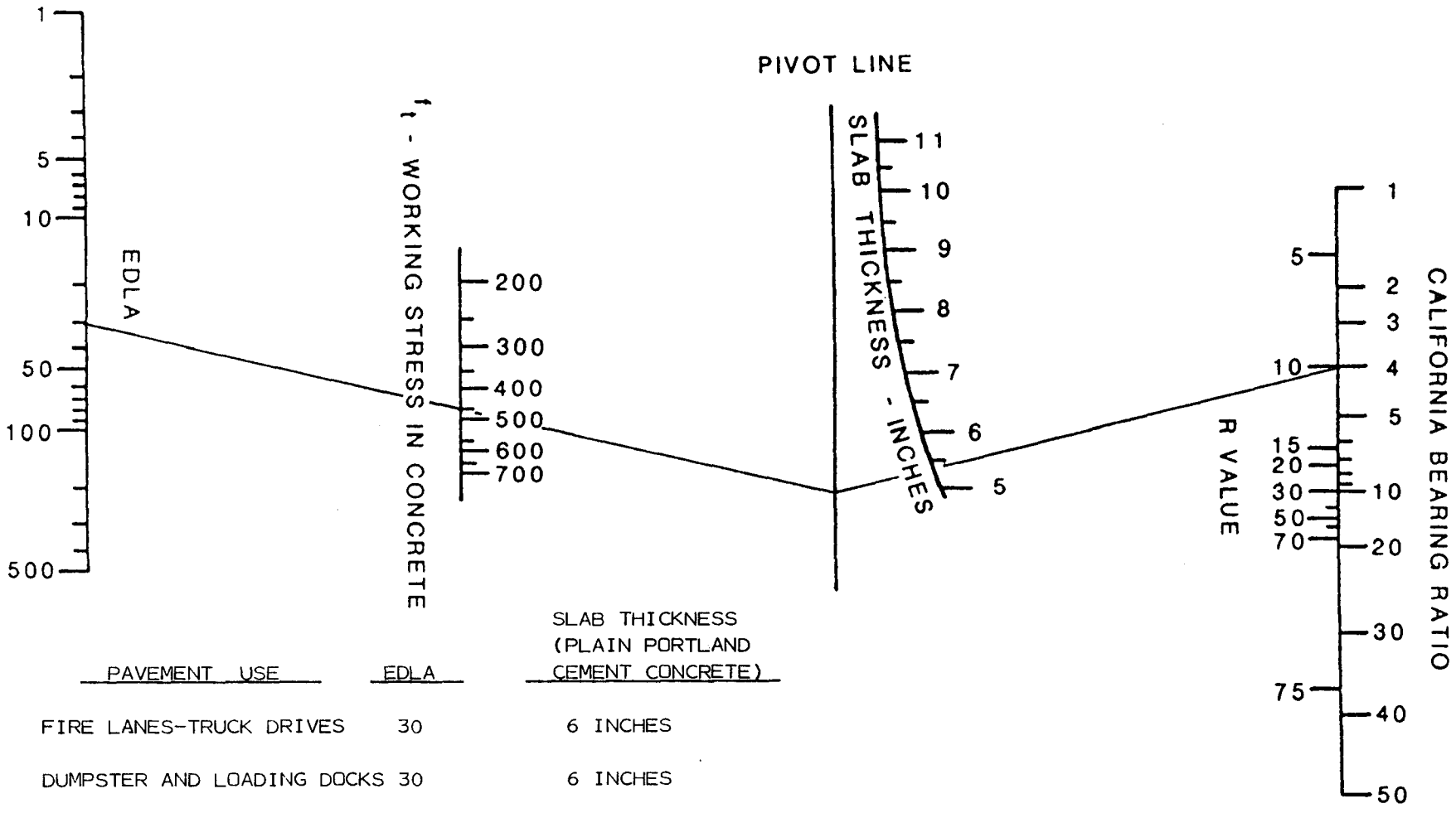
PAVEMENT USE	EDLA	SLAB THICKNESS (PLAIN PORTLAND CEMENT CONCRETE)
PARKING STALLS-LOW TRAFFIC	2	5 INCHES
PARKING AREAS-HEAVY TRAFFIC	5	5 INCHES

DESIGN NOMOGRAPH FOR RIGID PAVEMENT

SERVICEABILITY INDEX = 2.0

FIG. B-3

JOB NO. 18,248



PAVEMENT USE	EDLA	SLAB THICKNESS (PLAIN PORTLAND CEMENT CONCRETE)
FIRE LANES-TRUCK DRIVES	30	6 INCHES
DUMPSTER AND LOADING DOCKS	30	6 INCHES

DESIGN NOMOGRAPH FOR RIGID PAVEMENT

SERVICEABILITY INDEX 2.5

FIG. B-4

DESIGN CALCULATIONS

PARKING STALLS - LOW TRAFFIC

DESIGN DATA

Design Traffic Number (DTN) = 2
California Bearing Ratio (CBR) = 4
Structural Number (SN) = 1.89 (from Fig. B-1)

DESIGN EQUATION

$SN = C_1D_1 + C_2D_2$

C_1 = 0.40 - Strength Coefficient - Hot Bituminous Asphalt
C_2 = 0.12 - Strength Coefficient - Aggregate Base Course

D_1 - Depth of Asphalt (inches)
D_2 - Depth of Base Course (inches)

FOR FULL DEPTH ASPHALT SECTION:

$D_1 = (1.89)/0.40 = 4.73$ inches of Full Depth Asphalt

FOR ASPHALT + AGGREGATE BASE COURSE SECTION:

$D_3 = ((1.89) - (3)(0.40))/0.12 = 5.75$ inches of Aggregate Base Course

RECOMMENDED SECTIONS:

1. 5.0 inches of Full Depth Asphalt, or
2. 3.0 inches Asphalt + 6 inches Aggregate Base Course.

Job No. 18,248

Fig. B-5

DESIGN CALCULATIONS

PARKING AREAS - HEAVY TRAFFIC

DESIGN DATA

Design Traffic Number (DTN) = 5
California Bearing Ratio (CBR) = 4
Structural Number (SN) = 2.21 (from Fig. B-1)

DESIGN EQUATION

$SN = C_1D_1 + C_2D_2$

C_1 = 0.40 - Strength Coefficient - Hot Bituminous Asphalt
C_2 = 0.12 - Strength Coefficient - Aggregate Base Course

D_1 - Depth of Asphalt (inches)
D_2 - Depth of Base Course (inches)

FOR FULL DEPTH ASPHALT SECTION:

$D_1 = (2.21)/0.40 = 5.53$ inches of Full Depth Asphalt

FOR ASPHALT + AGGREGATE BASE COURSE SECTION:

$D_3 = ((2.21) - (3)(0.40))/0.12 = 8.42$ inches of Aggregate Base Course

RECOMMENDED SECTIONS:

1. 5.5 inches of Full Depth Asphalt, or
2. 3.0 inches Asphalt + 8.5 inches Aggregate Base Course.

Job No. 18,248

Fig. B-6

DESIGN CALCULATIONS

FIRE LANES AND TRUCK DRIVES

DESIGN DATA

Design Traffic Number (DTN) = 30
California Bearing Ratio (CBR) = 4
Structural Number (SN) = 3.05 (from Fig. B-2)

DESIGN EQUATION

$SN = C_1D_1 + C_2D_2$

C_1 = 0.40 - Strength Coefficient - Hot Bituminous Asphalt
C_2 = 0.12 - Strength Coefficient - Aggregate Base Course

D_1 - Depth of Asphalt (inches)
D_2 - Depth of Base Course (inches)

FOR FULL DEPTH ASPHALT SECTION:

$D_1 = (3.05)/0.40 = 7.63$ inches of Full Depth Asphalt

FOR ASPHALT + AGGREGATE BASE COURSE SECTION:

$D_3 = ((3.05) - (5)(0.40))/0.12 = 8.75$ inches of Aggregate Base Course

RECOMMENDED SECTIONS:

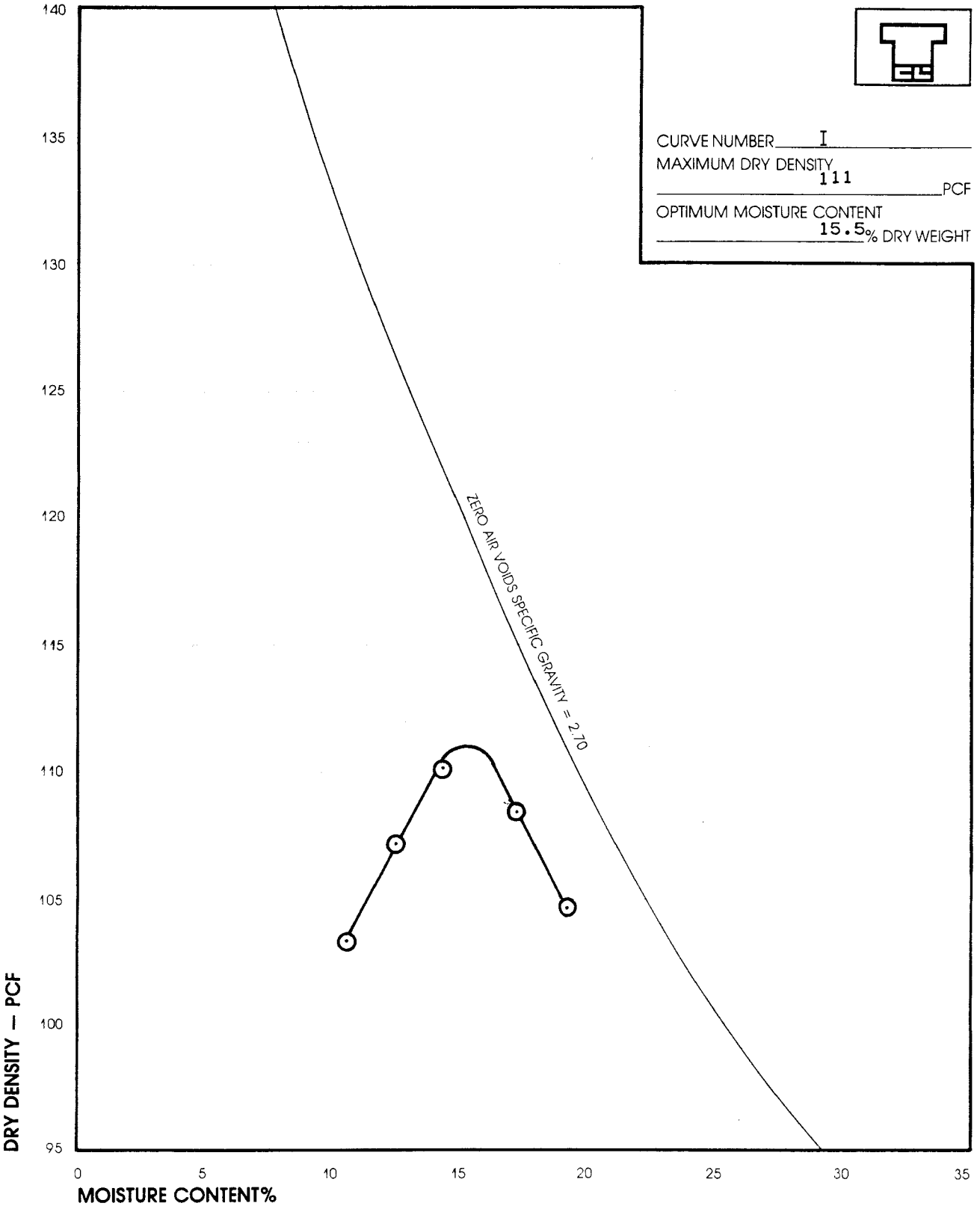
1. 7.5 inches of Full Depth Asphalt, or
2. 5.0 inches Asphalt + 8.5 inches Aggregate Base Course.

Job No. 18,248

Fig. B-7

APPENDIX C

LABORATORY TESTING PAVEMENT DESIGN



CURVE NUMBER I

MAXIMUM DRY DENSITY 111 PCF

OPTIMUM MOISTURE CONTENT 15.5% DRY WEIGHT

Sample Description CLAY, SILTY, SANDY (CL)

Location COMBINED, TH-13 THROUGH 18, BULK SAMPLE

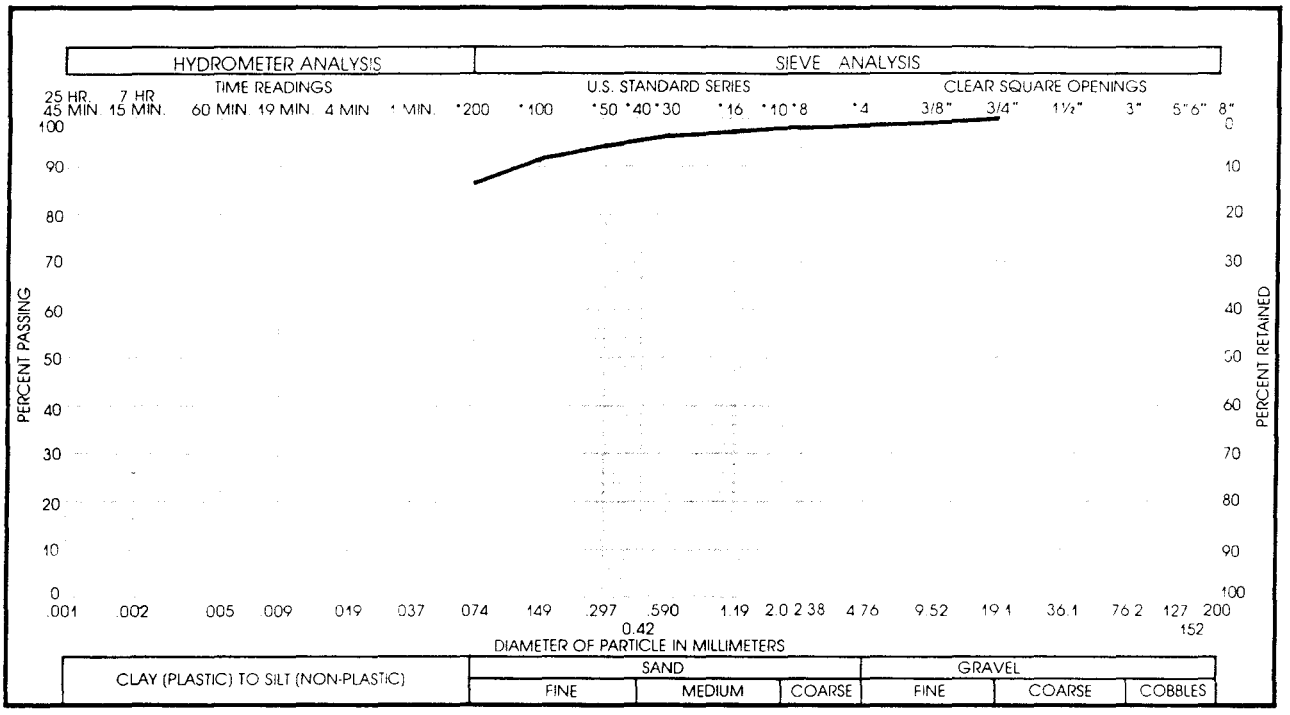
Compaction Test Procedure ASTM D 698

LIQUID LIMIT	33 %
PLASTICITY INDEX	15 %
GRAVEL	0 %
SAND	15 %
SILT AND CLAY	85 %

Compaction Test Results

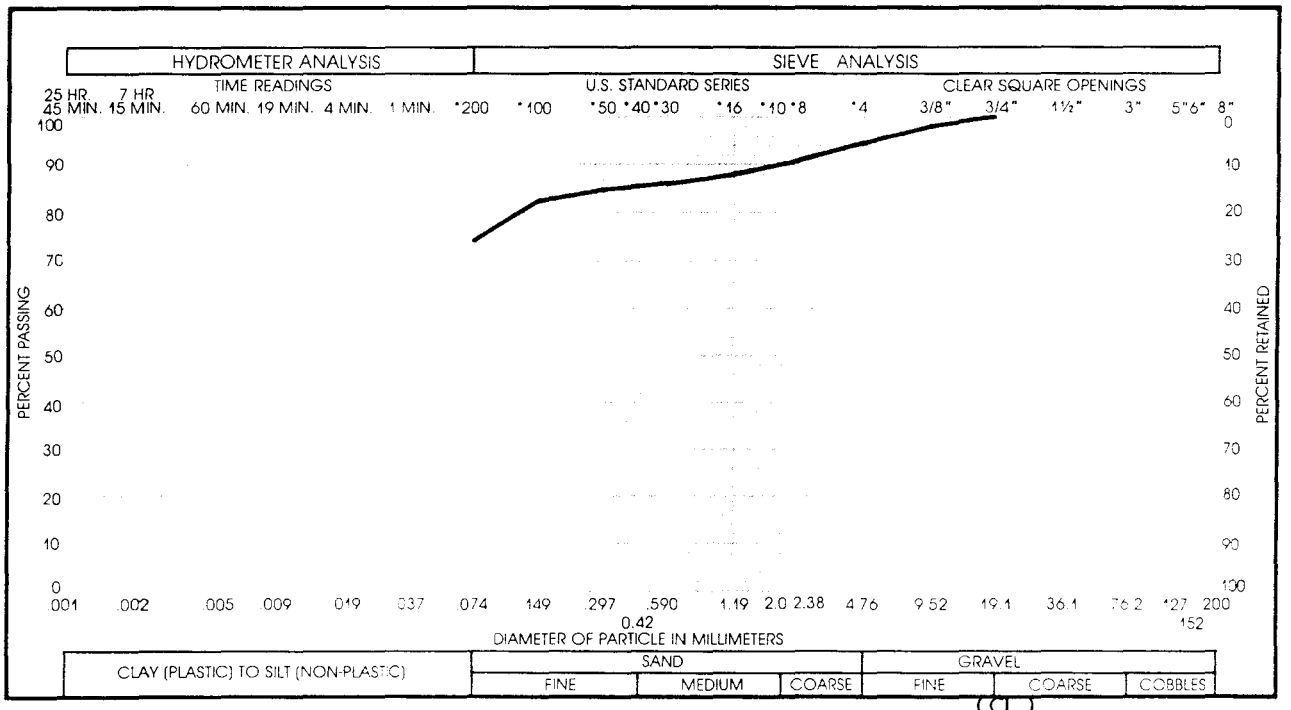
JOB NO. 18,248

FIG. C-1



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-13 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 13 %
SILT & CLAY 87 % LIQUID LIMIT 32 %
PLASTICITY INDEX 14 %



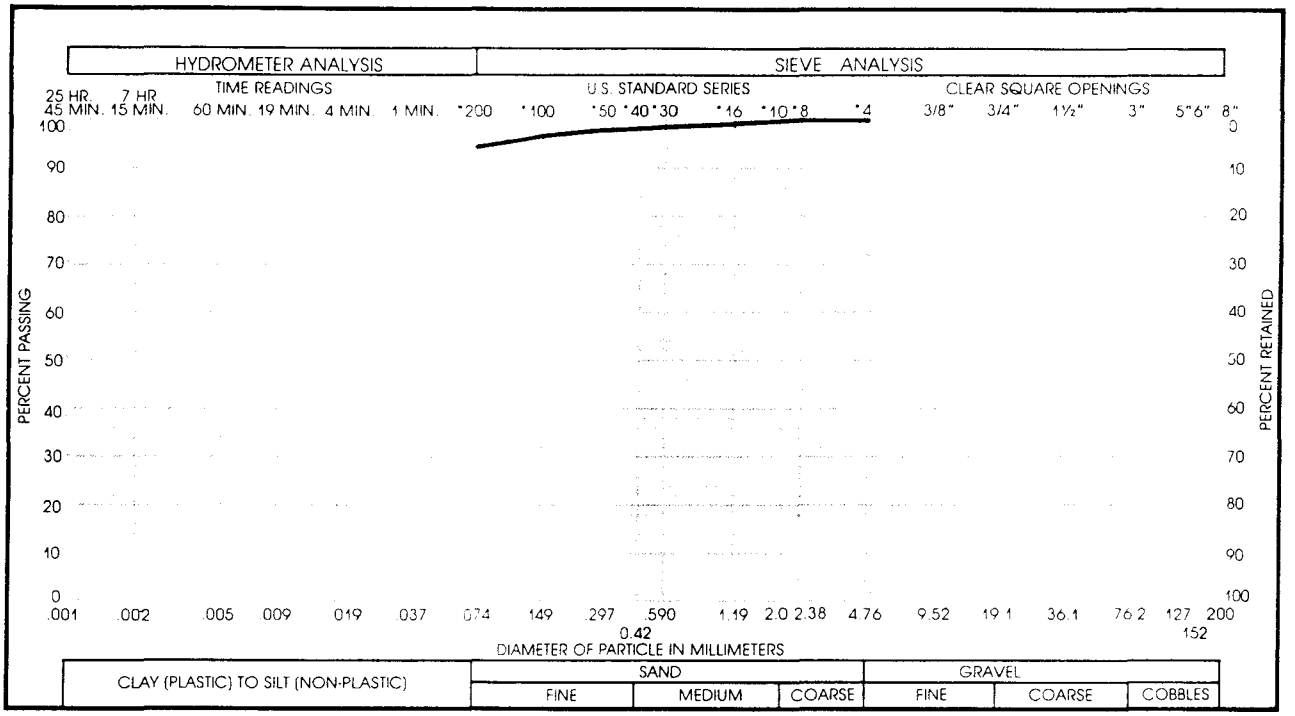
Sample of CLAY, SILTY, SLIGHTLY SANDY, SLIGHTLY GRAVELLY (CL)
From TH-14 AT 0 TO 4 FEET, BULK

GRAVEL 5 % SAND 21 %
SILT & CLAY 74 % LIQUID LIMIT 25 %
PLASTICITY INDEX 9 %

Gradation Test Results

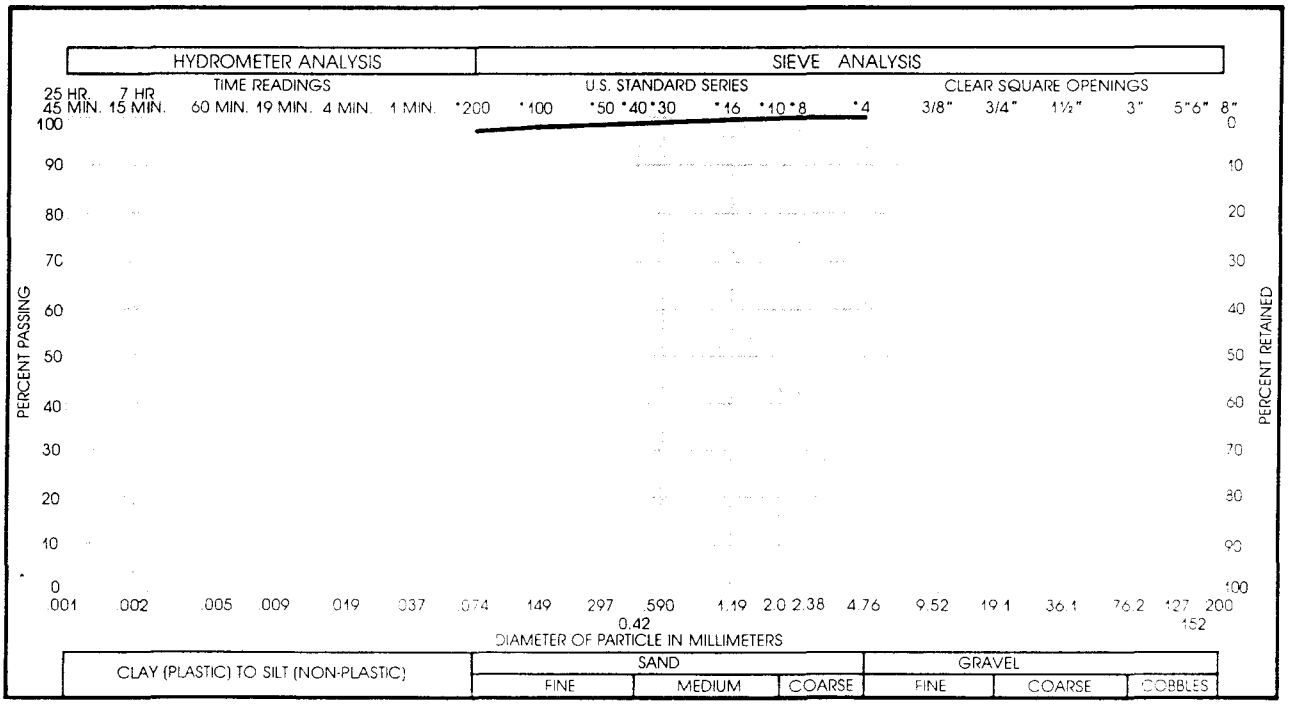
JOB NO. 18,248

FIG. C-2



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-15 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 6 %
SILT & CLAY 94 % LIQUID LIMIT 33 %
PLASTICITY INDEX 16 %



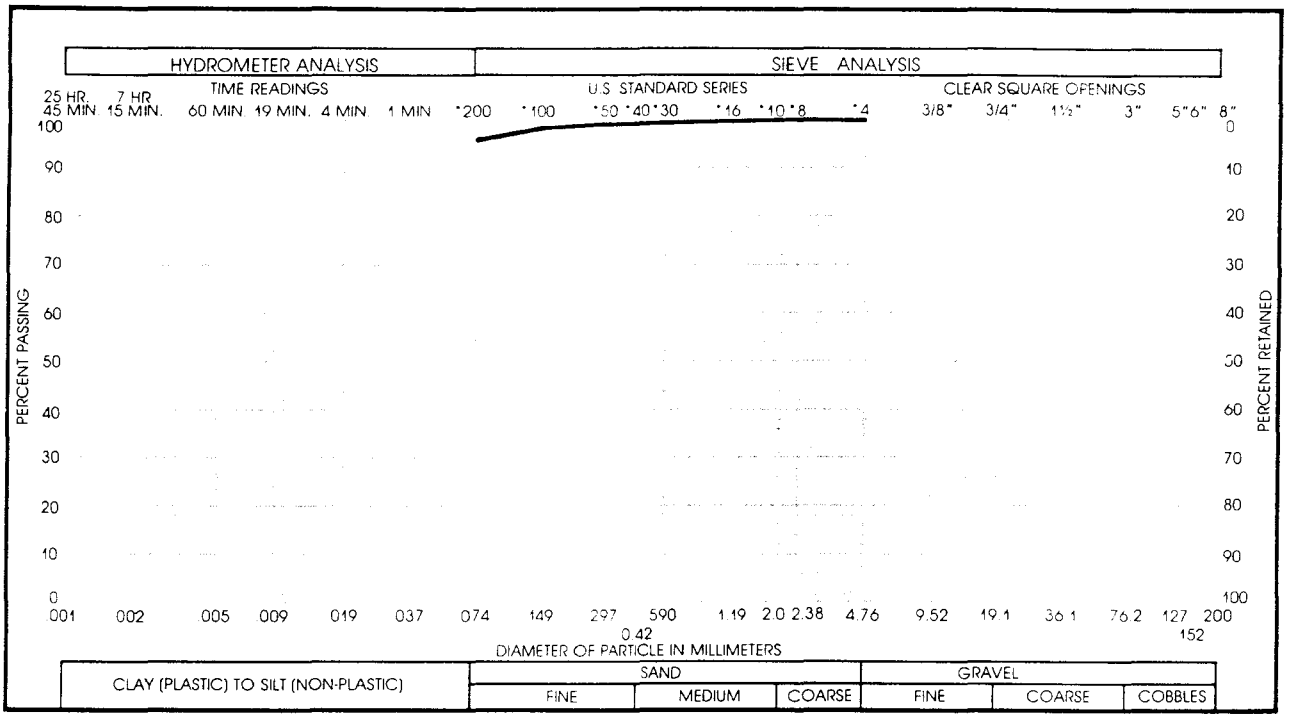
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-16 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 3 %
SILT & CLAY 97 % LIQUID LIMIT 39 %
PLASTICITY INDEX 21 %

Gradation Test Results

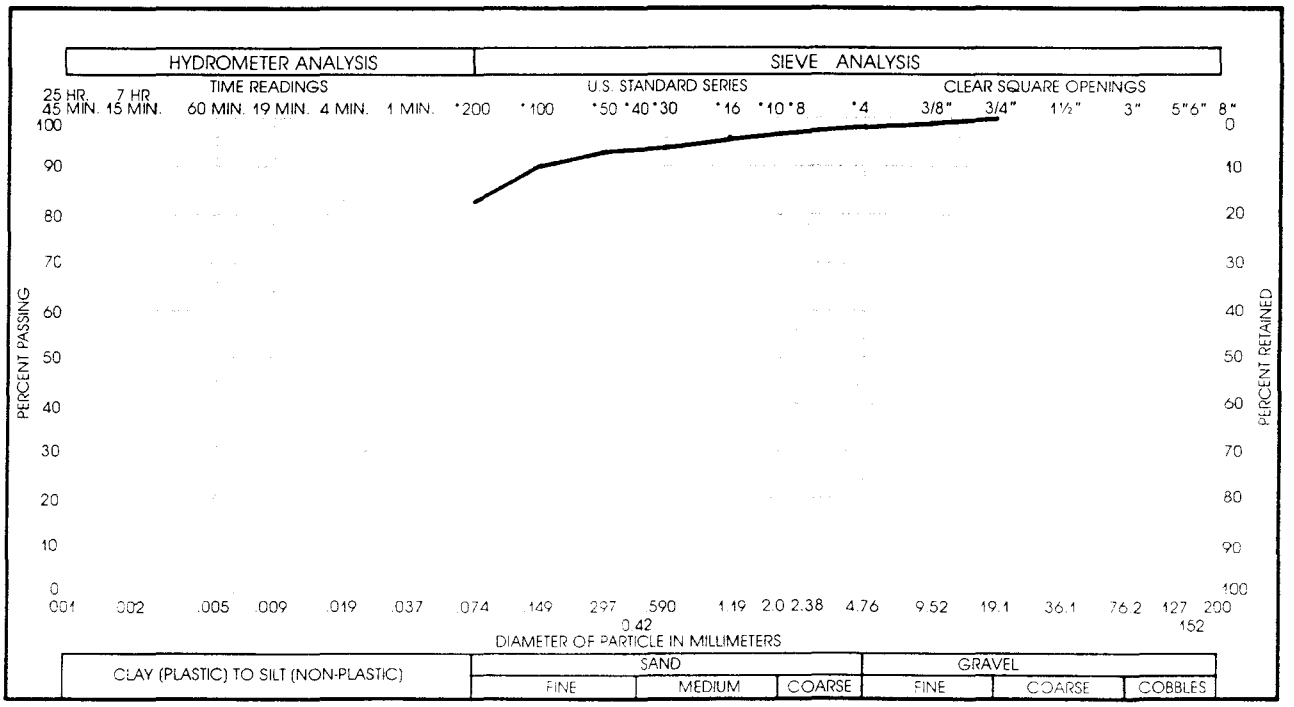
JOB NO. 18,248

FIG. C-3



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-17 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 4 %
SILT & CLAY 96 % LIQUID LIMIT 34 %
PLASTICITY INDEX 17 %



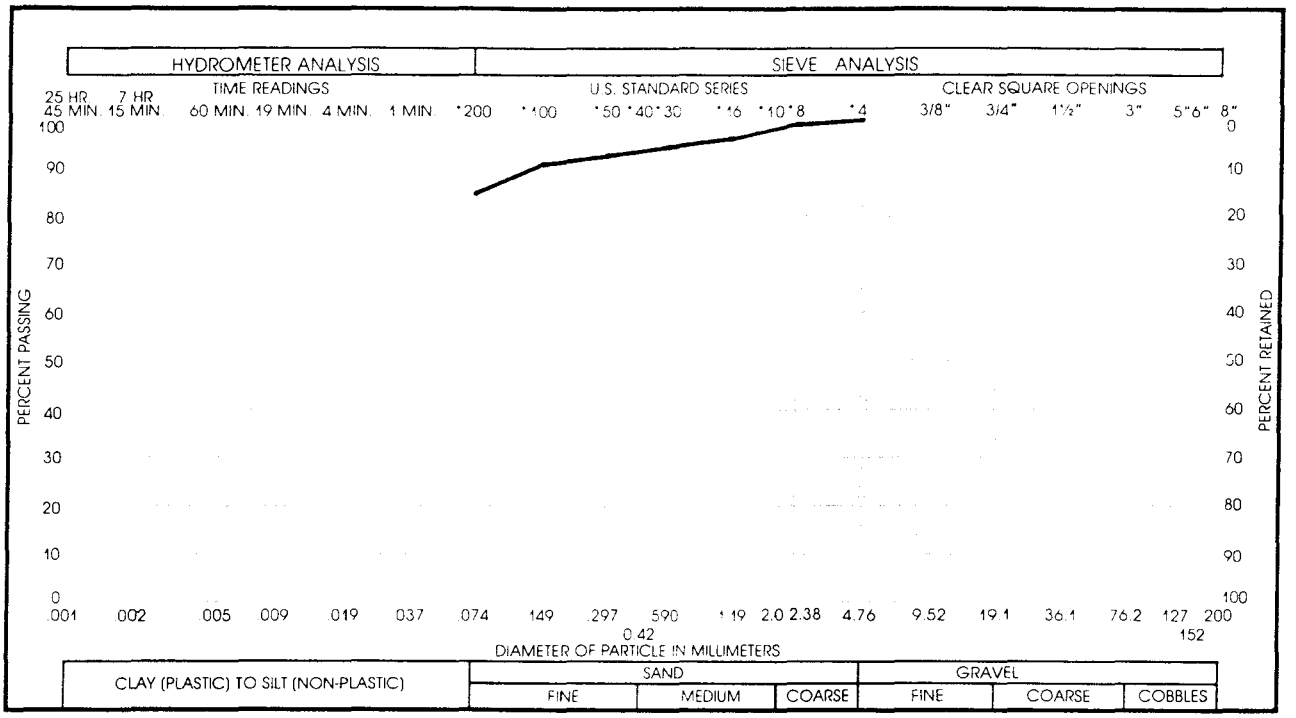
Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-18 AT 0 TO 4 FEET, BULK

GRAVEL 2 % SAND 15 %
SILT & CLAY 83 % LIQUID LIMIT 29 %
PLASTICITY INDEX 14 %

Gradation Test Results

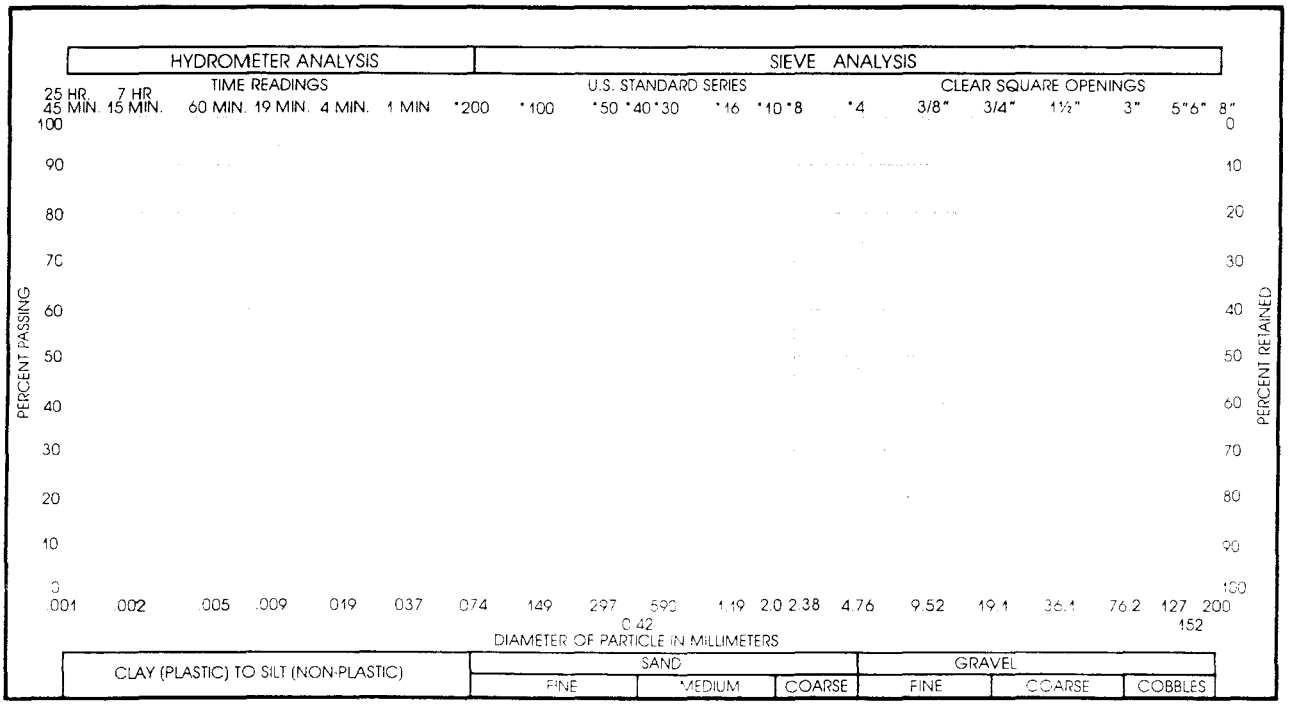
JOB NO. 18,248

FIG. C-4



Sample of CLAY, SILTY, SLIGHTLY SANDY (CL)
From TH-13 THROUGH 18 AT 0 TO 4 FEET, BULK

GRAVEL 0 % SAND 15 %
SILT & CLAY 85 % LIQUID LIMIT 33 %
PLASTICITY INDEX 15 %



Sample of _____
From _____

GRAVEL _____ % SAND _____ %
SILT & CLAY _____ % LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %

Gradation Test Results

JOB NO. 18,248

FIG. C-5

JOB NO. 18,248

TABLE C-1

SUMMARY OF LABORATORY TEST RESULTS

SAMPLE NO.	DEPTH (FEET)	GROUP NO.	PERCENT PASSING NO. 200 SIEVE	ATTERBERG LIMITS		GROUP INDEX	CLASSIFICATION			DESCRIPTION
				LIQUID LIMIT (%)	PLASTICITY INDEX (%)		AASHTO	UNIFIED	FAA	
TH-13	0 TO 4	I	87	32	14	11	A-6	CL	E-6	CLAY, SILTY, SANDY
TH-14	0 TO 4	I	74	25	9	4	A-4	CL	E-6	CLAY, SILTY, SANDY
TH-15	0 TO 4	I	94	33	16	14	A-6	CL	E-6	CLAY, SILTY, SANDY
TH-16	0 TO 4	I	97	39	21	21	A-6	CL	E-6	CLAY, SILTY, SANDY
TH-17	0 TO 4	I	96	34	17	16	A-6	CL	E-6	CLAY, SILTY, SANDY
TH-18	0 TO 4	I	83	29	14	10	A-6	CL	E-6	CLAY, SILTY, SANDY
TH-13 THRU TH-18 COMBINED	0 TO 4	I	85	33	15	12	A-6	CL	E-6	CLAY, SILTY, SANDY

APPENDIX D

FLEXIBLE AND RIGID PAVEMENT CONSTRUCTION RECOMMENDATIONS

FLEXIBLE PAVEMENT CONSTRUCTION RECOMMENDATIONS

Experience has shown that construction methods can have a significant effect on the life and serviceability of a pavement system. We recommend the proposed pavement be constructed in the following manner:

1. The subgrade should be stripped of organic matter, scarified, moisture treated, and compacted. Soils should be moisture treated to optimum to 2 percent above optimum moisture content and compacted to at least 95 percent of maximum standard Proctor dry density (ASTM D 698, AASHTO T 99).

2. Utility trenches and all subsequently placed fill should be properly compacted and tested prior to paving. As a minimum, fill should be compacted to 95 percent of maximum standard Proctor dry density.

3. After final subgrade elevation has been reached and the subgrade compacted, the area should be proof-rolled with a heavy pneumatic-tired vehicle (i.e., a loaded 10-wheel dump truck). Subgrade that is pumping or deforming excessively should be scarified, moisture conditioned and compacted.

4. If areas of soft or wet subgrade are encountered, the material should be subexcavated and replaced with properly compacted structural backfill. Where extensively soft, yielding subgrade is encountered, we recommend the excavation be inspected by a representative of our office.

5. Aggregate base course should be laid in thin, loose lifts, moisture treated to within 2 percent of optimum moisture content, and compacted to at least 95 percent of maximum modified Proctor dry density (ASTM D 1557, AASHTO T 180).

6. Asphaltic concrete should be hot plant-mixed material compacted to at least 95 percent of maximum Marshall density. The temperature at laydown time should be near 235 degrees F. The maximum compacted lift should be 3.0 inches and joints should be staggered.

7. The subgrade preparation and the placement and compaction of all pavement material should be observed and tested. Compaction criteria should be met prior to the placement of the next paving lift. The additional requirements of the Colorado Department of Highways Specifications and Mesa County should apply.

RIGID PAVEMENT CONSTRUCTION RECOMMENDATIONS

Rigid pavement sections are not as sensitive to subgrade support characteristics as flexible pavement. Due to the strength of the concrete, wheel loads from traffic are distributed over a large area and the resulting subgrade stresses are relatively low. The critical factors affecting the performance of a rigid pavement are the strength and quality of the concrete, and the uniformity of the subgrade. We recommend subgrade preparation and construction of the rigid pavement section be completed in accordance with the following recommendations:

1. Natural soils should be stripped of organic matter, scarified, moisture treated, and compacted. We recommend the top one foot of the subgrade be moisture treated to between optimum and 2 percent above optimum moisture content. Soils should be compacted to at least 95 percent of maximum standard Proctor dry density (ASTM D 698, AASHTO T 99). Moisture treatment and compaction recommendations also apply where additional fill is necessary.

2. The resulting subgrade should be checked for uniformity and all soft or yielding materials should be replaced prior to paving. Concrete should not be placed on soft, spongy, frozen, or otherwise unsuitable subgrade.

3. The subgrade should be kept moist prior to paving.

4. Curing procedures should protect the concrete against moisture loss, rapid temperature change, freezing, and mechanical injury for at least 3 days after placement. Traffic should not be allowed on the pavement for at least one week.

5. A white, liquid membrane curing compound, applied at the rate of 1 gallon per 150 square feet, should be used.

6. Construction joints, including longitudinal joints and transverse joints, should be formed during construction or should be sawed shortly after the concrete has begun to set, but prior to uncontrolled cracking. All joints should be sealed.

7. Construction control and inspection should be carried out during the subgrade preparation and paving procedures. Concrete should be carefully monitored for quality control. The additional requirements of the Colorado Department of Highways Specifications should apply.

The design section is based upon a 20-year Period. Our experience indicates virtually no maintenance or overlays are necessary for the design period. To avoid problems associated with scaling and to continue the strength gain, we recommend deicing salts not be used for the first year after placement.

MESA COUNTY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING AND DESIGN
DEVELOPMENT REVIEW COMMENTS

GJ FILE NUMBER: 70-91

PROJECT NAME: N.W.C. North Ave and 29-1/2 Road
Rezone and Final Plat
PETITIONER: Drychester Retail II, Inc.

DUE DATE: 11/12/91

THE FOLLOWING HAS BEEN REVIEWED BY: Jaci Gould, P.E.
DATE OF REVIEW: November 7, 1991

ENGINEERING REVIEW COMMENTS:

1. Access from Bunting Ave should not be allowed for commercial/retail uses. Bunting is a local street, with a 50 feet wide right-of-way, and was not designed to handle the additional volume of traffic which would be generated from the proposed retail use.

2. The proposed access on 29-1/2 Road is to close to Bunting Ave. Mesa County Access Standards require a minimum 100 feet setback from the curb line of the intersecting street for private driveway accesses, (Section 4.6.2). Mesa County will not issue a access permit on 29-1/2 Road at the location on the site plan which was reviewed as a part of this submittal.

3. The stormwater management storage requirement calculation was based on the modified rational method. This method grossly underestimates the amount of storage required to provide peak discharge attenuation resulting in too small of detention volume being provided. Instead, TR-55/TR-20 methods should be used to determine storage volume.

   Also the HEC-1 calculations were performed using a SCS Type II storm mass curve. This mass curve represents a long term storm event with no front end loading. Rainfall events that occur in the Grand Junction area are more typical of the SCS Type IIa storms, which provides for a storm mass curve with front end loading thunderstorm type events.

4. Landscaping in public right-of-way should not be allowed. Other landscaping on-site should be examined to minimize site distance obstructions. This includes berming and low level landscaping be limited to 30" height from the pavement, and 10 feet clear restriction on tree canopies.

pc: Don Newton, City Engineer
County Planning

PROJECT: NORTH AVENUE MARKETPLACE SUBDIVISION

REVIEWED BY: DON NEWTON 11-5-91 , City Engineer

DRAINAGE REPORT:

The drainage report includes a HEC-1 computer analysis of an off-site drainage basin located north of the proposed development; however, the drainage report does not discuss this analysis.

What are the 10-year and 100-year runoff rates from the off-site drainage basins? How will these flows impact and be routed through and downstream from the development? Off-site flows must be considered in sizing the detention basins and establishing high water elevations.

How much area and corresponding runoff from North Avenue drains into the existing inlet on the 36" pipe? What is proposed to be done with this inlet and runoff from North Avenue?

What is the capacity of the existing 36" drainage pipe?

Please submit details for all drainage inlets, storm drainage pipes (including pipe grades and elevations), and details for regulating the release from detention ponds.

The floor of the building proposed at the southwest corner of the property should be at least one foot above the 100-year high water elevation.

TRAFFIC ACCESS AND IMPACT STUDY (Received 11-4-91)

An access permit will be required from the Colorado State D.O.T. for access on North Avenue. Speed change lanes, driveway locations/widths, median modifications, etc. will be subject to review and approval by the State. We recommend that no left turns be allowed out of curb cuts on North Avenue. A 6' wide concrete sidewalk will be required adjacent to the curb on North Avenue along the frontage of lots 1 and 2.

The proposed curb cut on 29 1/2 Road is too close to Bunting Avenue and will not be allowed. In order for access to be allowed on Bunting, this residential street would have to be widened to "local commercial" street standards. Access onto Bunting could have an negative impact on apartments to the North.

Sight distance from Bunting Avenue to the north on 29 1/2 Road is severely obstructed by landscaping and a fence at Palace Estates Apartments. These obstructions would have to be removed before access could be allowed on Bunting.

29 1/2 Road is functionally classified as a "collector". The existing street improvements do not meet the City standards for a collector street. Improvement of the west half of 29 1/2 Road to City standards will be required.

Because of problems with proposed access on 29 1/2 Road and Bunting Avenue. I would recommend that the Pace building be relocated to the northwest corner of the site and access to 29 1/2 Road be located half way between North Avenue and Bunting Avenue. This would eliminate the need for access at or near Bunting Avenue.

As a result of traffic generated by this development, a traffic signal will be warranted and required at the intersection of 29 1/2 Road and North Avenue. This signal is necessary to allow left turns across North Avenue.

STREET LIGHTS AND TRAFFIC SIGNS:

Street lights will be required at the intersection of 29 1/2 Road and North Avenue at 29 1/2 Road and Bunting and at each curb cut on North Avenue and 29 1/2 Road.

Traffic control signs shall be furnished and installed as required by the City and/or State Traffic Departments.

LANDSCAPING PLAN: Unobstructed sight distance from all curb cuts shall be provided in accordance with Section 1.6.4 Sight Distance, in the City of Grand Junction Street Standards.

No trees, shrubs or other obstructions shall be placed with the line of sight from curb cuts.

COMMUNITY DEVELOPMENT DEPARTMENT 11/13/91
Kathy Portner 244-1446
File #70-91 North Avenue Marketplace--Rezone, Final Plan and Plat

Proposal

The developers are proposing the annexation of approximately 30 acres at the northwest corner of North Avenue and 29 1/2 Road. The City Council has accepted the petition for annexation and will continue with the annexation process. The petitioners are requesting that 14 acres of the above, along North Avenue, be rezoned from the current County zoning of C (commercial) and R-4 (residential, 5,000 sq.ft./unit) to a City zoning of C-1 (light commercial). They are also requesting approval of a final plat and plan for a shopping center on approximately 150,000 square feet on the 14 acres. Zoning on the remainder of the 30 acres would follow annexation.

Surrounding Land Use and Zoning

The surrounding County zoning is R-4 (residential) to the north, C (commercial) to the east, west and south across North Avenue. Surrounding land uses are retail business and offices to the east, west and south and residential (townhomes) to the north along 29 1/2 Road. Much of the land directly to the north is vacant, abutting Bookcliff Middle School which fronts on Orchard Avenue.

North Avenue Corridor Guidelines

The North Avenue Corridor Guidelines encourage the use of planned development concepts for any new development of vacant land or redevelopment of large parcels. The Guidelines further state that existing housing in the residentially zoned areas abutting the North Avenue Corridor should be respected and protected. When new non-residential development adjacent to existing residential uses is considered, the impacts of increased traffic, noise, and lighting should not adversely affect the existing neighborhoods. New development is encouraged to use alternative accesses that do not encroach on the existing residential areas adjacent to the corridor.

If approved, Community Development staff recommends this property be zoned Planned Commercial to better control the future development or redevelopment and provide additional flexibility in site design. The development as proposed would adversely impact the existing residential development and zoning to the north if Bunting Avenue is used as an access. Access should be prohibited onto Bunting and the development better buffered from the residential area through the use of berming, landscaping, screen wall and/or privacy fencing.

The corridor guidelines further note that access points should be designed to maintain a clear site distance for vehicular, bicycle and pedestrian traffic safety. Concerns have been raised by the City Engineer on the poor site distance to the north from Bunting Avenue onto 29 1/2 Road. As noted by both the City Engineer and

the County Engineer, the proposed driveway access onto 29 1/2 Road is too close to the Bunting Avenue and 29 1/2 Road intersection.

The North Avenue corridor guidelines also state that development should provide adequate setbacks for structures from the public right-of-way to be used in part for landscaping. As noted by the State Department of Transportation the building should be set back more from North Avenue to provide and protect approach site distance at 29 1/2 Road.

Rezone

As stated in section 4-4-4 of the Grand Junction Zoning and Development Code, the following criteria must be answered in reviewing a rezoning application:

A. Was the existing zone an error at the time of adoption?

One must assume the answer to this is no. The existing County and City Commercial zoning is at a constant depth all along the corridor.

B. Has there been a change of character in the area due to installation of public facilities, other zone changes, new growth trends, deterioration, development transitions, etc.?

The property has been abandoned for some time and left to deteriorate. Bunting Avenue does seem to form some kind of line of demarkation between an area in transition to the south and the residential area to the north.

C. Is there an area of community need for the proposed rezone?

Previous studies of the Valley, such as the Northwest Area Plan, have pointed out an over-abundance of commercial zoning in the Valley. However, large acreages with that zoning may be somewhat more scarce.

D. Is the proposed rezone compatible with the surrounding area or will there be adverse impacts?

A development of this size will have adverse impacts on the surrounding area from noise, light and traffic. However, some of these adverse impacts could be mitigated through good site design.

E. Will there be benefits derived by the community or area by granting the proposed rezone?

The proposed commercial development will provide a large retail facility unlike any others currently in the Valley, although another has been proposed and approved.

F. Is the proposal in conformance with the policies, intents and

requirements of this Code and other adopted plans and policies?

The proposal as submitted is in direct conflict with several of the North Avenue Corridor Guidelines.

G. Are adequate facilities available to serve development for the type and scope suggested by the proposed zone? If utilities are not available, could they be reasonably extended.

Adequate facilities are available to serve the development.

Final Plat

The proposed final plat is for a 3 lot subdivision of approximately 24 acres of the 30 acres site. The remainder of the site is a part of the existing Palace Estates Subdivision. The following comments refer to the technical drawing requirements of the plat as per section 6-8-2 of the Zoning and Development Code:

6-8-2.A.1.a. The plat can be drawn at a scale of not less than 1" = 200'. If drawn at this scale the 3 lots could be shown on one sheet instead of two.

6-8-2.A.1.e. Excepted parcels should have the notation "Not included in this subdivision".

6-8-2.A.1.h. Dedications of additional ROW as required for North Avenue, 29 1/2 Road, 29 1/4 Road and Bunting Avenue must be shown on the plat. Bunting Avenue ROW should continue through to 29 1/4 Road.

6-8-2.A.1.n. All easements shall be designated with type, bearings, and dimensions given. I understand the Drainage District easement is being redefined by the drainage district and the new alignment and description will be included on the plat prior to recording. What is the ROW and HWY easements shown along North Avenue?

6-8-2.A.1.p. All easements must be dedicated to the City of Grand Junction on behalf of the public and public utilities (see attached example of dedication language).

6-8-2.A.1.s. President of the Grand Junction City Council needs to be added to the signature block in place of one of the City Manager lines which appear twice. The title block above the clerk and recorders signature block should be changed to read "Mesa County Clerk and Recorder Approval"

6-8-2.A.3.a,b. A key to the monumentation shown on the plat should be provided.

6-8-2.A.3.c. An elevation benchmark based on U.S. Geological Survey sea level datum shall be set.

Utilities

Utilities to service the development are available. No major problems were noted by the utility providers.

Roadways and Access

29 1/2 Road is a County road and is proposed for annexation to the City. County Road and Bridge standards and City Street standards will apply to 29 1/2 Road. Additional ROW may be required along North Avenue and 29 1/2 Road, as well as Bunting Avenue if it is used for access. North Avenue is a State Highway and all improvements will be governed by ;the State Department of Transportation's Highway Access Permit. Half street improvements will be required for all abutting roadways in addition to other improvements necessary to mitigate the traffic impacts of this development. Those improvements may include turn lanes, accel/decel lanes, continuation of raised medians and signalization. All driveways must meet the requirements of the City of Grand Junction, Mesa County or the State Department of Transportation, who ever has jurisdiction over the roadway to be accessed.

Drainage and Soils

The property is bisected by a large drainage ditch running north-south, ending approximately 400 feet north of the south property line in a 36" concrete pipe. Also, along the east property line is a small concrete irrigation ditch. Concerns have been raised by both the City Engineer and County Engineer over the methods used to calculate drainage from the site. There concerns must be satisfied.

The preliminary geotechnical and environmental site assessment of the site indicates subsoil conditions of 25 to 30 feet of stiff to soft clays underlain by sand and gravel. The anticipated foundation systems to be considered are driven pipe piling or, possibly, footing or pad-type systems. The complete final report will be required prior to final recording of the plat.

Improvements Agreement/Guarantee

The final improvements agreement and guarantee must be approved by the City prior to recording the plat.

Appraisal for Parks and Open Space Fee

As per section 5-4-6 of the Zoning and Development Code 5% of the fair market value of the unimproved land must be paid into the City's Parks and Open Space fund prior to recording the plat.

Final Site Plan

Access as proposed onto 29 1/2 Road and Bunting Avenue is a

concern. The driveway onto 29 1/2 Road is too close to the Bunting Ave. intersection and will not be allowed. Planning staff also has a concern with allowing access onto Bunting since it is designed as a local residential street. The use of Bunting for the development will negatively impact the adjoining residential zoning and uses. Access should be denied onto Bunting and the buffering along the north property line of the development increased to include a combination of 6' screen walls and vegetation to adequately buffer the residential area.

As suggested early in the review, staff recommends that the building be relocated further to the west to allow access from 29 1/2 Road at least 300 feet south of the Bunting Avenue intersection. The relocation of the building could allow parking on 3 sides of the building, breaking up the "sea of asphalt" and creating shorter walking distances to the building. The building should also be moved back from North Avenue to allow more landscaping in front of the building. Staff realizes the drainage ditch poses some constraints to site design; however, if the ditch is to be piped anyway it could also be realigned to accommodate the building.

The purpose of the North Avenue Guidelines is to improve the appearance of this important corridor through the Valley. The parking lot should be "softened" with the use of perimeter berming with the landscaping, including street trees. Each of the parking lot islands should accommodate 2 trees instead of one. One more row of islands should be included in the west half of the lot to further break up the continuous asphalt. The vegetative ground cover should be a low water use variety. There are a few mature cottonwood trees on the perimeter of the property that should be saved if possible.

The free standing sign should be a monument style sign rather than a pole sign.

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

November 15, 1991

KATHY PORTNER
For your files
JMA 11/20/91

Mr. Mark K. Achen
City Manager
CITY OF GRAND JUNCTION
City Hall
250 North 5th Street
Grand Junction, Colorado 81501

VIA: FACSIMILE AND MAIL

Re: North Avenue Marketplace
Grand Junction, Colorado

Dear Mr. Achen:

Thank you for taking the time to speak with me today concerning the above referenced shopping center which Trammell Crow Company is proposing for the northwest corner of North Avenue and 29 1/2 Road in Grand Junction, Colorado. While I enjoyed our conversation, I was disturbed to hear of a rumor that was circulating around the City implying that our company did not plan to proceed with this project. This is totally and completely untrue and unfounded.

Please accept this letter as confirmation of our conversation wherein I explained that we fully intend to proceed forward with this project. As a matter of fact, just this afternoon I made arrangements for Don Slack, the Project Architect, and I to travel to Grand Junction for the Planning Commission Hearing and City Council Meeting scheduled for November 19th and 20th respectively. I look forward to seeing you there. Trammell Crow Company, through our affiliate , Drychester Retail II has already committed significant amounts of capital to this project. We and PACE are very excited about completing the approval process so we can commence construction activities on the site as soon as possible in order realize our Tenant's goal of a May 1992 Grand Opening.

Once again, it was a pleasure speaking with you. I hope that the information I shared with you proves to be helpful in silencing this unfortunate rumor. Should you have any questions or require further information please do not hesitate to call.

Sincerely,
DRYCHESTER RETAIL II, INC.

Mark H. Sidell
Marketing Principal

cc: Mr. Dan Wilson
Mr. Bennett Boeschenstein

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

November 18, 1991

Ms. Katherine Portner, AICP
Senior Planner
CITY OF GRAND JUNCTION
Community Development Department
250 North 5th Street
Grand Junction, Colorado 81501

VIA: HAND DELIVERY

Re: North Avenue Marketplace
Northwest corner 29 1/2 Rd. & North Ave.
Grand Junction, Colorado

Dear Kathy:

Enclosed please find the following revised submittal items with the appropriate number of copies for distribution to the specified review agencies:

1. Summary Form
2. Legal Description
3. Floodplain Analysis
4. Plat (including easements at 24" x 32")
5. Drainage/Grading Plan
6. Utilities Composite
7. Roadway Plan/Profile
8. Reduction of Plan (8 1/2" x 11")
9. Reduction of Plat (8 1/2" x 11")
10. Geotechnical Investigation
11. Landscape Plan (to be delivered by Landscape Architect)

Please call me to let me know that you have received everything you need for our Planning Commission Hearing November 19th, as well as City Council on November 20th. Don Slack and I will arrive in Grand Junction on Tuesday afternoon. I look forward to seeing you again soon.

Sincerely,

TRAMMELL CROW COMPANY

Mark. H. Sidell
Marketing Principal

cc: Mr Bennett Boeschenstein - w/o encl.
Mr. Don Slack - w/o encl.

DRAINAGE REPORT

FOR

THE NORTH AVENUE MARKETPLACE SUBDIVISION

S. A. Miro Job No. 91-062-00

October 28, 1991

November 18, 1991

Prepared By:

S. A. Miro, Inc.
4582 S. Ulster St. Pkwy.
Suite 1405
Denver, Colorado 80237
(303) 741-3737
Contact: William E. McCormick

Prepared For:

Trammel Crow Company
7995 E. Prentice Avenue
Suite 300
Englewood, Colorado 80111
(303) 220-0900
Contact: Mark Sidell

INTRODUCTION

Location

The site is located in the SE 1/4, SW 1/4 of Section 8, Township 1 South, Range 1 East, Ute Meridian, Mesa County, Colorado. The site is at the northwest corner of the North Avenue and 29 1/2 Road. A more definitive map showing the property is presented in the appendix.

Existing Conditions

Onsite:

The site consists of 23.34 acres. A vacant amusement park occupies the southeasterly corner of the site. The remaining property is covered with natural grasses and weeds with some trees found along the southerly and easterly edges of the property.

A drainage ditch, owned by the Grand Junction Drainage District, traverses the middle of the site in the north-south direction. The ditch ends approximately 400 feet north of the south property line. The ditch is picked up by a 36-inch concrete pipe.

The site generally slopes north to south at about a one percent grade.

At the middle of the site along North Avenue there is an area inlet intercepting some surface runoff. It appears to discharge into the 36-inch drainage ditch pipe.

Along the east property line there is an existing concrete irrigation waste ditch. This ditch is intercepted by an inlet approximately 220 feet north of North Avenue. From the inlet the waste irrigation water is piped to North Avenue, then west along North Avenue to the 36 inch drainage ditch pipe.

Offsite:

According to the Grand Junction Drainage District, the above-mentioned drainage ditch drains a basin which extends approximately two miles north to the area of the I-70 right-of-way. This offsite basin is lightly developed with residential and commercial construction. A majority of the basin appears to be undeveloped.

The drainage ditch is crossed by several roads and a canal. The major crossings are Patterson Road, Orchard Avenue and the Grand Valley Canal. Pipes have been installed in the ditch at these crossings. According to the Grand Junction Drainage District, the pipes installed at these crossings range in size from 24-inch to 48-inch and effectively detain runoff within the basin.

DRAINAGE TECHNICAL CRITERIA

Analysis

Since the onsite study area is less than 200 acres, an analysis and determination of the amount of flows at various predetermined points has been made using the "Rational Method." The runoff analysis is based on the proposed land use and topographic features of the project area. The average land slopes are used for computing runoff. The drainage facilities are designed such that increased flows and velocities will not cause erosion damage.

The offsite basin is draining larger than 200 acres. Therefore, the S.C.S. hydrograph and U. S. Army Corps of Engineers HEC-1 computer program were used to analyze the anticipated runoff. The Type IIA Unit hydrograph was used. The curve numbers used came from TR 55 and are assumed to be 70 for historic conditions. For preliminary calculations, assumptions were made as to the runoff characteristics of the offsite areas and design storms used. A 100-year, 24 hour, 2.4 inch storm was used in this analysis.

Design Storm Frequencies

The initial and major design storm runoff drainage has been analyzed in this report. The initial design storm drainage system, based on a 10 year storm return frequency, is designed to provide protection against regularly recurring damage, reduce street and parking lot maintenance costs, provide an orderly drainage system and offer convenience to the general public. The storm sewer system and natural drainage ways are considered to be part of the initial storm drainage system. The major design storm drainage system, based on a 100-year storm frequency, is that system which will convey the major storm runoff that will minimize property damage.

Runoff Coefficients

The runoff coefficient, C, used in conjunction with the Rational Method was taken from the State Highway Department's Roadway Design Manual, revised March, 1988. The Rational Method Formula used in this report is:

$$Q = C\,I\,A$$

where	Q	=	Storm Flow, CFS
	I	=	Rainfall Intensity (in/hr)
	A	=	Drainage Area (Acres)
	C	=	Runoff Coefficient

Time of Concentration

The time of concentration (when maximum discharge of the drainage area is reached) is the time required for runoff from the most remote point of the drainage area to arrive at the design point. The "most remote point" is that point from which the time of flow to the design point is the greatest and not necessarily the greatest linear distance.

DRAINAGE ANALYSIS

Offsite Conditions:

The offsite basin will not be analyzed for a fully developed basin because it is anticipated that as the offsite basin is developed each development will release its developed runoff at historic rates.

The existing Grand Junction Drainage Ditch's 36 inch pipe has a maximum capacity of approximately 90 cfs under outlet control.

The offsite runoff at the 36 inch pipe is anticipated to be 77 cfs and 145 cfs for the 10 and 100 year storms, respectively. This assumes the canal and the roads crossing the basins are not breached. For the remote possibility that the canal and the roads crossing the basin are breached the anticipated runoff is 267 cfs and 521 cfs for the 10 year and 100 year storm events, respectively.

For the 100 year storm the worst case scenario 431 cfs will continue on through the project assuming the canal and roads are breached. The finished floor elevations for the buildings are set 1 foot above this maximum water surface elevation. Some of the onsite detention facilities will be inundated, however, they will function as designed once the peak flow has passed. Offsite flow which exceeds the capacity of the 36" culvert at the south property line will pass through the site and enter North Avenue. The slope of North Avenue at this location is very gradual to the east. The majority of flow entering North Avenue from the site will continue south over the crown of the road and follow the natural topography south. At this location the road can be considered essentially a broad creaster weir. If the length of road functioning as a weir is assumed to be several hundred feet then the 100 year depth of flow over the crown would be less than 1 foot at approximately 2 feet per second.

Approximately 1.4 acres of street surface drains to the existing North Avenue inlet on the existing 36 inch pipe. The existing inlet is proposed to be reconstructed as a C.D.O.T. Type R inlet with a six foot opening. The inlet is in a sump condition. The capacity of the new inlet is 5 cfs for a ponded depth of six inches. Approximately 3.3 cfs is anticipated to flow to the inlet for the 10 year storm. Therefore, the new inlet has adequate capacity.

Onsite Conditions:

The entire North Avenue Marketplace Subdivision will not be developed at this time. Lot 3 (Basin C) will remain undeveloped for now. When Lot 3 is developed it will need its own drainage study to determine the amount of runoff released and its associated detention volume requirements. Basin C is not analyzed in this report since it is remaining in its historic condition.

Lot 1 and Lot 2 (Basin A) are addressed in this report. Lot 1 is proposed to contain a Pace Warehouse retail facility with its associated parking. Lot 2 is a pad that could be developed as a restaurant or another retail establishment.

Lots 1 and 2 will be considered as the site from hereon.

The site will have one detention facility in the parking lot, Pond A. The detention facilities will be released at historic rates into the 36-inch pipe owned by the Grand Junction Drainage District. The District requires the developed runoff be routed through a sand/oil trap before the runoff enters the 36 inch pipe.

The Pace Warehouse roof slopes down to the east. Its runoff will be collected in roof drains and will be conveyed to the detention facilities through storm pipes before flowing into the 36-inch pipe.

A small area at the main entrance to Pace off of North Avenue will be released undetained onto North Avenue. Also, the landscape buffers around the project are released undetained. The runoff from the landscaped areas sheet flows from the site. The detention facility analysis takes into account this portion being released.

CONCLUSION

The developed runoff from the project site will be conveyed through the proposed parking lot to the proposed detention areas as shown on the Drainage Plan and is released at the 100 year "historic" level. The detailed calculations of peak flows at predetermined design points for historic and developed conditions are shown on the drainage maps and are attached in the Appendix.

On-site detention of 46,100 cubic feet is more than adequate for the required detention of 33,500 cubic feet.

The parking lot is graded to accommodate the passage of a 100 year event with little or no property damage.

This Drainage Report is submitted for review and approval.

APPENDIX

Title North Ave. Marketplace Date 10/25/91 Job No.

Runoff Coefficients By WEM Sheet of

Basin A (Developed)

	Acres	C_{10}		C_{100}	
Landscaped Area	1.16	0.05	0.005	0.20	0.02
Roof Area	3.44	0.88	0.240	0.89	0.24
Pavement	8.00	0.90	0.571	0.93	0.59
TOTAL	12.60	$C_{10} = 0.82$		$C_{100} = 0.85$	

Lot 1 and 2 ("Historic")

	Acres	C_{10}		C_{100}	
Undeveloped Land	12.83	0.05	0.05	0.20	0.19
Pavement	0.75	0.90	0.05	0.93	0.05
Roof	0.12	0.88	0.01	0.89	0.01
TOTAL	13.70	$C_{10} = 0.11$		$C_{100} = 0.25$	

Basin B

	Acres	C_{10}		C_{100}	
Landscaped Area	0.90	0.05	0.05	0.20	0.16
Pavement	0.20	0.90	0.16	0.93	0.17
TOTAL	1.10	$C_{10} = 0.21$		$C_{100} = 0.33$	

TABLE 803.3A

RUNOFF COEFFICIENTS FOR RATIONAL METHOD

LAND USE OR SURFACE CHARACTERISTICS	PERCENT IMPERVIOUS	C, Runoff Coefficients FREQUENCY 2	5	10	100
Business:					
Commercial Areas	95	.87	.87	.88	.89
Neighborhood Areas	70	.60	.65	.70	.80
Residential:					
Single-Family	40	.40	.45	.50	.60
Multi-Unit (detached)	50	.45	.50	.60	.70
Multi-Unit (attached)	70	.60	.65	.70	.80
½ Acre Lot or Larger	30	.30	.35	.40	.60
Apartments	70	.65	.70	.70	.80
Industrial:					
Light Areas	80	.71	.72	.76	.82
Heavy Areas	90	.80	.80	.85	.90
Parks, Cemeteries:	7	.10	.10	.35	.60
Playgrounds:	13	.15	.25	.35	.60
Schools:	50	.45	.50	.60	.70
Railroad Yard Areas:	40	.40	.45	.50	.60
Undeveloped Areas:					
Historic Flow Analysis- Greenbelts, Agricultural	2	(See "Lawns")			
Offsite Flow Analysis (when land use not defined)	45	.43	.47	.55	.65
Streets:					
Paved	100	.87	.88	.90	.93
Gravel	13	.15	.25	.35	.65
Drive and Walks:	96	.87	.87	.88	.89
Roofs:	90	.80	.85	.90	.90
Lawns, Sandy Soil:	0	.00	.01	.05	.20
Lawns, Clayey Soil:	0	.05	.10	.20	.40

NOTE: These Rational Formula coefficients may not be valid for large basins.

803.3 Runoff Predictions (cont.)

E. Technical Manual No. 1.[16]

Multiple regression equations for various frequencies are given for the four regions of the state. The parameters are drainage area, channel slope, and annual precipitation. The equations are not applicable in urban areas nor on streams with mixed population (snowmelt and rainfall) floods. Equations for parts of the southwest and northwest regions appear to predict too low of peak discharges.

F. Soil Conservation Service

This method is primarily for drainage basins consisting of farm and ranchlands. Charts have been extended to include forested and urban areas. The method is not applicable where peak flows result from snowmelt nor where rock outcrops predominate. The method uses a 24 hour rainfall depth and a soil and vegetal cover complex number to determine runoff in inches. The product of the discharge coefficient, drainage area and runoff depth determines the peak flow.

Title North Ave. Marketplace Date 11/17/91 Job No.

North Ave Flows By WEM Sheet of

Half roadway width is approx. 30'. Based on a USGS map the existing inlet on the exist, 36" pipe drains the street from a point approx. 500 feet east of 29½ road and from approximately 29½ Road intersection. Approximately 500 feet of 29½ Road, both sides, and approximately another 500 feet, west half of 29½ Road also contributes runoff to the existing inlet on North Avenue.

Area

$500 \times 35 + 500 \times 17 + 30 \times 1200 = 62000$ sf.

$= 1.42$ acres

Runoff coefficient

$C_{10} = 0.90$; $C_{100} = 0.93$

Time of Concentration

Assume the water doesn't start flowing for 3 minutes.

$V = 1.5$ fps for 0.5% ave. gutter slope

$900 \div 1.5 \div 60 = 10$ min.

$T_L = 13$ min.

Title North Ave. Marketplace Date 10/25/91 Job No.

Time of Concentration By WEM Sheet of

"Historic" $S = 1\%$

$$T_c = \frac{1.8(1.1-0.11)\sqrt{50}}{\sqrt[3]{1}} = 13 \text{ min.}$$

$T_T \Rightarrow V = 1$ fps $L = 810'$

$$T_T = \frac{810}{1(60)} = 14 \text{ min}$$

$T_C = T_L + T_T = 13 + 14 = 27$ min.

Developed

BASIN A

Assumed $T_c = 10$ min to get roof water to flow east to roof drains to storm sewer to detention pond for Basins A and B

BASIN B

Since the basin is very narrow a time of concentration of 5 minutes is used.

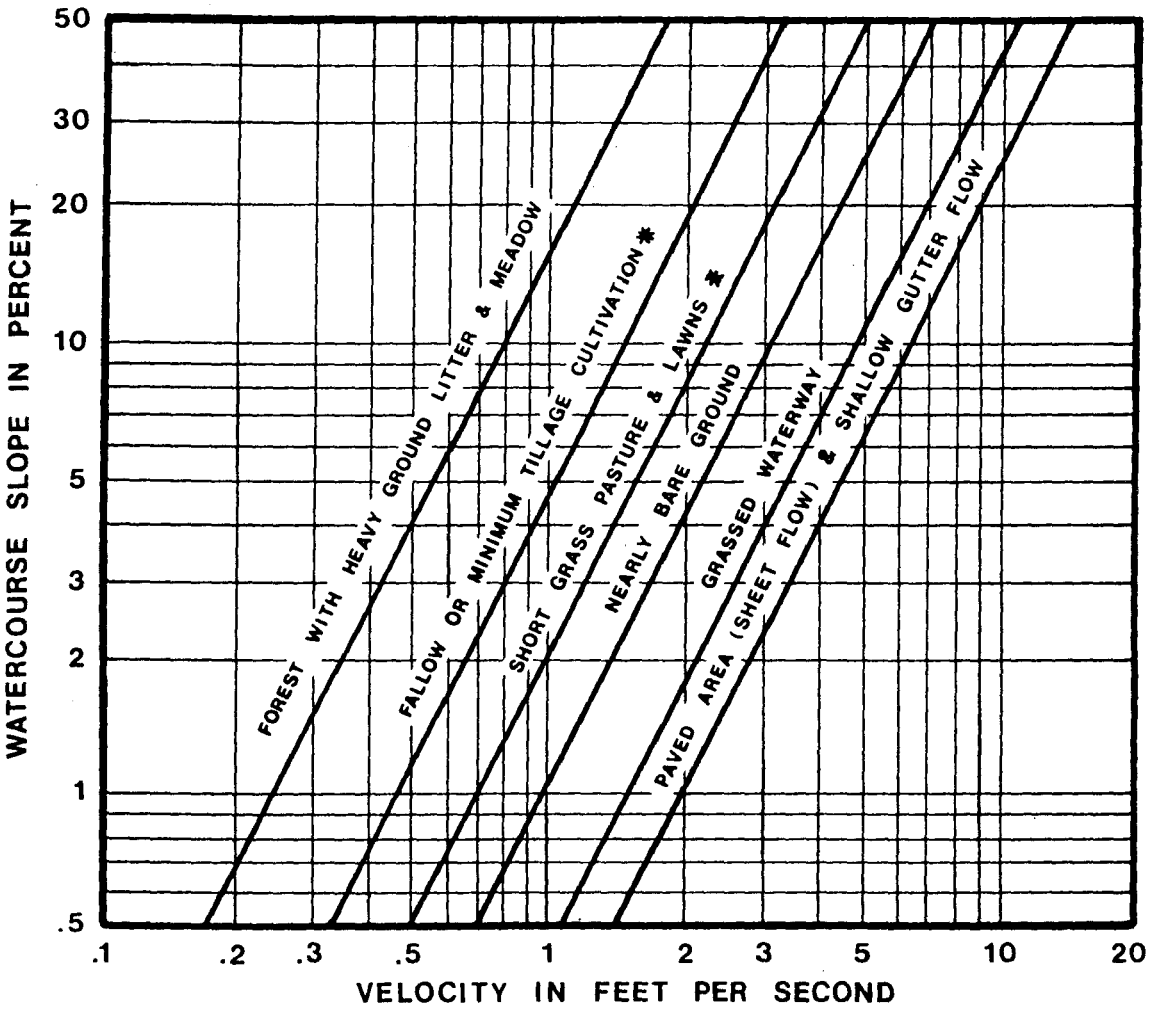


FIGURE 3-2. ESTIMATE OF AVERAGE FLOW VELOCITY FOR USE WITH THE RATIONAL FORMULA.

* MOST FREQUENTLY OCCURRING "UNDEVELOPED" LAND SURFACES IN THE DENVER REGION.

REFERENCE: "Urban Hydrology For Small Watersheds" Technical Release No. 55, USDA, SCS Jan. 1975.

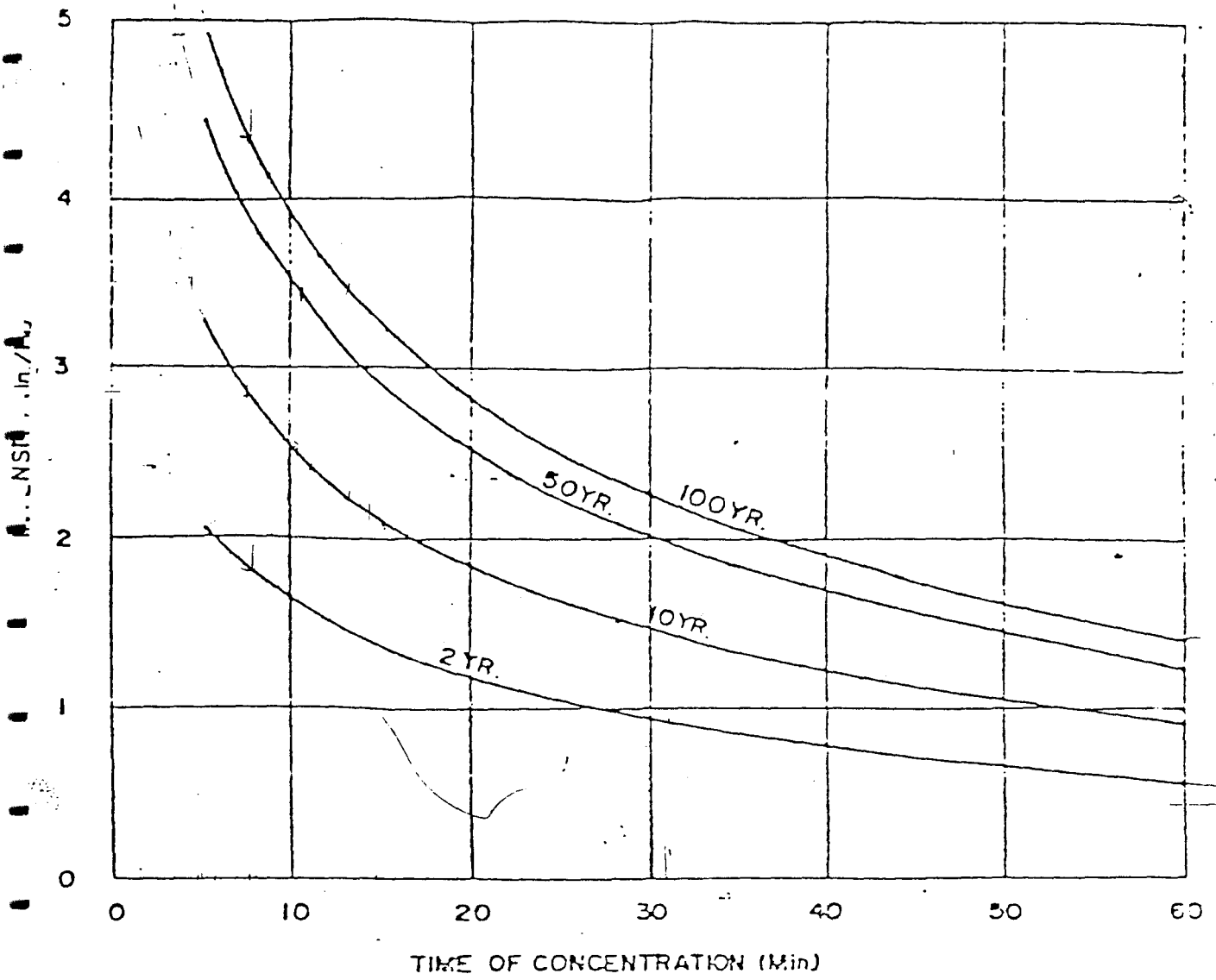
SUBDIVISION _____
LOCATION _____
DESIGN STORM _____ YR RECURRENCE INTERVAL
COMPUTATIONS BY _____ DATE _____
SUBMITTED BY _____ DATE _____

RUNOFF COMPUTATIONS
(Rational Method)

PAGE _____ OF _____

Design Point	Area Designation	A (Acres)	c	c_f	$\bar{c} = (c \times c_f)$	$A \cdot \bar{c}$	$\Sigma A \cdot \bar{c}$	tc (min)	i (in/hr)	$Q = (\Sigma A \cdot \bar{c}) \times i$ cfs	Slope (S)	Length L (feet)	VEL* V fps	t_t (min.)	Remarks
3	BASIN A & B	13.70	0.11	—		1.51		27	1.6	2.4					Q_{10} (Historic)
3	"	13.70	0.25	—		3.43		27	2.4	8.2					Q_{100} (Historic)
1	BASIN A	12.6	0.82	—		10.33		10	1.9	19.6					Q_{10} (Developed)
1	"	12.6	0.86	—		10.71		10	3.9	41.8					Q_{100} (Developed)
2	BASIN B	1.1	0.21	—		0.23		5	3.4	0.8					Q_{10} (Developed)
2	"	1.1	0.33	—		0.36		5	4.9	1.8					Q_{100} (Developed)
4	Basin B & North Ave						1.49	13	2.2	3.3					Q_{10} Developed
4	North Ave	1.4	0.90	—		1.26		13	2.2	2.8					Q_{10} Developed
4	North Ave	1.4	0.93	—		1.30		13	3.5	4.6					Q_{100} Developed

*These values must be substantiated with additional computations or use of appropriate charts, etc.



INTENSITY DURATION CURVES
GRAND JUNCTION, COLORADO

Title North Ave. Marketplace Date 10/25/91 Job No.

Allowable Runoff By WEM Sheet of

"Historic" runoff = 8.2 cfs

Basin C releases 1.5 cfs as sheet flow off of landscape areas.

Basin A: release can only total 8.2 - 1.8 = 6.4 cfs.

Inlet A release = 4.4 cfs

Inlet B release = 2.0 cfs

TOTAL 6.4 cfs ok

Title North Ave. Marketplace Date 10/25/91 Job No.

Detention Req'ts By WEM Sheet of

BASIN A A = 12.6 ac. C = 0.85

Developed Q_{100} = 12.6 × 0.85 × i × t(in sec.) ; Q release = 6.4 cfs × t(in sec)

Time (min.)	Q_{100}	Q release	
10	10.71 × 39 × 600 = 25061	− 3840	= 21,221
20	10.71 × 2.8 × 1200 = 35986	− 7680	= 28,306
30	10.71 × 2.3 × 1800 = 44339	− 11520	= 32,819
40	10.71 × 1.9 × 2400 = 48837	− 15360	= 33,477 ←
50	10.71 × 1.6 × 3000 = 51408	− 19200	= 32,208
60	10.71 × 1.4 × 3600 = 53978	−	

Req'd Detention = 33500 C.F.

Title North Ave. Marketplace Date 11/17/91 Job No.

Detention Volume Available By WEM Sheet of

Pond A

35 2'x3'x4 = 24 S.F.

36 31.60 x 1.7517 x 50² = 138,384 S.F.

46,743 C.F.

Title North Ave. Marketplace Date 11/19/91 Job No.

Orifice Sizing By WEM Sheet of

$Q = C_d A (2gh)^{1/2}$; $C_d = 0.65$ for square edged openings

A = Opening area

g = 32.2 fps

h = head on orifice =

Inlet A invert = 29.65

∴ Top Water = 35.75

$h = 6.1'$; $Q = 4.4$ cfs

$$A = \frac{Q}{C_d (2gh)^{1/2}} = \frac{4.4}{0.65(2(32.2)(6.1))^{1/2}} = 0.34 \text{ SF} = 49.2 \text{ in}^2$$

$$A = \pi R^2 \Rightarrow R = \left(\frac{A}{\pi}\right)^{1/2}$$

$$= \left(\frac{49.2}{\pi}\right)^{1/2} = \underline{\underline{4.0 \text{ in}}}$$

Inlet B Invert = 32.00

Top Water = 35.75

$h = 3.75'$; $Q = 2.0$ cfs

$$A = \frac{2.0}{0.65(2(32.2)(3.75))^{1/2}} = 0.20 \text{ SF} = 28.5 \text{ in}^2$$

$$R = \left(\frac{28.5}{\pi}\right)^{1/2} = \underline{\underline{3.0 \text{ in}}}$$

Title [illegible] Date 16 Nov '91 Job No.

By TRH Sheet of

NORTH AVENUE

- BROAD CRESTED

$Q = C * L * H^{1.5}$

$C = 3.8$ $Q_{100} = 431$

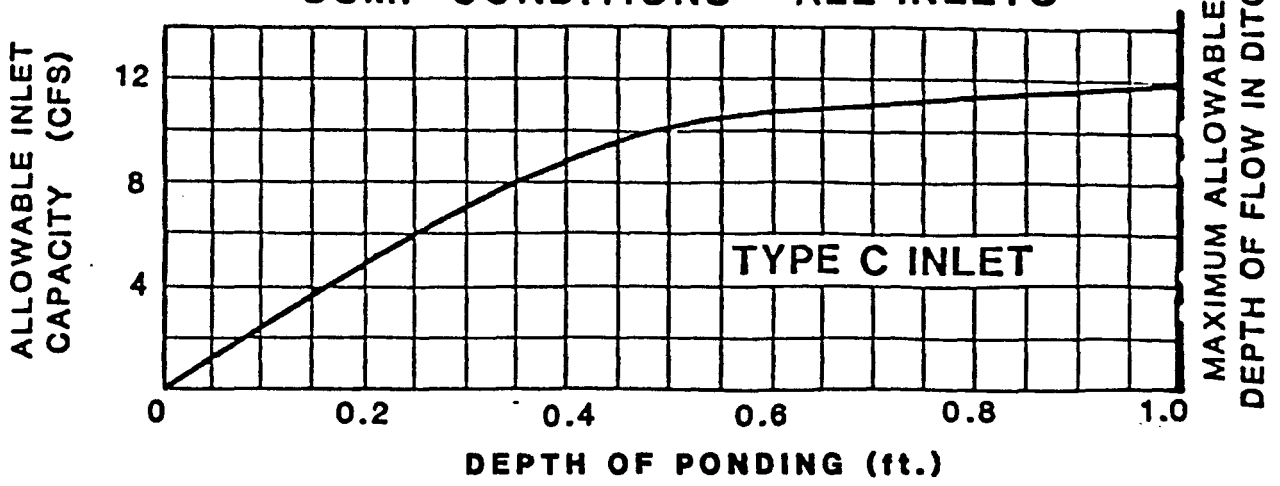
$L = 200'$

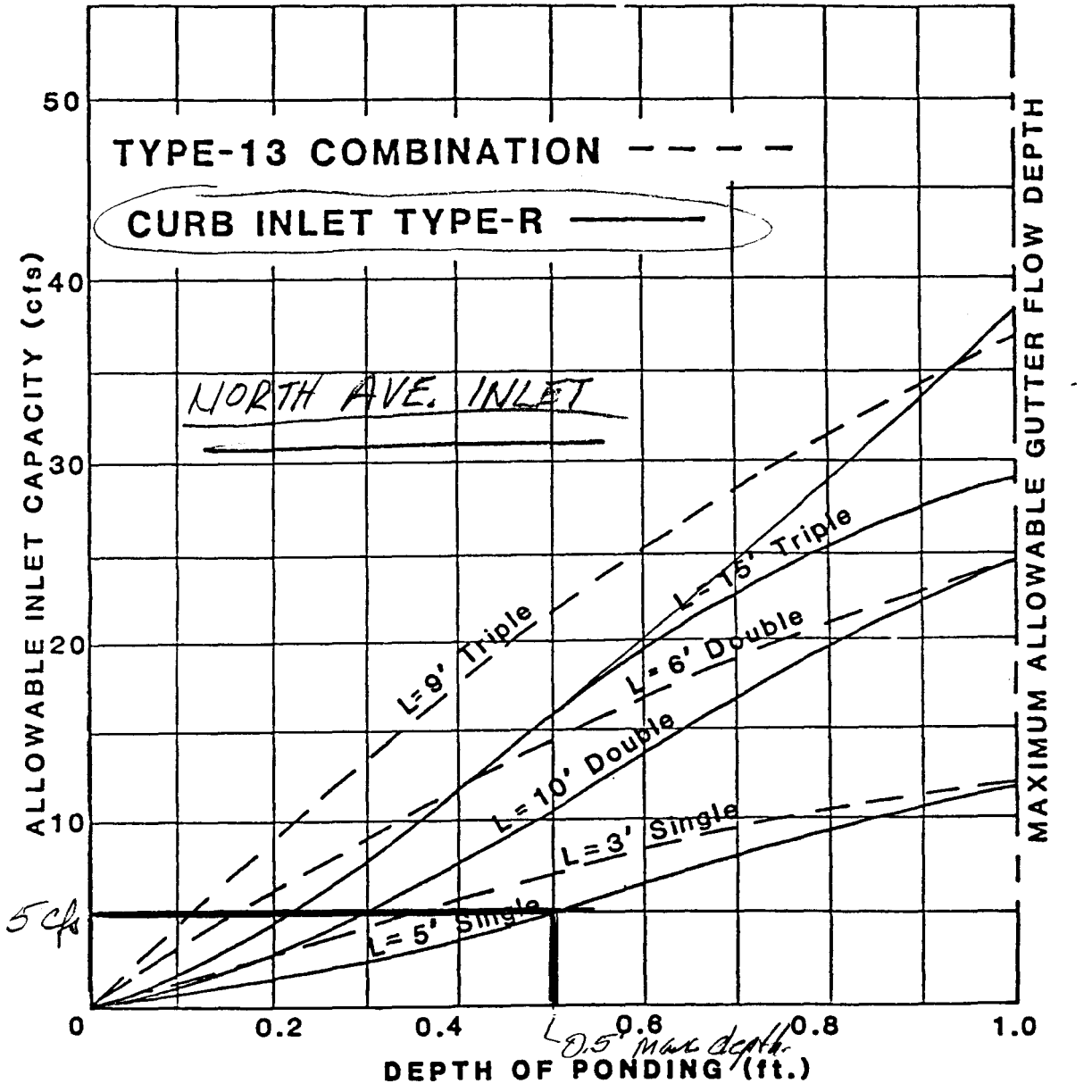
$H = \left(\frac{Q}{CL}\right)^{0.67}$

$H = \left(\frac{431}{3.8(200)}\right)^{0.67} = 0.7'$

∴ FLOW CROSSING NORTH AVENUE AT THE SITE WILL NOT EXCEED 1 DEPTH FOR THE 100-YEAR EVENT.

ALLOWABLE INLET CAPACITY
SUMP CONDITIONS - ALL INLETS





Date: NOV 1984
Rev: JULY 1985

REFERENCE: WRC ENGINEERING, INC., TM-2 AUG. 1984

PIPE CULVERT ANALYSIS
COMPUTATION OF CULVERT PERFORMANCE CURVE

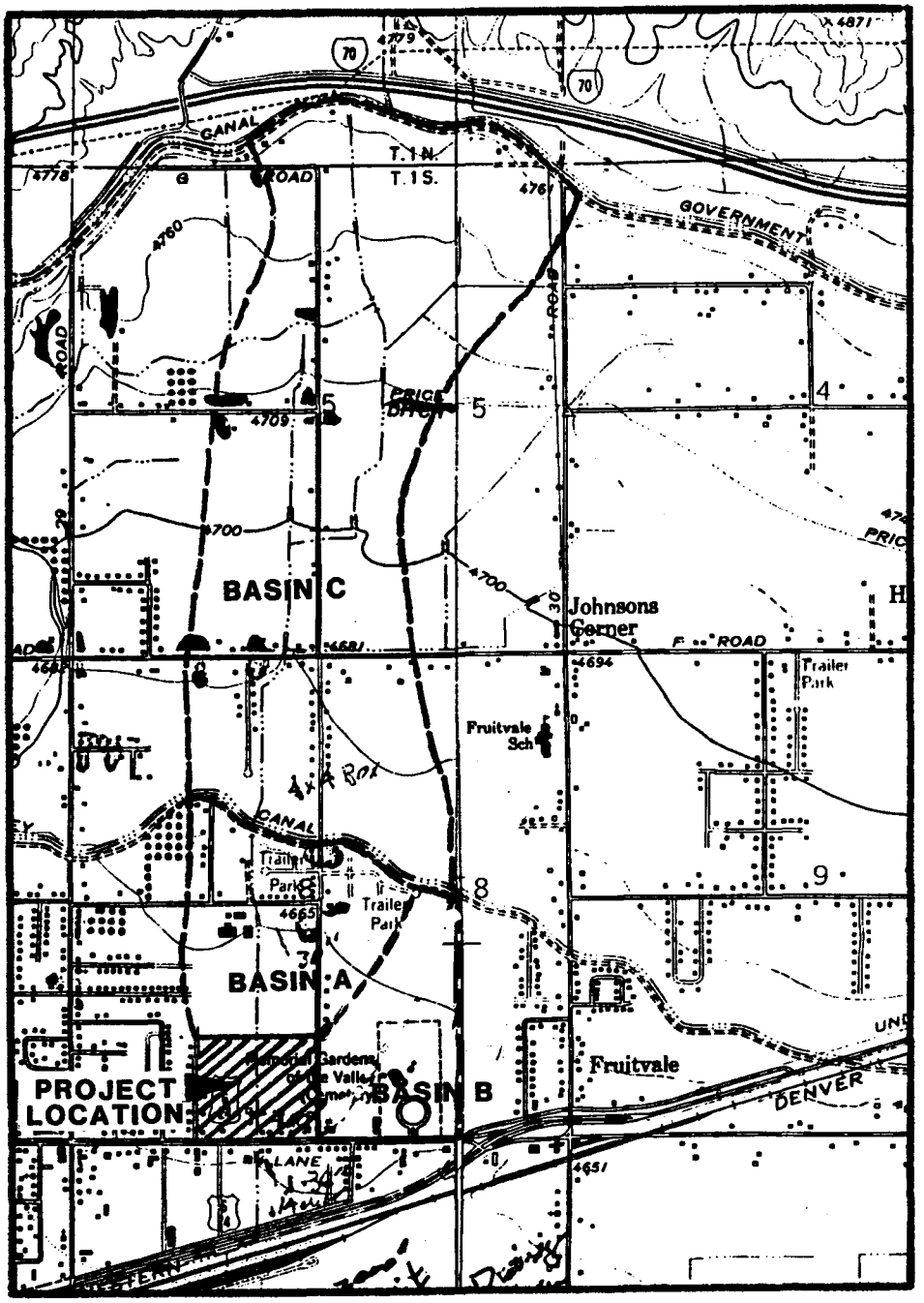
November 17, 1991
PACE, GRAND JUNCTION
36" CULVERT THROUGH THE SITE

PROGRAM INPUT DATA:

DESCRIPTION	VALUE
Culvert Diameter (feet)	3.00
FHWA Chart Number (1,2 or 3)	1
Scale Number on Chart (Type of Culvert Entrance)	1
Manning's Roughness Coefficient (n-value)	0.0130
Entrance Loss Coefficient of Culvert Opening	0.50
Culvert Length (feet)	750.0
Culvert Slope (feet per foot)	0.0125

PROGRAM RESULTS:

Flow Rate (cfs)	Tailwater Depth (ft)	Headwater (ft) Inlet Control	Headwater (ft) Outlet Control	Normal Depth (ft)	Critical Depth (ft)	Depth at Outlet (ft)	Outlet Velocity (fps)
10.0	1.00	1.38	-7.16	0.74	1.00	0.74	7.34
20.0	1.00	2.07	-6.30	1.06	1.43	1.06	8.91
30.0	1.00	2.69	-5.06	1.32	1.77	1.32	10.03
40.0	2.00	3.30	-3.42	1.56	2.06	1.56	10.76
50.0	2.00	4.00	-1.37	1.80	2.30	1.80	11.32
60.0	2.00	4.88	1.09	2.03	2.50	2.03	11.80
70.0	2.00	5.91	3.95	2.30	2.66	2.30	12.02
80.0	2.00	7.11	7.22	2.74	2.77	2.77	11.73
90.0	2.00	8.46	10.90	3.00	2.85	2.85	12.98
100.0	3.00	9.98	15.05	3.00	2.90	3.00	14.15


70
70
CANAL
T.1 N.
T.1 S.
GOVERNMENT
ROAD
BASIN C
BASIN A
BASIN B
PROJECT LOCATION
Johnsons Corner
Trailer Park
Fruitvale Sch
Fruitvale
DENVER
5
4
8
9
3

USGS MAP

****

FLOOD HYDROGRAPH PACKAGE HEC-1 (IBM XT 512K VERSION) -FEB 1,1985

U.S. ARMY CORPS OF ENGINEERS, THE HYDROLOGIC ENGINEERING CENTER, 609 SECOND STREET, DAVIS, CA. 95616

****

THIS HEC-1 VERSION CONTAINS ALL OPTIONS EXCEPT ECONOMICS, AND THE NUMBER OF PLANS ARE REDUCED TO 3

HEC-1 INPUT PAGE 1

```
      LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

*** FREE ***
                    *DIAGRAM
          1         ID   PACE, GRAND JUCTION, OFFSITE FLOW
          2         ID   HEC1 INPUT FILE PACE-GJ7
          3         ID   10 AND 100-YEAR EVENTS - 24 HOUR DURATION - TYPE IIA
          4         IT      15 16NOV91    0000     100
          5         IO       3       1
          6         IN      30 16NOV91    0000
          7         JR    PREC    0.71     1.0
                    *

          8         KK      A1 OFFSITE BASIN A, BETWEEN SITE AND GRAND VALLEY CANAL
          9         BA   0.133
         10         PB     2.4
         11         PC  0.0000  0.0033  0.0067  0.0100  0.0133  0.0190  0.0210  0.0300  0.0350  0.0450
         12         PC  0.0600  0.1000  0.7000  0.7480  0.7780  0.8000  0.8150  0.8290  0.8400  0.8500
         13         PC  0.8600  0.8690  0.8780  0.8850  0.8920  0.9000  0.9050  0.9120  0.9180  0.9220
         14         PC  0.2900  0.9330  0.9400  0.9420  0.9500  0.9580  0.9610  0.9640  0.9680  0.9700
         15         PC  0.9750  0.9790  0.9810  0.9850  0.9880  0.9900  0.9940  1.0000
         16         LS       0      70
         17         UD    0.10
                    *

         18         KK      A2DIVERT BASIN A FOR LATER RECOVERY
         19         DT      D1
         20         DI       1      50     100     200     500    1000    2000
         21         DQ       1      50     100     200     500    1000    2000
                    *

         22         KK      B1OFFSITE BASIN B, BETWEEN SITE AND 30th
         23         BA   0.121
         24         LS       0      70
         25         UD    0.10
                    *

         26         KK      C1OFFSITE BASIN C, GRAND VALLEY AND GOVERNMENT HIGHLINE CANALS
         27         BA   0.728       0
         28         LS       0      70
         29         UD    0.40
                    *
```

```
          30          KK      R1ROUTE BASIN C TO THE SITE
          31          RK    2200   0.015   0.035           TRAP      10       3             25
                      *
          32          KK      A1RETRIEVE BASIN A
          33          DR      D1
                      *

          34          KK      ACCOMBINE BASINS A AND C AT NORTH PROPERY LINE
          35          HC       2
                      *
          36          ZZ

              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    8          A1
               .
               .
   19          .-------->      D1
   18          A2
               .
               .
   22          .          B1
               .           .
               .           .
   26          .           .          C1
               .           .           V
               .           .           V
   30          .           .          R1
               .           .           .
               .           .           .
   33          .           .           .           .<--------      D1
   32          .           .           .         A1
               .           .           .           .
               .           .           .           .
   34          .           .          AC.............

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
                                                    ****
                          FLOOD HYDROGRAPH PACKAGE HEC-1 (IBM XT 512K VERSION) -FEB 1,1985
                 U.S. ARMY CORPS OF ENGINEERS, THE HYDROLOGIC ENGINEERING CENTER, 609 SECOND STREET, DAVIS, CA. 95616
                                                    ****




                          PACE, GRAND JUCTION, OFFSITE FLOW
                          HEC1 INPUT FILE PACE-GJ7
                          10 AND 100-YEAR EVENTS - 24 HOUR DURATION - TYPE IIA

   5 IO          OUTPUT CONTROL VARIABLES
                       IPRNT          3  PRINT CONTROL
                       IPLOT          1  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE

     IT          HYDROGRAPH TIME DATA
```

```
                    NMIN          15  MINUTES IN COMPUTATION INTERVAL
                   IDATE     16NOV91  STARTING DATE
                   ITIME        0000  STARTING TIME
                      NQ         100  NUMBER OF HYDROGRAPH ORDINATES
                  NDDATE     17NOV91  ENDING DATE
                  NDTIME        0045  ENDING TIME

               COMPUTATION INTERVAL     .25 HOURS
                   TOTAL TIME BASE   24.75 HOURS

      ENGLISH UNITS

   JP         MULTI-PLAN OPTION
                  NPLAN           1  NUMBER OF PLANS

   JR         MULTI-RATIO OPTION
                RATIOS OF PRECIPITATION
                .71      1.00


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


        **************
        *            *
 8 KK   *        A1  *      OFFSITE BASIN A, BETWEEN SITE AND GRAND VALLEY CANAL
        *            *
        **************

 6 IN       TIME DATA FOR INPUT TIME SERIES
               JXMIN          30  TIME INTERVAL IN MINUTES
              JXDATE     16NOV91  STARTING DATE
              JXTIME           0  STARTING TIME

          SUBBASIN RUNOFF DATA

 9 BA       SUBBASIN CHARACTERISTICS
               TAREA         .13  SUBBASIN AREA

          PRECIPITATION DATA

10 PB            STORM        2.40  BASIN TOTAL PRECIPITATION

11 PI        INCREMENTAL PRECIPITATION PATTERN
              .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
              .00   .00   .00   .00   .00   .00   .01   .00   .01   .01
              .02   .02   .30   .30   .02   .02   .01   .01   .01   .01
              .01   .01   .01   .01   .01   .01   .01   .00   .00   .00
              .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
              .00   .00   .00   .00   .00   .00   .00   .00  -.32  -.32
              .32   .32   .00   .00   .00   .00   .00   .00   .00   .00
              .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
              .00   .00   .00   .00   .00   .00   .00   .00   .00   .00
              .00   .00   .00   .00

16 LS       SCS LOSS RATE
               STRTL         .86  INITIAL ABSTRACTION
              CRVNBR       70.00  CURVE NUMBER
               RTIMP         .00  PERCENT IMPERVIOUS AREA
```

17 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .10 LAG

***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
5 END-OF-PERIOD ORDINATES
255. 71. 14. 3. 0.

TOTAL RAINFALL = 2.40, TOTAL LOSS = 1.13, TOTAL EXCESS = 1.27

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
(CFS)	(HR)					
		(CFS)				
145.	15.50		13.	5.	4.	4.
		(INCHES)	.919	1.274	1.274	1.274
		(AC-FT)	7.	9.	9.	9.

CUMULATIVE AREA = .13 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION A1
FOR PLAN 1, RATIO = .71

TOTAL RAINFALL = 1.70, TOTAL LOSS = 1.11, TOTAL EXCESS = .60

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
(CFS)	(HR)					
		(CFS)				
77.	15.50		7.	2.	2.	2.
		(INCHES)	.476	.596	.596	.596
		(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = .13 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION A1
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 2.40, TOTAL LOSS = 1.13, TOTAL EXCESS = 1.27

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
(CFS)	(HR)					
		(CFS)				
145.	15.50		13.	5.	4.	4.
		(INCHES)	.919	1.274	1.274	1.274
		(AC-FT)	7.	9.	9.	9.

CUMULATIVE AREA = .13 SQ MI

*** ***

```
          ***************
          *             *
   18 KK  *       A2    *    DIVERT BASIN A FOR LATER RECOVERY
          *             *
          ***************
```

DT DIVERSION

ISTAD D1 DIVERSION HYDROGRAPH IDENTIFICATION

DI	INFLOW	1.00	50.00	100.00	200.00	500.00	1000.00	2000.00
DQ	DIVERTED FLOW	1.00	50.00	100.00	200.00	500.00	1000.00	2000.00

***

*** *** *** *** ***

DIVERSION HYDROGRAPH D1
FOR PLAN 1, RATIO = .71

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
+ (CFS)	(HR)					
		(CFS)				
+ 77.	15.50		7.	2.	2.	2.
		(INCHES)	.476	.596	.596	.596
		(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = .13 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION A2
FOR PLAN 1, RATIO = .71

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
+ (CFS)	(HR)					
		(CFS)				
+ 0.	.25		0.	0.	0.	0.
		(INCHES)	.000	.000	.000	.000
		(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .13 SQ MI

*** *** *** *** ***

DIVERSION HYDROGRAPH D1
FOR PLAN 1, RATIO = 1.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR

```
+  (CFS)      (HR)
                       (CFS)
   145.     15.50                   13.          5.          4.           4.
                    (INCHES)      .919       1.274       1.274        1.274
                     (AC-FT)        7.          9.          9.           9.

                     CUMULATIVE AREA =      .13 SQ MI


    ***            ***            ***            ***            ***

                      HYDROGRAPH AT STATION        A2
                        FOR PLAN 1, RATIO = 1.00

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR        24-HR       72-HR     24.75-HR
  (CFS)       (HR)
                       (CFS)
     0.        .25                   0.          0.          0.           0.
                    (INCHES)      .000        .000        .000         .000
                     (AC-FT)        0.          0.          0.           0.

                     CUMULATIVE AREA =      .13 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           ***************
           *             *
 22 KK     *       B1    *     OFFSITE BASIN B, BETWEEN SITE AND 30th
           *             *
           ***************

              SUBBASIN RUNOFF DATA

 23 BA          SUBBASIN CHARACTERISTICS
                      TAREA          .12  SUBBASIN AREA

                PRECIPITATION DATA

 10 PB                STORM        2.40  BASIN TOTAL PRECIPITATION

 11 PI                INCREMENTAL PRECIPITATION PATTERN
                        .00        .00        .00        .00        .00        .00        .00        .00        .00        .00
                        .00        .00        .00        .00        .00        .00        .01        .00        .01        .01
                        .02        .02        .30        .30        .02        .02        .01        .01        .01        .01
                        .01        .01        .01        .01        .01        .01        .01        .00        .00        .00
                        .00        .00        .00        .00        .00        .00        .00        .00        .00        .00
                        .00        .00        .00        .00        .00        .00        .00        .00       -.32       -.32
                        .32        .32        .00        .00        .00        .00        .00        .00        .00        .00
                        .00        .00        .00        .00        .00        .00        .00        .00        .00        .00
                        .00        .00        .00        .00        .00        .00        .00        .00        .00        .00
                        .00        .00        .00        .00

 24 LS          SCS LOSS RATE
                      STRTL          .86  INITIAL ABSTRACTION
                     CRVNBR        70.00  CURVE NUMBER
```

RTIMP .00 PERCENT IMPERVIOUS AREA

25 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .10 LAG

***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
5 END-OF-PERIOD ORDINATES
232. 65. 13. 3. 0.

TOTAL RAINFALL = 2.40, TOTAL LOSS = 1.13, TOTAL EXCESS = 1.27

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.75-HR
		(CFS)				
132.	15.50		12.	4.	4.	4.
		(INCHES)	.919	1.274	1.274	1.274
		(AC-FT)	6.	8.	8.	8.

CUMULATIVE AREA = .12 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION B1
FOR PLAN 1, RATIO = .71

TOTAL RAINFALL = 1.70, TOTAL LOSS = 1.11, TOTAL EXCESS = .60

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.75-HR
		(CFS)				
70.	15.50		6.	2.	2.	2.
		(INCHES)	.476	.596	.596	.596
		(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = .12 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION B1
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 2.40, TOTAL LOSS = 1.13, TOTAL EXCESS = 1.27

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.75-HR
		(CFS)				
132.	15.50		12.	4.	4.	4.
		(INCHES)	.919	1.274	1.274	1.274
		(AC-FT)	6.	8.	8.	8.

CUMULATIVE AREA = .12 SQ MI

```
*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

             ***************
             *             *
  26 KK      *      C1     *     OFFSITE BASIN C, GRAND VALLEY AND GOVERNMENT HIGHLINE CANALS
             *             *
             ***************

                SUBBASIN RUNOFF DATA

  27 BA          SUBBASIN CHARACTERISTICS
                       TAREA          .73  SUBBASIN AREA

                 PRECIPITATION DATA

  10 PB                STORM         2.40  BASIN TOTAL PRECIPITATION

  11 PI            INCREMENTAL PRECIPITATION PATTERN
                       .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                       .00       .00       .00       .00       .00       .00       .01       .00       .01       .01
                       .02       .02       .30       .30       .02       .02       .01       .01       .01       .01
                       .01       .01       .01       .01       .01       .01       .01       .00       .00       .00
                       .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                       .00       .00       .00       .00       .00       .00       .00       .00      -.32      -.32
                       .32       .32       .00       .00       .00       .00       .00       .00       .00       .00
                       .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                       .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                       .00       .00       .00       .00

  28 LS          SCS LOSS RATE
                       STRTL          .86  INITIAL ABSTRACTION
                      CRVNBR        70.00  CURVE NUMBER
                       RTIMP          .00  PERCENT IMPERVIOUS AREA

  29 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG          .40  LAG

                                                                  ***

 WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                             UNIT HYDROGRAPH
                                                        10 END-OF-PERIOD ORDINATES
              291.      671.      507.      221.      103.       48.       22.       10.        5.        2.

    TOTAL RAINFALL =     2.40, TOTAL LOSS =     1.13, TOTAL EXCESS =     1.27

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR     24.75-HR
+   (CFS)       (HR)
                            (CFS)
     506.      15.75                    72.          25.         24.          24.
                          (INCHES)     .918        1.274       1.274        1.274
                           (AC-FT)      36.          49.         49.          49.
```

CUMULATIVE AREA = .73 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION C1
FOR PLAN 1, RATIO = .71

TOTAL RAINFALL = 1.70, TOTAL LOSS = 1.11, TOTAL EXCESS = .60

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
(CFS)	(HR)					
		(CFS)				
+ 263.	15.75		37.	12.	11.	11.
		(INCHES)	.475	.596	.596	.596
		(AC-FT)	18.	23.	23.	23.

CUMULATIVE AREA = .73 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION C1
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 2.40, TOTAL LOSS = 1.13, TOTAL EXCESS = 1.27

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
+ (CFS)	(HR)					
		(CFS)				
+ 506.	15.75		72.	25.	24.	24.
		(INCHES)	.918	1.274	1.274	1.274
		(AC-FT)	36.	49.	49.	49.

CUMULATIVE AREA = .73 SQ MI

*** ***

```
          **************
          *            *
30 KK     *        R1  *    ROUTE BASIN C TO THE SITE
          *            *
          **************
```

HYDROGRAPH ROUTING DATA

31 RK KINEMATIC WAVE STREAM ROUTING

L	2200.	CHANNEL LENGTH
S	.0150	SLOPE
N	.035	CHANNEL ROUGHNESS COEFFICIENT
CA	.00	CONTRIBUTING AREA
SHAPE	TRAP	CHANNEL SHAPE
WD	10.00	BOTTOM WIDTH OR DIAMETER
Z	3.00	SIDE SLOPE

***

KINEMATIC STREAM ROUTING USED FOR THIS REACH

COMPUTED KINEMATIC PARAMETERS

ALPHA	M	DT (MIN)	DX (FT)
1.4465	1.417	3.75	1100.00

*** *** *** *** ***

HYDROGRAPH AT STATION R1
FOR PLAN 1, RATIO = .71

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
(CFS)	(HR)					
		(CFS)				
+ 245.	15.75		38.	12.	11.	11.
		(INCHES)	.485	.606	.606	.606
		(AC-FT)	19.	24.	24.	24.

CUMULATIVE AREA = .73 SQ MI

KINEMATIC STREAM ROUTING USED FOR THIS REACH

COMPUTED KINEMATIC PARAMETERS

ALPHA	M	DT (MIN)	DX (FT)
1.4465	1.417	2.50	1100.00

*** *** *** *** ***

HYDROGRAPH AT STATION R1
FOR PLAN 1, RATIO = 1.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.75-HR
+ (CFS)	(HR)					
		(CFS)				
481.	15.75		72.	25.	24.	24.
		(INCHES)	.926	1.283	1.283	1.283
		(AC-FT)	36.	50.	50.	50.

CUMULATIVE AREA = .73 SQ MI

*** ***

****
*   *

```
32 KK      *        A1  *     RETRIEVE BASIN A
           *            *
           **************

33 DR          RETRIEVE DIVERSION HYDROGRAPH
                     ISTAD          D1  DIVERSION HYDROGRAPH IDENTIFICATION

                                                        ***

     ***          ***          ***          ***          ***

                       HYDROGRAPH AT STATION       A1
                         FOR PLAN 1, RATIO =  .71

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.75-HR
    (CFS)       (HR)
                          (CFS)
     77.      15.50                    7.          2.          2.          2.
                       (INCHES)      .087        .109        .109        .109
                        (AC-FT)        3.          4.          4.          4.

                      CUMULATIVE AREA =      .00 SQ MI

     ***          ***          ***          ***          ***

                       HYDROGRAPH AT STATION       A1
                         FOR PLAN 1, RATIO = 1.00

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.75-HR
+   (CFS)       (HR)
                          (CFS)
+   145.      15.50                   13.          5.          4.          4.
                       (INCHES)      .168        .233        .233        .233
                        (AC-FT)        7.          9.          9.          9.

                      CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
34 KK      *        AC  *     COMBINE BASINS A AND C AT NORTH PROPERY LINE
           *            *
           **************

35 HC          HYDROGRAPH COMBINATION
                     ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                        ***

     ***          ***          ***          ***          ***

                       HYDROGRAPH AT STATION       AC
```

FOR PLAN 1, RATIO = .71

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR (CFS)	24-HR	72-HR	24.75-HR
267.	15.75		45.	14.	14.	14.
		(INCHES)	.572	.715	.715	.715
		(AC-FT)	22.	28.	28.	28.

CUMULATIVE AREA = .73 SQ MI

*** *** *** *** ***

HYDROGRAPH AT STATION AC
FOR PLAN 1, RATIO = 1.00

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR (CFS)	24-HR	72-HR	24.75-HR
521.	15.75		86.	30.	29.	29.
		(INCHES)	1.093	1.516	1.516	1.516
		(AC-FT)	42.	59.	59.	59.

CUMULATIVE AREA = .73 SQ MI

1

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 .71	RATIO 2 1.00
HYDROGRAPH AT	A1	.13	1	FLOW	77.	145.
				TIME	15.50	15.50
DIVERSION TO	D1	.13	1	FLOW	77.	145.
				TIME	15.50	15.50
HYDROGRAPH AT	A2	.13	1	FLOW	0.	0.
				TIME	.25	.25
HYDROGRAPH AT	B1	.12	1	FLOW	70.	132.
				TIME	15.50	15.50
HYDROGRAPH AT	C1	.73	1	FLOW	263.	506.
				TIME	15.75	15.75
ROUTED TO						

+	R1	.73	1	FLOW	245.	481.
				TIME	15.75	15.75

HYDROGRAPH AT

+	A1	.00	1	FLOW	77.	145.
				TIME	15.50	15.50

2 COMBINED AT

	AC	.73	1	FLOW	267.	521.
				TIME	15.75	15.75

*** NORMAL END OF HEC-1 ***

GRAND JUNCTION DRAINAGE DISTRICT

722 23 ROAD
P.O. BOX 55246
GRAND JUNCTION, COLORADO 81505
(303) 242-4343

November 20, 1991

Drychester Retail II, Inc.

Re: Grand Junction Planning Commission Review Item 70-91
North Avenue Marketplace

To Whom it May Concern,

The revised site plan for the project at 29 1/2 Road and North Avenue has been reviewed. The Drainage District asked for a few details which the petitioner did answer.

This letter is in response to an inquiry concerning relocation of the building. Construction of **any** building over **any** tile line is not a reasonable idea as far as the Drainage District is concerned. The question of locating a large building near the tile line is not a good idea. Positioning a building in such a fashion that overland flows would be directed into the front door or right in front of the main entrance is unreasonable.

An early inquiry to the District was about use of the land over the tile and easement for parking and could it be covered with asphalt. The answer to both questions is yes. It was made clear that buildings over the tile or on the easement or where overland flows might occur are strongly discouraged.

Sincerely,
Grand Junction Drainage District

John L. Ballagh,
Manager

November 20, 1991

Mr. Mark Sidell
Trammell Crow Company
7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111

Subject: Grand Junction Pace Site - North Avenue Marketplace Subdivision

Dear Mark:

Per your request, we have investigated, once again, what effect relocating the Pace Building to the west side of the site would have on the existing Grand Junction Drainage District ditch. The existing 36" pipe is sized to carry the 10 year storm runoff; with a 100 year flow of approximately 500 cfs on the surface along the alignment of the pipe.

Placement of the building on the west side of the site would require relocating the pipe and grading the site to relocate the 100 year overland flow to a north south alignment approximately 100' east of the current location. From an engineering standpoint, this is impractical and is not recommended for the following reasons:

1. The relocation would require the pipe to be at a grade flatter than the existing pipe. This would require the proposed pipe to be upsized to 42". The upsizing would need to be carried through the length of the pipe approximately 750' downstream to the outfall point. The cost of this upsizing would be economically unfeasible.

2. Given the size and configuration of the building, it is only possible to locate it on the west if the drainageway is moved 100' or more to the east. Otherwise there would be approximately 430 cfs of storm water directed at the Pace front door.

3. The regrading of the 100 year flow path would move the 100 year storm flow to a point approximately 100' east of its current location. This would direct the 100 year flow to a point on the south side of North Avenue approximately 100' further east. This will have implications to the downstream property owners due to the realignment of the flow. Additional easements and/or relocation of downstream drainage improvements may be necessary. This is impractical to obtain from all downstream owners, considering buildings and other improvements are already in place.

4. The existing drainage ditch to the north would need to be relocated as well. This would require regrading the existing ditch to a point 100' east of its current location which will impact the Lots 1 through 5, Block 3 of the Palace Estates subdivision. Those lots are only 130' deep and they would be undevelopable with the ditch relocation.

If you have any further questions, please call.

Sincerely,

S. A. MIRO, INC.

James C. Atkinson

James C. Atkinson, P.E.
Associate Principal

JCA/kjm

cc: Craig Cahen, Slack-Ellermann Architects

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

November 22, 1991

Ms. Kathy Portner, AICP
Senior Planner
Community Development Department
CITY OF GRAND JUNCTION
250 North 5th Street
Grand Junction, Colorado 81501

Re: North Avenue Marketplace
Grand Junction, Colorado

Dear Kathy:

Thank you for all of your assistance during the approval process of this project. I appreciate your direction and guidance in addressing the pertanent issues. We are enthusiastic about the opportunities that Grand Junction presents for Trammell Crow Company and PACE Membership Warehouse. I will be contacting you in the near future to review the site plan modifications which were requested by Planning Commission and City Council.

I look forward to working with you on this and future projects.

Sincerely,

TRAMMELL CROW COMPANY

Mark. H. Sidell
Marketing Principal

MHS:dd

FF — ACTION SHEET

~~~~ANNEXATION~~~~
REZONE AND FINAL

ACRES ________

UNITS ________

DENSITY ________

FILE NUMBER [illegible]0 91

ZONE C & R-4 (County)

TAX SCHEDULE # 2943-083-00-098
095
099
09-001-007

ACTIVITY Rezone (Zone of Annexation) and Final Plat

PHASE Final

COMMON LOCATION NW Corner of North Ave & 29 1/2 Rd

DATE SUBMITTED ________ DATE MAILED OUT ________ DATE POSTED ________

________ DAY REVIEW PERIOD RETURN BY ________

OPEN SPACE DEDICATION (acreage) ________ OPEN SPACE FEE REQUIRED $________ PAID RECEIPT #________

RECORDING FEE REQUIRED $________ PAID (Date) ________ DATE RECORDED ________

REVIEW AGENCIES

Agency	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG
Planning Department ✓	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
City Engineer ✓	●	●	●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●				
Transportation Engineer ✓	●	●	●										●	●	●	●	●	●	●	●	●	●	●	●	●	●			●				
City Parks/Recreation ✓	●	●	●	●									●	●	●	●	●	●	●		●	●				●			●				
City Fire Department ✓	●	●	●										●	●	●	●	●	●	●	●	●	●	●	●	●	●			●				
City Police Department	●	●	●												●	●	●	●			●	●				●			●				
County Planning ✓	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
County Engineer ✓	●	●	●										●	●	●	●	●	●	●	●	●	●	●	●	●	●			●				
County Health	●	●	●							●	●		●	●	●	●	●	●	●		●	●				●			●				
Floodplain Administration	●	●	●						●				●	●	●	●	●	●	●		●	●				●			●				
G.J. Dept. of Energy	●	●	●										●	●	●	●	●	●	●		●	●				●			●				
Walker Field	●	●	●										●	●	●	●	●	●	●		●	●				●			●				
School District	●	●	●										●	●	●	●	●	●	●		●	●				●			●				
Irrigation G.V.	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
Drainage G.J. ✓	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
Water (Ute, Clifton) ✓	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
Sewer Dist. (FV, CGV, OM) ✓	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
U.S. West	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
Public Service (2 sets) ✓	●	●	●										●	●	●	●	●	●	●	●	●	●				●			●				
State Highway Department ✓	●	●	●										●	●	●	●	●	●	●		●	●				●			●				
State Geological	●	●	●							●	●		●	●	●	●	●	●	●		●	●				●			●				
State Health Department	●	●	●												●														●				
City Property Agent	●	●	●										●	●	●	●	●	●	●	●		●	●			●			●				
City Utilities Engineer ✓	●	●	●										●	●	●	●	●	●	●	●		●	●			●			●				
City Attorney	●	●	●		●	●							●	●	●	●	●	●								●			●				
Building Department ✓	●	●	●							●		●			●		●	●				●				●			●				
DDA	●	●	●												●		●	●			●	●				●			●				
GJPC (7 packets) } no cover	●	●	●												●			●			●	●							●	●	●		
CIC (11 packets) } sheet	●	●	●												●			●			●	●							●	●	●		
Other Corps of Engineers	●	●	●												●	●	●	●				●							●				
TOTALS																																	

BOARDS	DATE
PC	11/19/91
CIC	11/20/91

Recommend Approval of Rezone to PC, Approved Plat, Denied Plan
Approved Rezone to PC, Approved Plat & Plan subject to staff recommendations w/ following changes: delete sentence 4 of #4 (refer to dev. of Lot 3); #12 allow sign up to 40'; Add: #15. 3 more islands in parking lot, #16. Entry way at least 150' from pavement

STAFF

APPLICATION FEE REQUIREMENTS

$500.00 payable to City of G.J. at time of submittal
$50.00 Sign deposit

GRAND JUNCTION planning

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814-4794

REPLY TO
ATTENTION OF

November 20, 1991

Regulatory Section

Ms. Kathy Portner
Community Development Department
250 North 5th Street
Grand Junction, Colorado 81501

Dear Ms. Portner:

I am responding to your "Agency Review" request delivered on October 29, 1991, concerning the proposed development of the North Avenue Marketplace Subdivision. The project area is located at NWC 29 1/2 Road and North Avenue in Section 8, Township 1 South, Range 1 East, Ute Meridian of Mesa County, Colorado.

This proposal includes the construction of a Pace shopping center. This development involves a parking lot which is to extend over a portion of the north-south drainage feature, also referred to as Fruitvale Drainage. Based on our review of the information provided, we have determined that this drainage does not qualify as "waters of the United States." under our jurisdiction. A Department of the Army permit is not required to fill of this drainage and replace it with a pipe. The remainder of the development also does not involve a discharge of dredged or fill material in "waters of the United States" and will not require a Department of the Army permit. This letter should not be construed as an endorsement of drainage changes. We are addressing only the need for a Department of the Army permit.

If you have any questions, you may contact Sue Bachini Nall of this office at telephone number (303) 243-1199.

Sincerely,

Grady L. McNure
Chief, Western Colorado Regulatory Office
402 Rood Avenue, Room 142
Grand Junction, Colorado 81501-2563

Copies Furnished:
Grand Valley Drainage District, Post Office Box 55246, Grand Junction, Colorado 81505

Kathy
Karl
Dave

UTILITY COORDINATING COMMITTEE MEETING

The regularly scheduled meeting of the Mesa County Utilities Coordinating Committee met on Wednesday December 11, 1991 in the Public Service Company Conference Room.

Those in attendance were:

Perry Rupp	Grand Valley Power	242-0040
John Ballagh	G.J. Drainage Dist.	242-4343
Dale Clawson	PSCO - Electric	244-2695
Bill Cheney	Grand Junction	244-1590
George Bennett	G.J. Fire Dept.	244-1400
Gray R. Mathews	Ute Water	242-7491
Fonda LoBach	Willowood Estates	243-9540
Leon Peach	U.S. West	244-4964
Kathy Portner	City Community Deve.	244-1446
Linda Dannenberger	County Planning	244-1771
Ted Wing	Mesa County Roads	244-1673
Jaci Gould	Mesa County Engineering	244-1815

The meeting was opened at 1:32 by President John Ballagh.

OLD BUSINESS (County)
1.) C70-91 Chipeta Golf Course P.U.D. - Final Plat - Tabled.

NEW BUSINESS (Grand Junction Planning)
1.) 74-91 Vacation of Alley - Signed Off.

2.) 70-91 North Avenue Market Place (Pace Warehouse) - Final Plat Hold for U.S. West & PSCO electric & Mesa County Engineering.

County Planning:
1.) C75-91 North Rolling Acres Filing 2 - Final Plat - Tabled. City needs sewer engineered. Mesa County needs R.O.W. adjusted.

2.) C80-91 Columbus Evangelical Free Church - Final Plan - Hold.

3.) C99-91 Administrative Replat of Willowood Mobile Home Sub. Signed Off.

4.) C26-91-2 Appleton Court - Final Plat - Signed Off.

5.) C25-91 The Seasons at Tiara Rado Filing 2 High Tiara - Final Plat - Signed Off.

DISCUSSION OF MESA COUNTY PLANNING COMMISSION AGENDA 12-19-91
1.) Was discussed.

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(303) 244-1430 FAX (303) 244-1599

December 9, 1991

Mark Sidell
Trammell Crow Company
7995 East Prentice Avenue, Suite 300
Englewood, CO 80111-2716

Dear Mark:

I'd like to recap the conditions of approval for the Pace development as required by City Council and also review some items that need to be resolved prior to recording the plat and site plan.

After further review of the contracts to purchase the property, we have determined that an appraisal will be necessary to calculate the amount of parks and open space fees due (as per section 5-4-6 of the Zoning and Development Code). The fees due at the time of recording are 5% of the appraised raw land value for lots 1 and 2 (commercial property) and $225 for lot 3 (residential property). Because of the difference in determining open space fees for the 3 lots and the varying land costs depending on access and zone, the appraisal is required for lots 1 and 2. If the developer would like the City to consider accepting lot 3 for parks and open space in lieu of the fees, an appraisal for lot 3 will also be required.

I am attaching a copy of the minutes from the City Council Hearing of November 20, 1991 which includes the conditions of approval. All conditions of approval must be satisfied prior to recording the plat and final plan. I understand that Jim Shanks, City Public Works Director, has approved the most recent revised site plan for the entrance drive and has agreed it meets the intent of the Council condition that the door be at least 150' from the south property line. However, approval will still be required from the State Highway access committee for an access permit.

The final landscaping plan may need to be revised to maintain the required site distance triangles at all intersections as shown on the attached drawing. Additional site distance is needed along Bunting Avenue. Nothing over 30" can be in the area 15' behind the edge of the pavement for a distance of 250' to the west of the driveway and a distance of 200' to the east of the driveway. Any trees proposed in those areas must be moved south out of the 15' site distance strip.

A signed and approved Development Improvements Agreement for the new plat and plan is also required. The Development Improvements Agreement for Palace Estates Subdivision will also have to be updated with the City, including deletion of the required improvements on the portion that will be a part of lot 1 of North Avenue Marketplace and a new agreement for the remainder of Palace Estates subdivision.

If you have further questions please contact me at 244-1446.

Sincerely,

Katherine M. Portner

Katherine M. Portner
Senior Planner

Trammell Crow Company

7995 East Prentice Avenue
Suite 300
Englewood, Colorado 80111-2716

303/220-0900
Fax 303/220-9706

January 16, 1992

Mr. Mark K. Achen
City Manager
CITY OF GRAND JUNCTION
City Hall
250 North 5th Street
Grand Junction, Colorado 81501

Re: North Avenue Marketplace
Grand Junction, Colorado

Dear Mr. Achen:

Thank you for taking the time to speak with me on the telephone, I wanted to personally let you know of news we received last week from PACE regarding the North Avenue Marketplace in Grand Junction. PACE has informed us that notwithstanding their agreement with us to open a store in this location, their senior operations management made a decision to not go forward with the store. Their primary concerns relate to new competitive analysis. We are extremely disappointed and surprised by this news .

The Grand Junction City Council, Planning Commission and staff have gone out of their way to be helpful, responsive and professional during our review and approval process. We genuinely appreciate and have been impressed by the City of Grand Junction and look forward to doing business with youin the future. We offer our personal thanks to you for your accommodation of our schedule and your consideration of our application. I look forward to the time that our paths cross again.

Sincerely,

TRAMMELL CROW COMPANY

Mark H. Sidell
Marketing Principal

MHS:dd

cc: Mr. Dan Wilson
Mr. Bennett Boeschenstein

January 17, 1992

City of Grand Junction, Colorado
81501-2668
250 North Fifth Street

Mesa County Clerk and Recorder
Mesa County Court House
6th and Rood
Grand Junction, Colorado 81501

SUBJECT: Drychester II, Inc., Annexation No. 1, 2, 3, 4 and 5

Gentlemen:

Please note the attached Daily Sentinel newspaper article regarding the decision by Pace Warehouse to cancel plans to build a store in Grand Junction.

On January 6, 1992, annexation documents were mailed to your office for Drychester II, Inc., Annexations No. 1, 2, 3, 4 and 5 located at 29-1/2 Road and North Avenue, with an effective day of January 21, 1992.

Please do not update your records to include the annxation at this time. The City Attorney has recommended that all documentation be retained for a period of time until written confirmation of Pace's decision is received by the City, at which time you will be notified by this office.

Sincerely,

Neva B. Lockhart

Neva B. Lockhart, CMC
City Clerk

NBL:tm

Attachment

c: Annexation Clerk, Public Service Company
Michael Martin, U.S. West Communications (Denver)
Larry Axtell, Colorado Department of Highways
Jarrett Broughton, Grand Valley Rural Power Lines, Inc.
Tom Worster, United Artists Cable TV
City Community Development ✓
City Engineering
City Sales Tax
City Sanitation
City Streets
City Traffic
City Utilities
City Parks & Recreation
City Police Department
City Fire Department
Greater Grand Valley Communications Center
County Assessor
County Engineering Department
County Road Department
County Sheriff

Pace won't build; annexation is off

C. Patrick Cleary
Daily Sentinel

Pace Warehouse won't build a store in Grand Junction, the company told city officials Friday, citing the competition from a similar discount store.

"Yes we are pulling out," Pace public relations director Cathy Roper said on Tuesday. "We just don't feel like the market can handle two warehouse clubs."

Sam's Club is building a 130,000-square-foot discount outlet at the west end of Independent Avenue. The store is expected to open this spring.

Because Pace pulled out, the annexation at the intersection of 29½ Road and North Avenue "is off," said Community Development Director Bennett Boeschenstein.

The annexation was contingent upon Pace signing a contract with the Denver-based developing company Trammell Crow to construct the 110,000-square-foot store.

Mark Sidell, with Trammell Crow, said Pace's decision was "based on concerns about the size of the market," the head start from Sam's Club and its affect on membership sales. Pace would have leased the property from Trammell Crow.

Sam's Club is an affiliate of the Wal-Mart chain. Pace is part of the K mart chain.

Cathy Frederick of Peach Tree True Value Hardware, 2963 North Ave., who organized a petition drive against the annexation when she found out that her store would be annexed along with the Pace site, said she was pleased the annexation won't go forward.

"This gives the people at this end of the valley a few more years to get educated to decide if they want to be a part of the city," Frederick said.

GJ can provide water service to Sam's Club

C. Patrick Cleary
Daily Sentinel

The city of Grand Junction can provide water service to a large retail outlet at the west end of Independent Avenue, despite legal objections by the Ute Water Conservancy District.

Mesa County District Judge Nick Massaro rejected Ute's request for an injunction to prevent the city from extending its water lines into Ute service territory, which Ute said was in direct violation of an existing contract between the water providers.

"It's a terrible waste of taxpayer money," said Ute Manager Lawrence "Fuzzy" Aubert. "That is what bothers me. I don't know where the judge was coming from."

Ute has a line that extends to the property line where a 130,000-square-foot Sam's Club discount store is under construction at Independent Avenue and U.S. 6&50.

The store, however, is in Grand Junction and "we believe a home-rule city has the right to supply the water to citizens within the city limits," said City Attorney Dan Wilson.

"They're extending their lines into our service area," Aubert said. "We've served that area for 25 years."

Wilson said that the city isn't violating the contract.

"The contract prohibits us from serving outside the city limits without Ute's consent," he said. "Inside the city the contract does not apply."

Such service disputes are part of a lawsuit between the city and Ute. A hearing is set for Feb. 24 in district court to settle a decade-old squabble.

Use case lands in high court

Oil companies argue for state authority

Associated Press

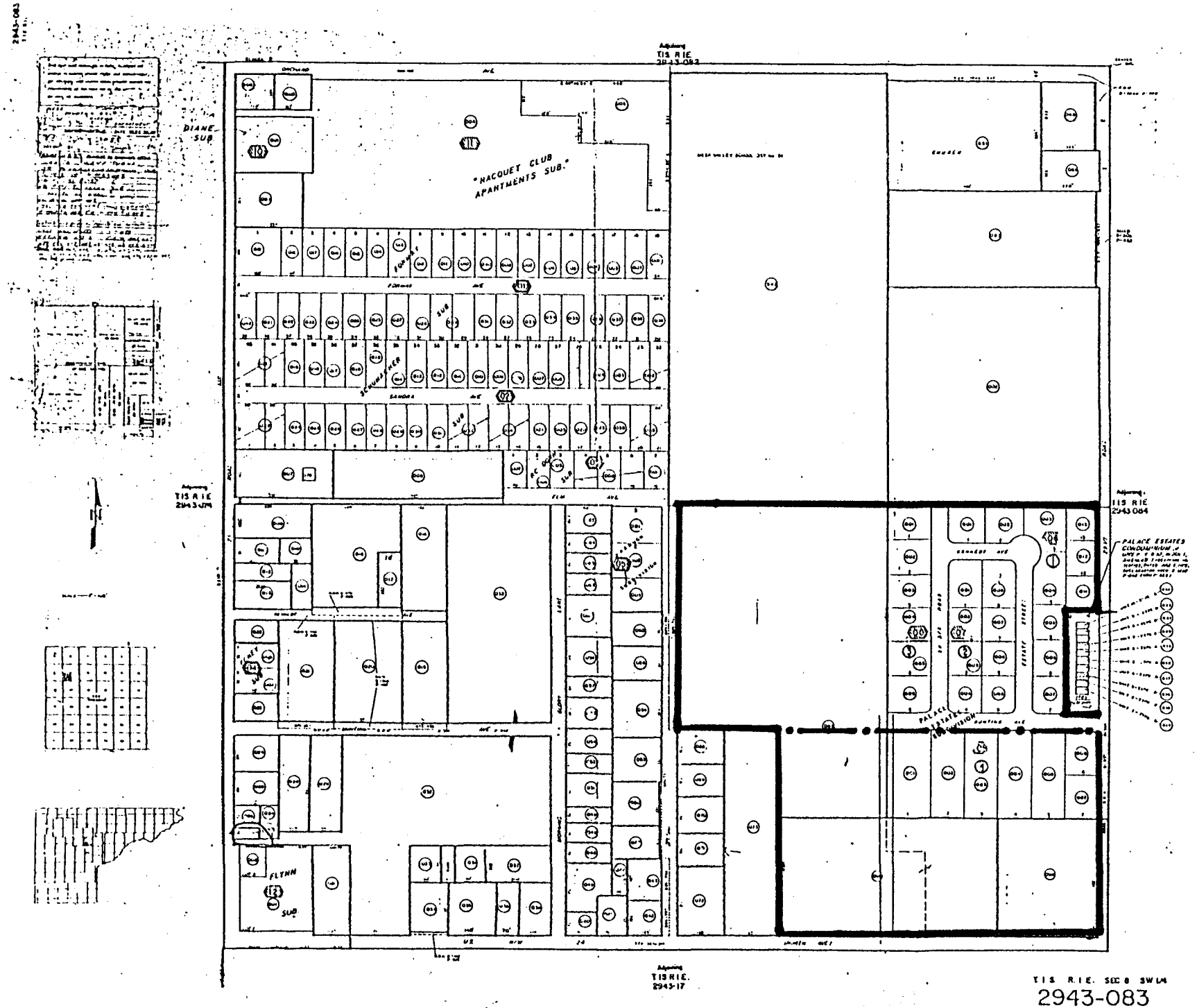
DENVER — Because of the valuable nature of resources, Colorado's Oil and Gas Act allows the state to govern all oil and gas operations, and intervention by county and municipal governments is illegal, the State Supreme Court was told on Tuesday.

That was the argument launched by Timothy J. Monahan, an assistant attorney general representing the Oil and Gas Conservation Commission and by James W. Peyton, a lawyer representing an oil and gas company thwarted in its effort to drill in Greeley.

But Mike McLachlan, a member of a team of lawyers representing La Plata County, which is fighting to preserve its own land-use rules and regulations, and Mark Hannen, representing Douglas County, argued the state act does not preempt all local land-use ordinances standing in the way of drilling.

And, they argued, the lawsuit filed by another drilling firm, Bowen-Edwards Associates Inc., to strike down local regulations, was premature because the firm did not apply for permits for the 100 coal wells it wanted to drill in La Plata County.

The high court heard two hours of challenges to local regulation in La Plata County and the city of Greeley.



T.1 S. R.1 E. SEC. 8 SW 1/4

2943-083

91

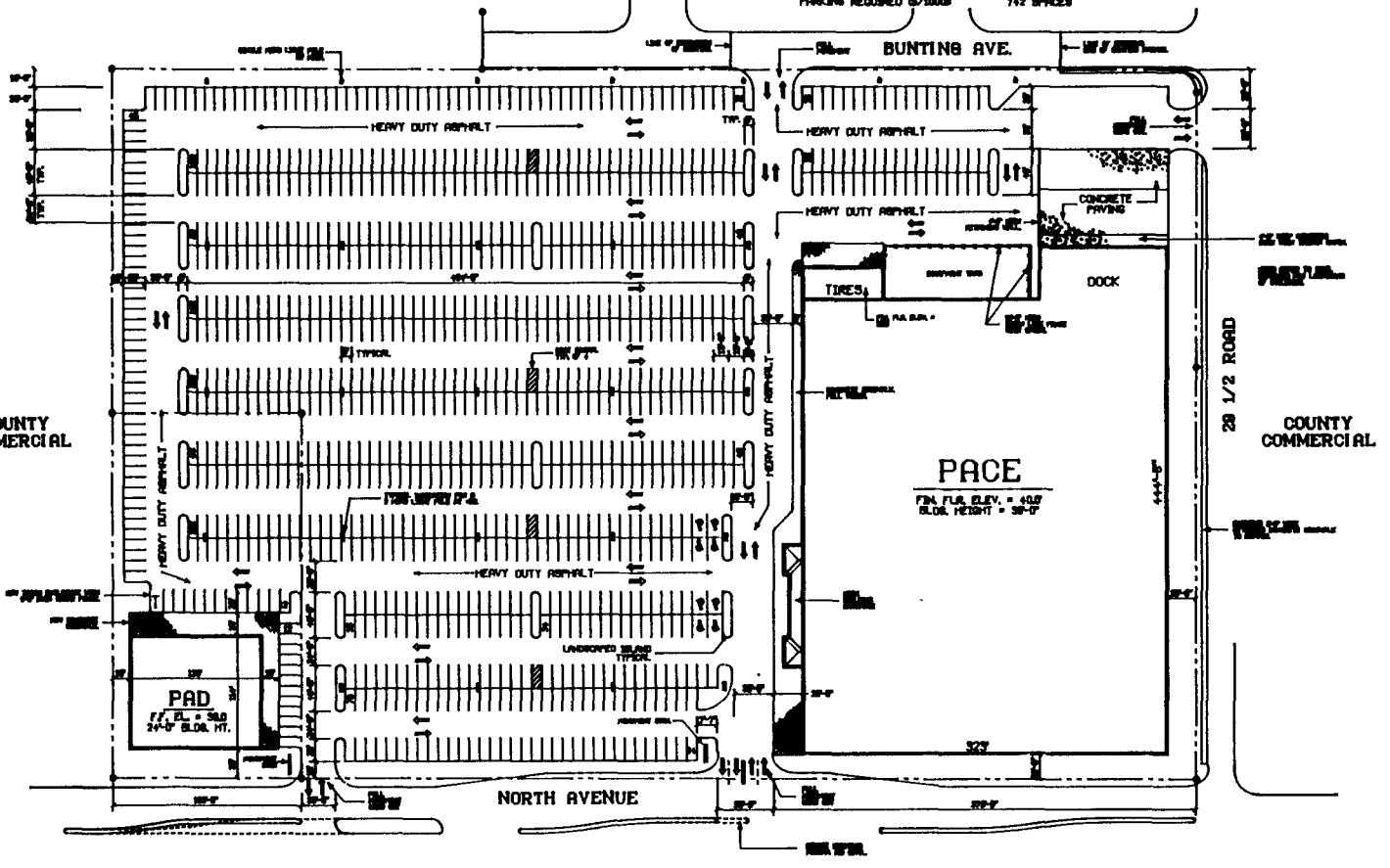
NORTH AVENUE MARKETPLACE
GRAND JUNCTION, COLORADO

A Trammell Crow Company Development

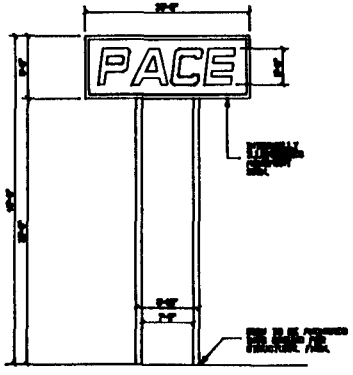
SITE PLAN

SCALE: 1" = 50'-0"

NORTH



LIGHT POLE DETAIL



SIGN ELEVATION

NORTH AVENUE MARKETPLACE
North Avenue & 28 1/2 Road
Grand Junction, Colorado
A Trammell Crow Company Development

S-1

#70 91

NORTH AVENUE MARKETPLACE
GRAND JUNCTION, COLORADO

A Trammell Crow Company Development

LANDSCAPE PLAN

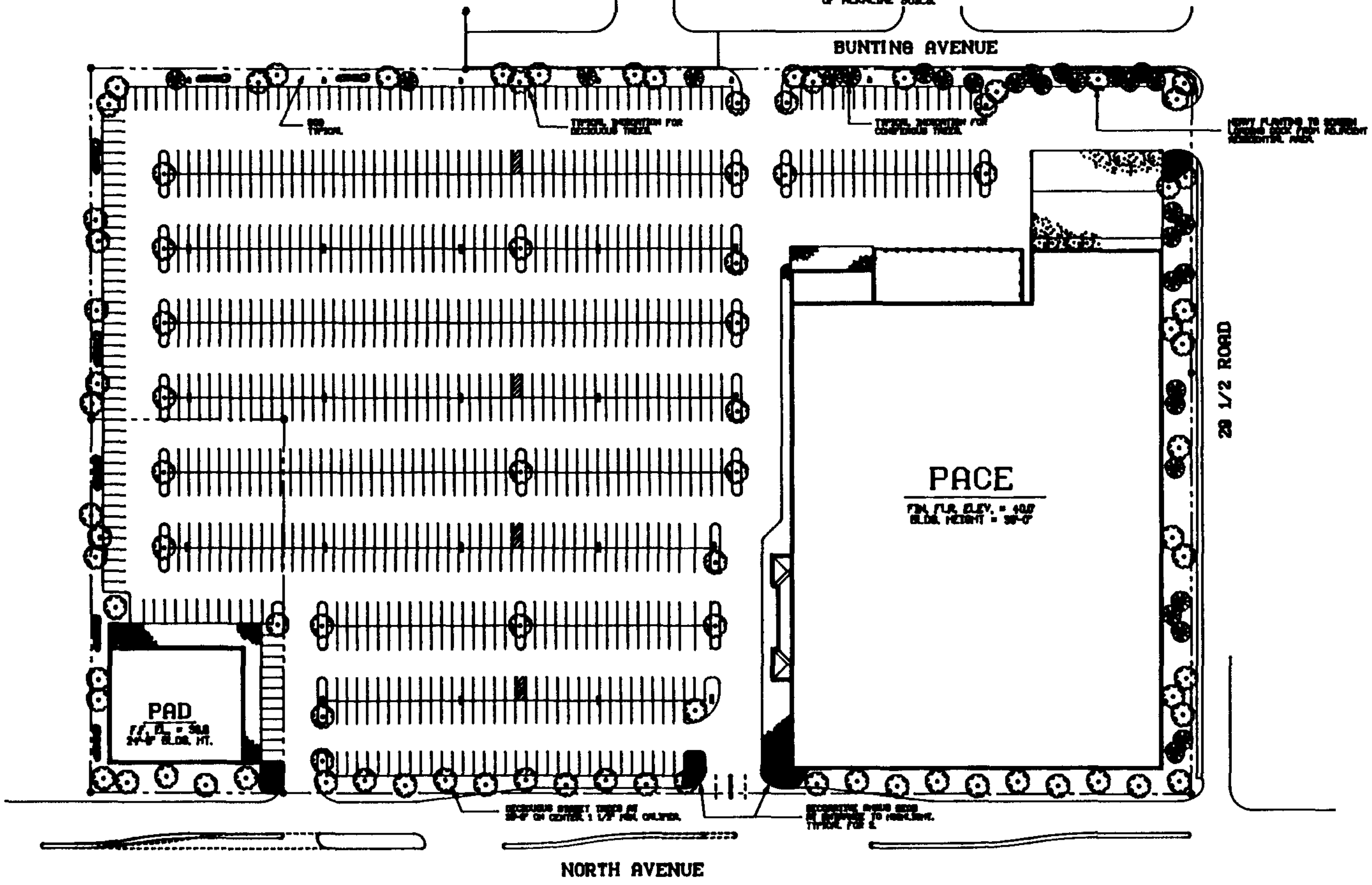
SCALE: 1" = 50'-0"   NORTH

LANDSCAPE SIZES (MIN.)	
DECIDUOUS	1 1/2" CALIPER
CONIFEROUS	6 FEET TALL
SHRUBS	5 GALLON SIZE

TABULATIONS	
TOTAL SITE AREA	586,573 SF (100%)
BLDG. AREA/COVERAGE	140,276 SF (24.0%)
OPEN SPACE	58,163 SF (9.9%)
HARD SURFACE AREA	388,134 SF (66.3%)

GENERAL NOTES:

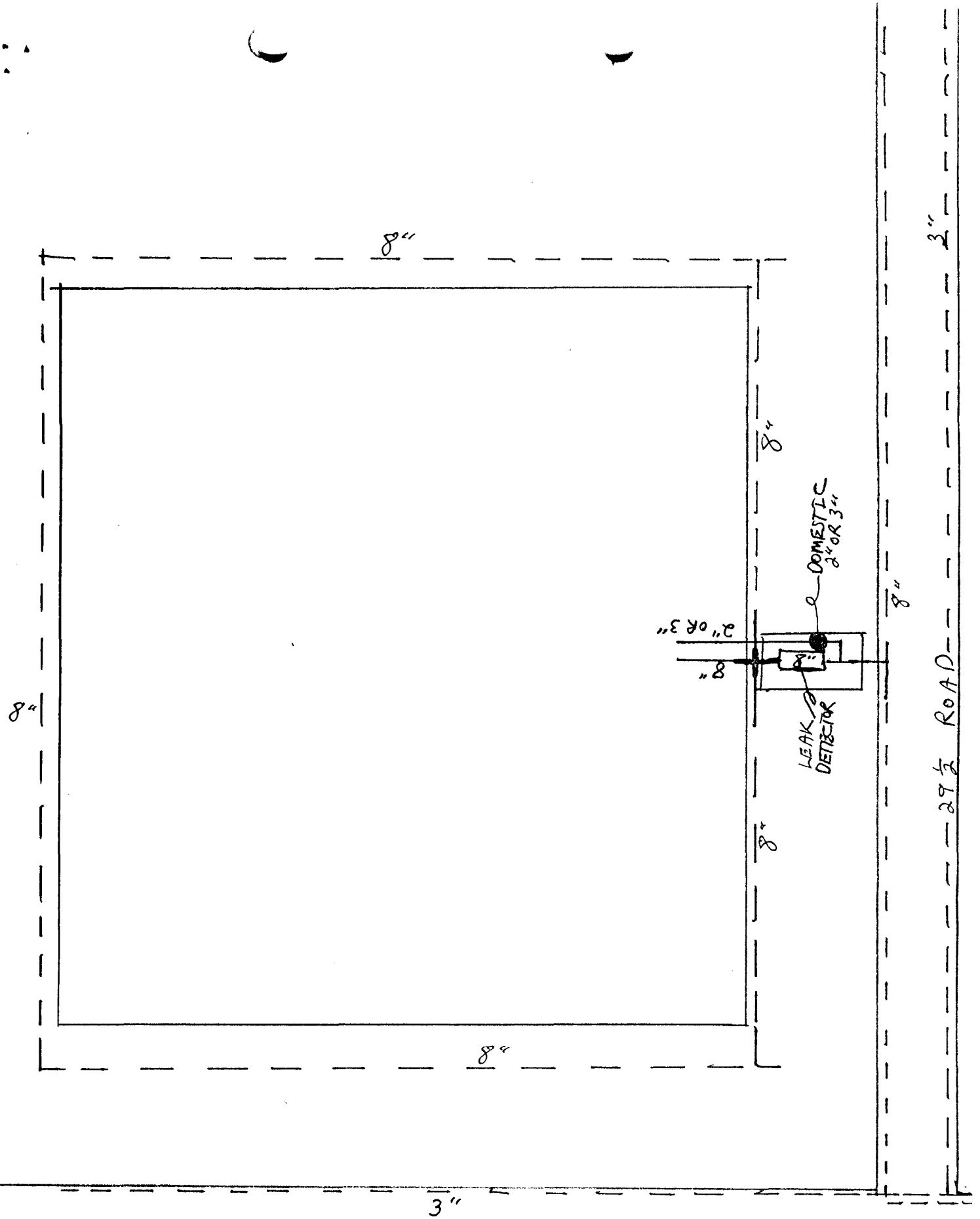
1) ALL LANDSCAPING TO MEET MINIMUM STANDARDS OF "CITY OF GRAND JUNCTION LANDSCAPE STANDARDS AND REQUIREMENTS".
2) ALL LANDSCAPING TO BE IRRIGATED WITH AN AUTOMATIC SPRINKLER SYSTEM.
3) SHRUB BEDS WITHIN THE 30' SITE TRIANGLE AT ENTRANCES SHALL BE A MAXIMUM OF 30" IN HEIGHT.
4) ALL LANDSCAPING MATERIALS TO MEET MINIMUM SIZE STANDARDS OF THE CITY OF GRAND JUNCTION.
5) ALL INTERIOR PARKING LOT ISLANDS TO BE LANDSCAPED AND IRRIGATED. PLANTINGS TO INCLUDE DECIDUOUS TREES AND SHRUBS WITH GROUND COVER.
6) ALL LANDSCAPE MATERIALS TO BE TOLERANT OF ALKALINE SOILS.



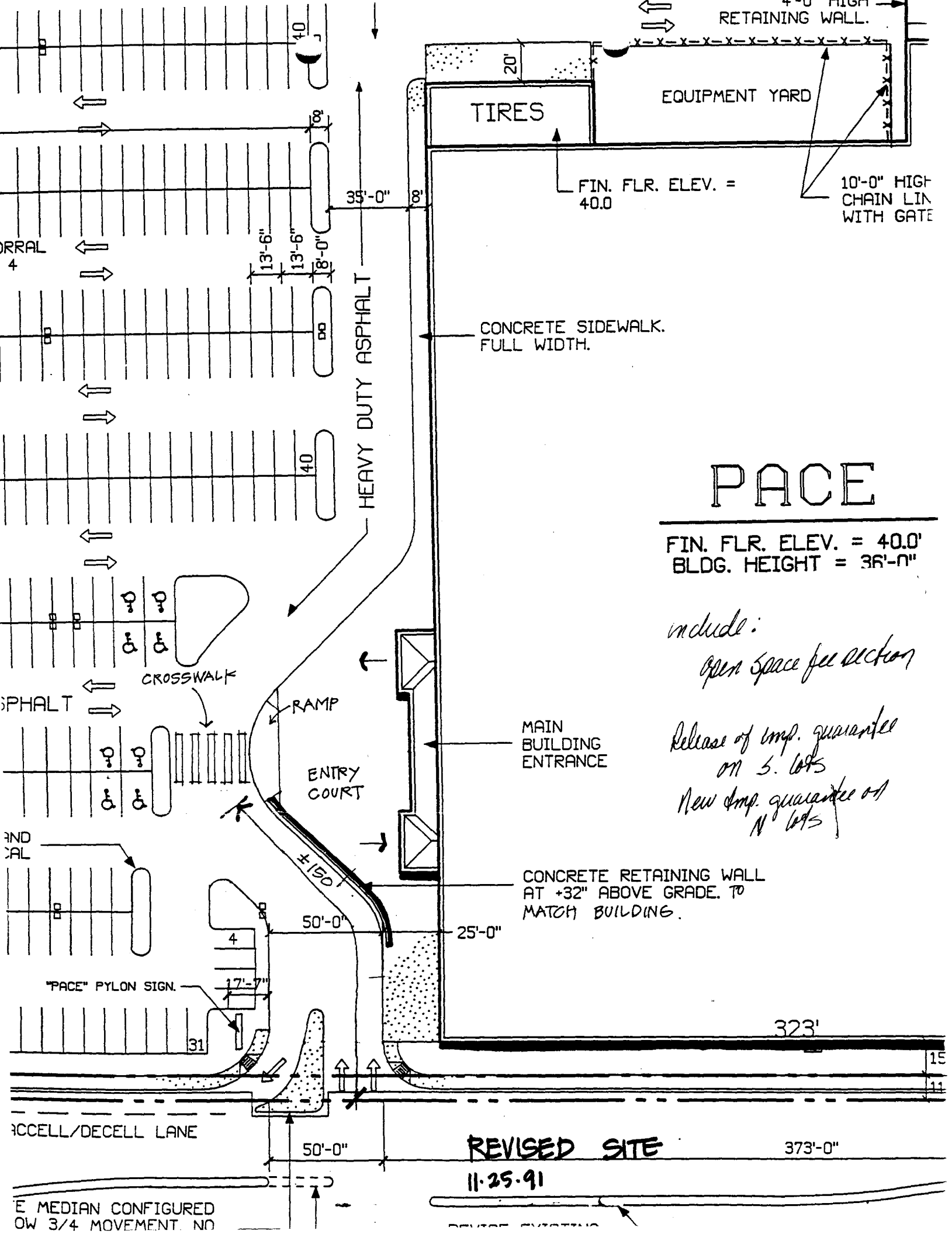
NORTH AVENUE MARKETPLACE
North Avenue & 28 1/2 Road
Grand Junction, Colorado
A Trammell Crow Company Development

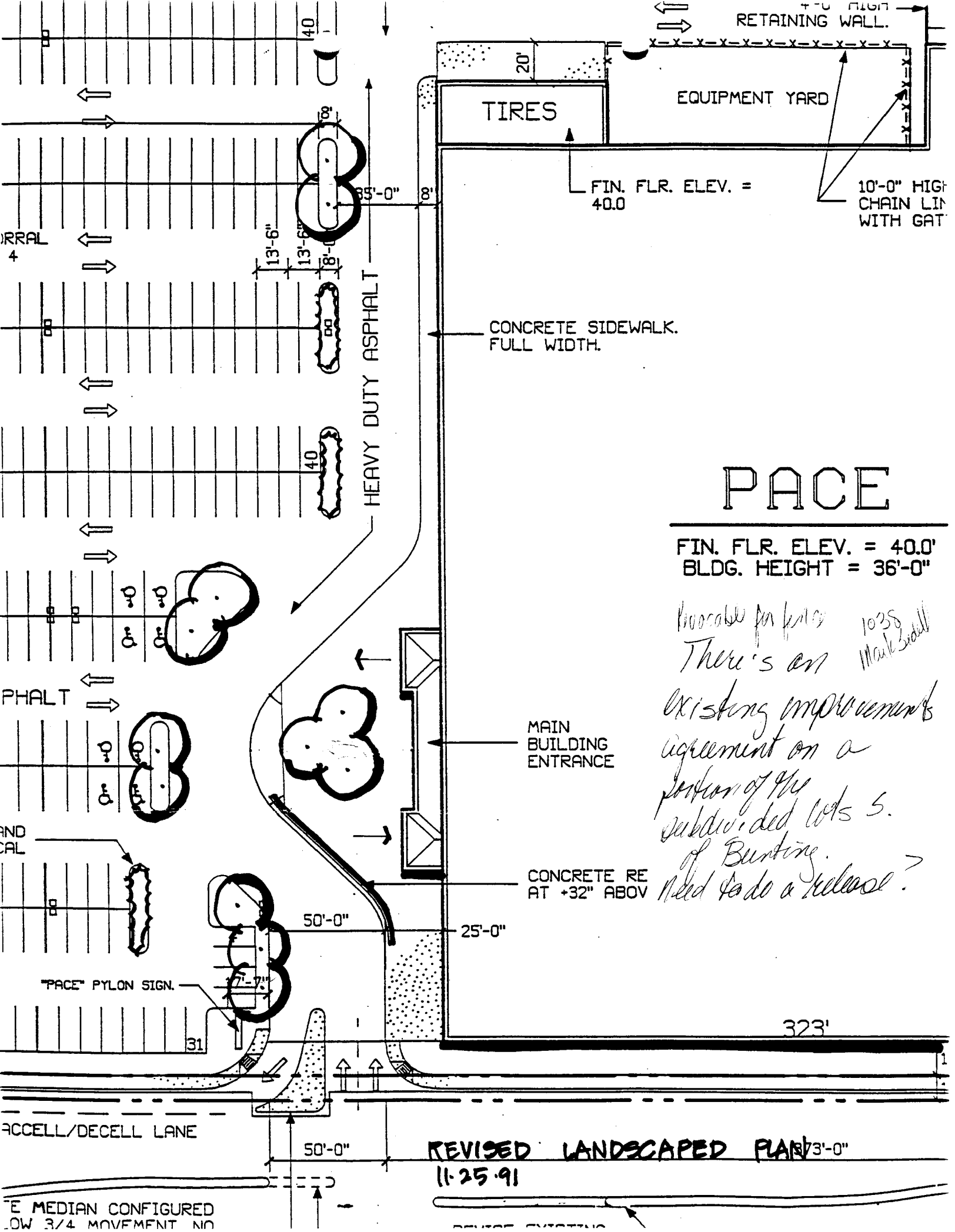
L-1

#70 91



NORTH AVE


RETAINING WALL.
TIRES
EQUIPMENT YARD
FIN. FLR. ELEV. = 40.0
10'-0" HIGH CHAIN LIN WITH GATE
35'-0"
13'-6"
13'-6"
8'-0"
HEAVY DUTY ASPHALT
CONCRETE SIDEWALK. FULL WIDTH.
PACE
FIN. FLR. ELEV. = 40.0'
BLDG. HEIGHT = 36'-0"
include:
open space fee section
Release of imp. guarantee on 5. lots
New imp. guarantee on N lots
CROSSWALK
RAMP
MAIN BUILDING ENTRANCE
ENTRY COURT
±150
CONCRETE RETAINING WALL AT +32" ABOVE GRADE. TO MATCH BUILDING.
50'-0"
25'-0"
"PACE" PYLON SIGN.
17'-7"
323'
ACCELL/DECELL LANE
50'-0"
REVISED SITE
11.25.91
373'-0"


RETAINING WALL.
TIRES
EQUIPMENT YARD
20'
FIN. FLR. ELEV. = 40.0
10'-0" HIGH CHAIN LIN WITH GAT
85'-0"
8'
13'-6"
13'-6"
8'-0"
HEAVY DUTY ASPHALT
CONCRETE SIDEWALK. FULL WIDTH.
PACE
FIN. FLR. ELEV. = 40.0'
BLDG. HEIGHT = 36'-0"
MAIN BUILDING ENTRANCE
CONCRETE RE AT +32" ABOV
50'-0"
25'-0"
"PACE" PYLON SIGN.
323'
ACCELL/DECELL LANE
50'-0"
REVISED LANDSCAPED PLAN
11.25.91
73'-0"

Slack Ellermann Architects PC

November 25, 1991

Mr. Dan E. Wilson
City Attorney
City of Grand Junction
250 North Fifth Street
Grand Junction, CO 81501

RE: PACE MEMBERSHIP WAREHOUSE

Dear Dan:

Thank you again for your help with the site plan approval last week. As you remember, we have one somewhat open issue regarding the location of Pace's entry door. Council stipulated it should be no closer to North Avenue than 150 feet, and we indicated we would take that back to Pace. We have done so. With this letter I am enclosing a partial site plan showing a revised entry which we offer as a possible solution to the problem which we hope will satisfy all parties. Pace is reluctant to move the entry itself given the implications that it will have on its merchandising opportunities, so we have come up with an alternative that moves the conflict point instead, and we think, creates a friendlier entry altogether.

Please reference the plan and I will explain our concept. As you can see we propose to design into the entry drive two elements that will insure that the first auto/pedestrian comfort is 150 feet into the site as desired. The first is a large curve in the drive aisle. This acts to increase the travel distance and slow traffic somewhat. The second is a low wall along the Pace entry side of the drive that directs both the auto traffic around the curve and prevents pedestrians from crossing the drive until they reach the "nose" of the curve where we will place a handicap ramp and indicate a pedestrian crosswalk. We believe this will effectively channel both the auto and the pedestrian traffic such that it is the equivalent to moving the entry some 50 feet to 60 feet north as requested. Please remember also that approximately 90 percent of the parking lot is located north of this crosswalk point so the number of conflicts is low compared to the overall intensity of use. In addition we will also commit to add three trees to the newly created entry courtyard to soften the impact and to give additional visual clues to slow traffic.

The Quorum at DTC • 7935 East Prentice Avenue • Suite 103 • Englewood Colorado 80111 • 303/220 8900 • FAX 220 0708

The other conditions have also been incorporated, and we hope you can take this request to the appropriate parties, obtain approval, and bring this phase of the process to closure. We are also submitting tomorrow our plans to the Building Department in order to stay on our development schedule.

Your help is appreciated. Please call me with any questions.

Very truly yours,

SLACK ELLERMANN ARCHITECTS PC

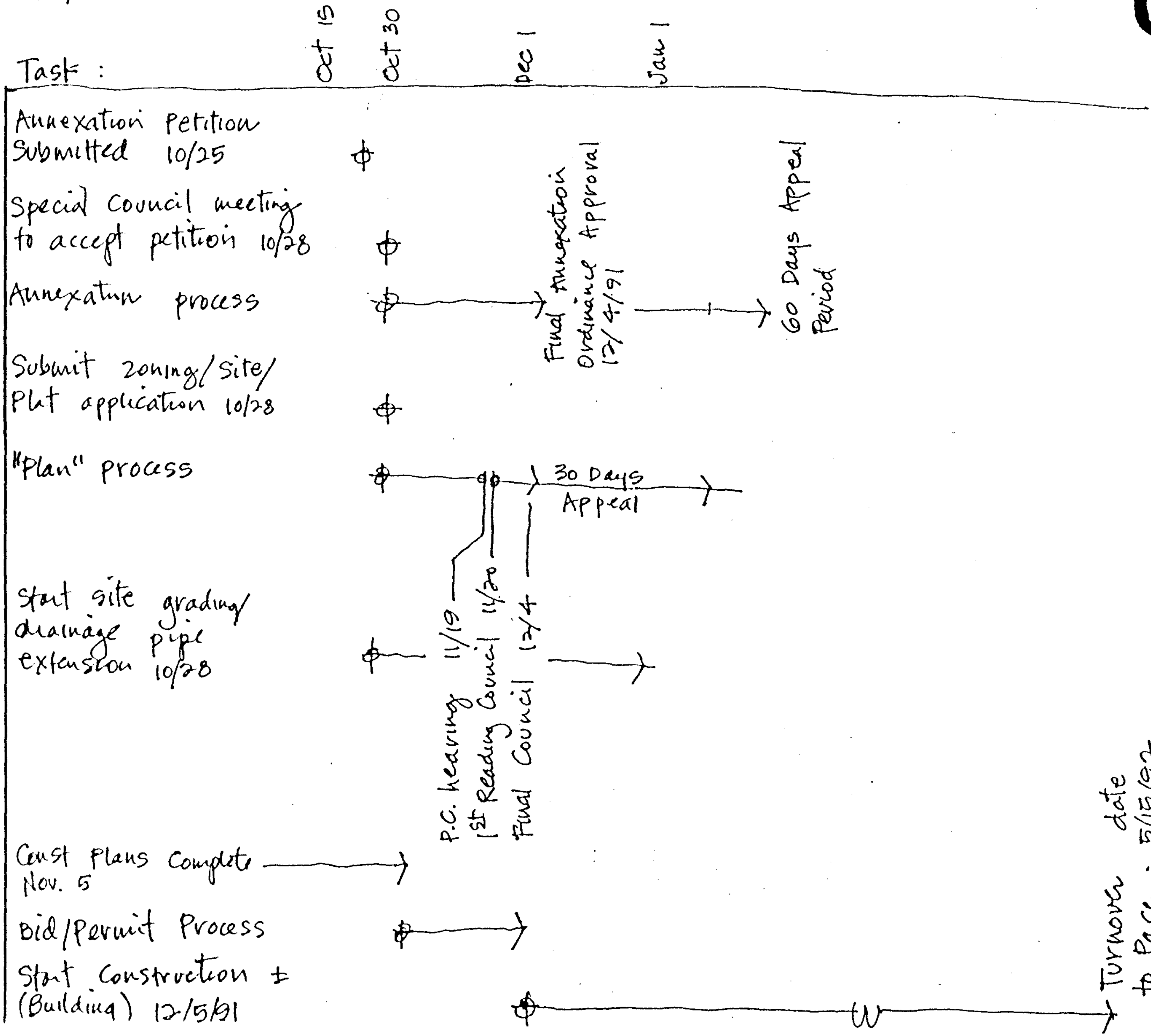
Donald R. Slack
President

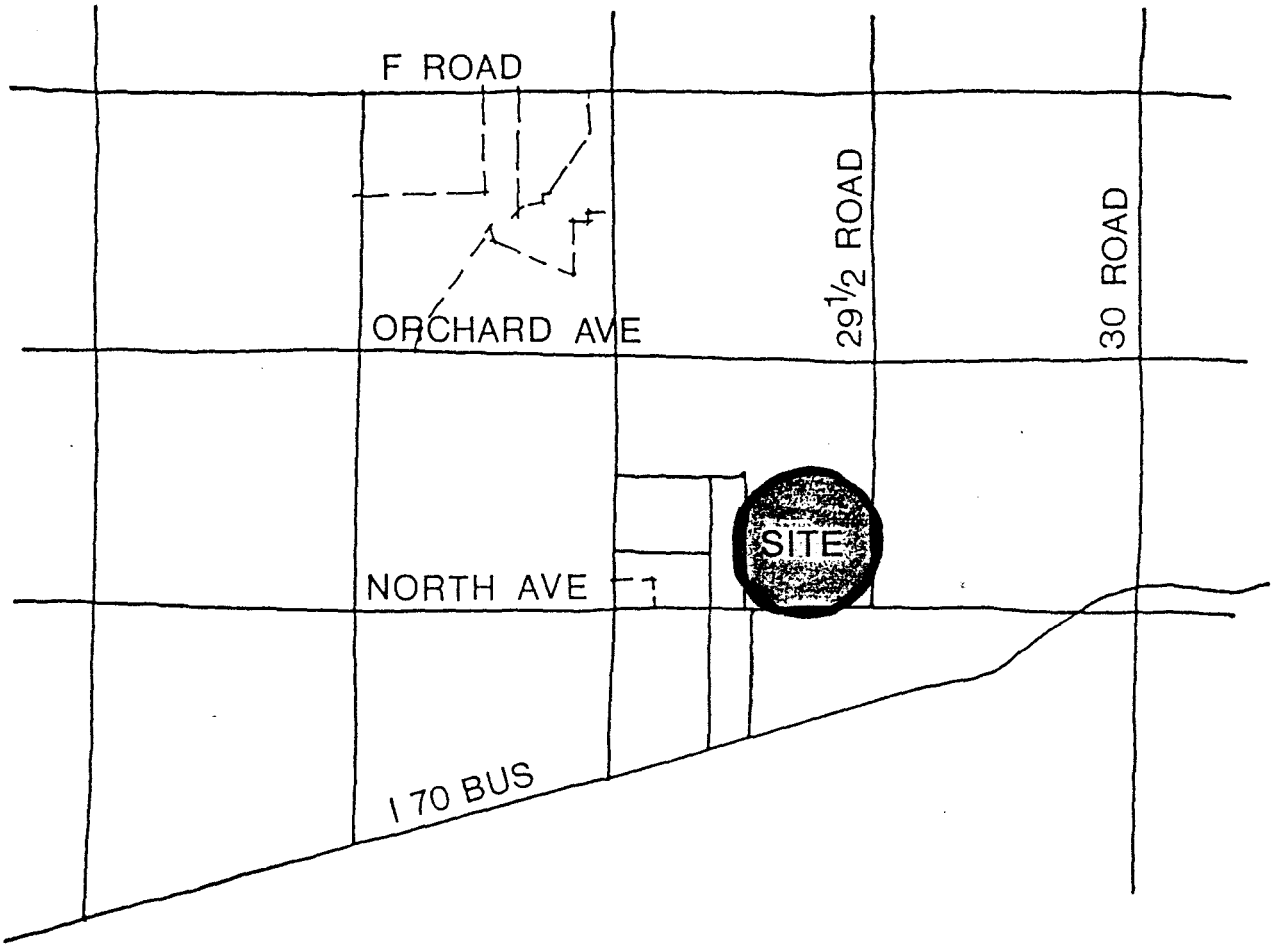
DRS/br

cc: Mark Sidell, Trammell Crow Company

PACE GRAND JUNCTION
10/21/91

DEVELOPMENT SCHEDULE





VICNITY MAP

NORTH AVENUE MARKETPLACE SUBDIVISION

LOCATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 8, T1S, R1E, OF THE UTE MERIDIAN
COUNTY OF MESA, STATE OF COLORADO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned Drychester Retail II, Inc, is the owner of that real property situated in the southwest quarter of Section 8, Township 1 South, Range 1 East of the Ute Meridian, County of Mesa, State of Colorado more particularly described as follows:

Commencing at the Southeast corner of the Southwest Quarter of said Section 8; thence N00°00'00"E, a distance of 40.00 feet; thence N89°52'51"W, a distance of 30.00 feet to the Point of Beginning;

Thence N00°00'00"E along the west right of way of 29 1/2 Road and parallel with the east line of the Southwest Quarter of said Section 8, a distance of 389.99 feet to the Southeast corner of Palace Estates Subdivision, a Plat on file and recorded in the office of the Mesa County Clerk and Recorder No. 1179340; thence continuing N00°00'00"E along the east line of said Palace Estates Subdivision, a distance of 240.90 feet to a point of curve; thence along the arc of a curve to the left having a central angle of 89°56'22", a radius of 20.00 feet; and an arc length of 31.39 feet to a point of tangent; thence N89°56'22"W along the south right of way of Bunting Avenue, a distance of 611.06 feet; thence N00°00'21"E, a distance of 660.48'; thence N89°56'46"W, a distance of 636.04 feet to a point on the west right of way of 29 1/4 Road; thence S00°00'20"W along the said east right of way of 29 1/4 Road, a distance of 660.15 feet; thence S89°54'48"E, a distance of 305.52 feet; thence S00°00'15"W, a distance of 620.32 feet to a point on the north right of way of North Avenue; thence S89°52'51"E along the said north right of way of North Avenue, a distance of 961.60 feet to the Point of Beginning.

Said parcel containing 23.34 acres more or less.

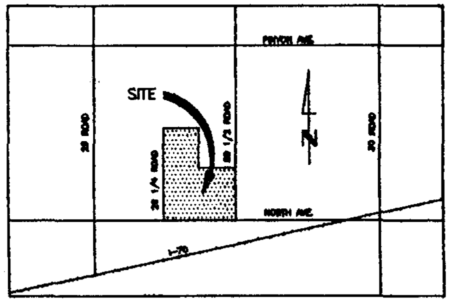
Basis of bearings is the East line of the Southwest Quarter of said Section 8, being N00°00'00"E.

That said owner has caused the said real property to be laid out and surveyed as NORTH AVENUE MARKETPLACE SUBDIVISION, a subdivision of a part of the City of Grand Junction, County of Mesa, State of Colorado.

That said owner does hereby dedicate to the City of Grand Junction those portions of real property which are labeled as utility easements on the accompanying plat, as easements for the installation and maintainance of utilities and drainage facilities, including but not limited to electric lines, gas lines, and telephone lines; together with the right to trim interfering trees and brush; together with the perpetual right of ingress and egress for installation, maintenance and replacement of such lines. Said easements and rights shall be utilized in a reasonable and prudent manner.

IN WITNESS WHEREOF said owner, DRYCHESTER RETAIL II, INC. has caused their name to be hereunto subscribed this day _____ of ____________________ A.D., 1991.

____
William R. Rothacker
Authorized Agent for
Drychester Retail II, Inc.



VICINITY MAP
NO SCALE

STATE OF COLORADO }
COUNTY OF MESA } ss

The foregoing instrument was acknowledged before me this _____ day of __________ A.D. 1991, by DRYCHESTER RETAIL II, INC.

My commission expires ______________.
Witness by hand and official Seal.

CITY OF GRAND JUNCTION APPROVAL

This plat of NORTH AVENUE MARKETPLACE SUBDIVISION, a subdivision of the City of Grand Junction, County of Mesa, and State of Colorado was approved and accepted on this __________ day of ______________ A.D., 1991.

______________________ City Manager

______________________ City Manager

______________________ Chairman, City Planning Commission

______________________ City Planning Director

______________________ City Engineer

CITY OF GRAND JUNCTION APPROVAL

STATE OF COLORADO }
COUNTY OF MESA } ss

I hereby certify that this instrument was filed in my office at __________ o'clock _____ M., this __________ day ____________________ A.D., 1991, and is duly recorded in plat Book No. _____ Page _____ Reception No. _____.

Fee $______________

______________________ Deputy

______________________ Clerk and Recorder

SURVEYOR'S CERTIFICATE

I, Mark Douglas Schear, do hereby certify that the accompanying plat of North Avenue Subdivision, a subdivision of a part of the City of Grand Junction, County of Mesa, has been prepared under my direction and accurately represents a field survey of same. Also said plat conforms to all applicable survey requirements of the Zoning and Development Code of the City of Grand Junction and all applicable state laws and regulations.

____
Mark Douglas Schear
Colorado Reg. No. 18478

__________ Date

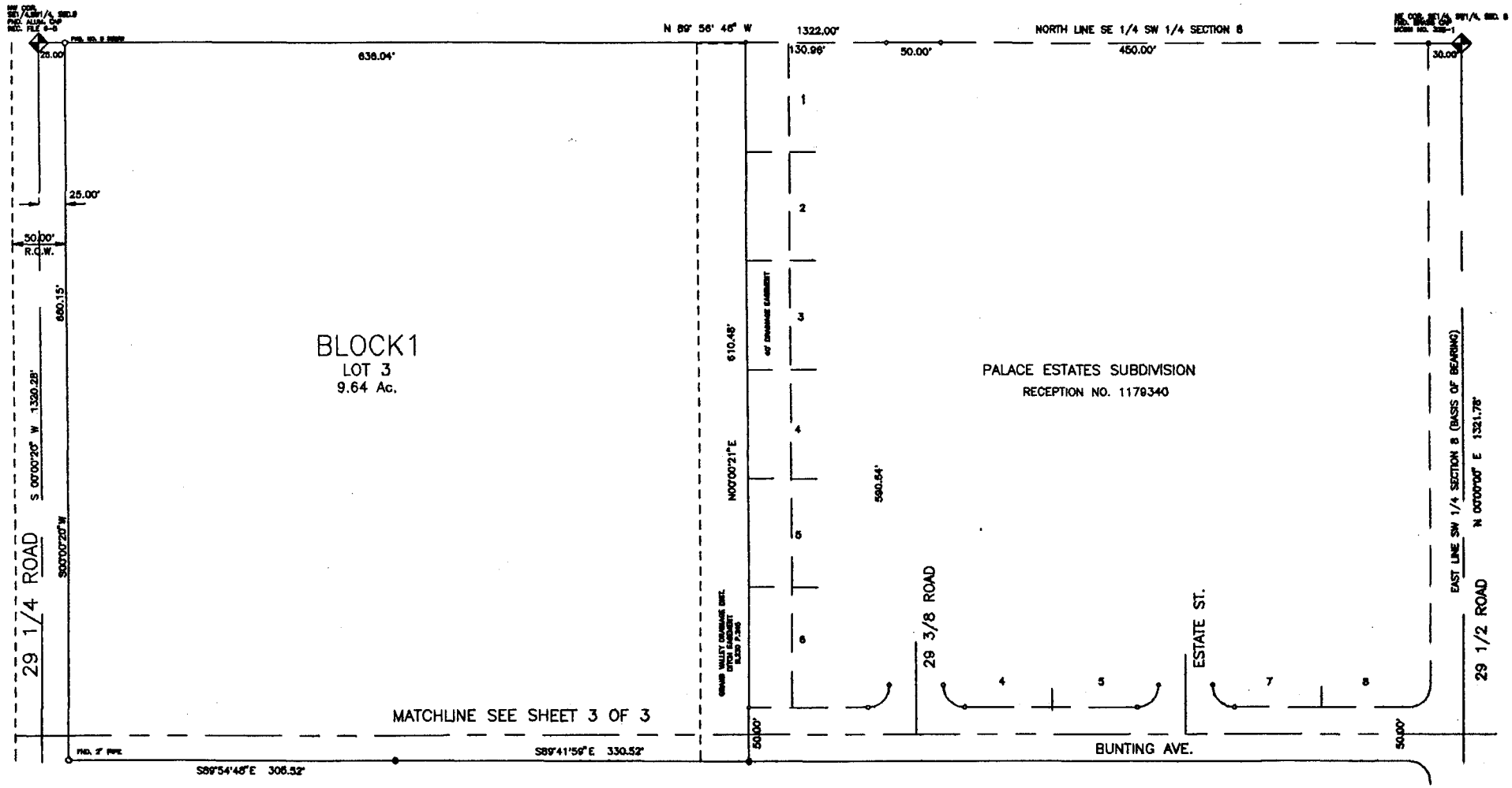
#70 91

S.A. MIRO, INC.
CONSULTING ENGINEERS
4582 S. ULSTER ST. PKWY. SUITE 1405 DENVER, COLORADO 80237 (303) 741-3737

NORTH AVENUE MARKETPLACE SUBDIVISION

LOCATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 8, T1S, R1E, OF THE UTE MERIDIAN
COUNTY OF MESA, STATE OF COLORADO

SHEET 2 OF 3



91

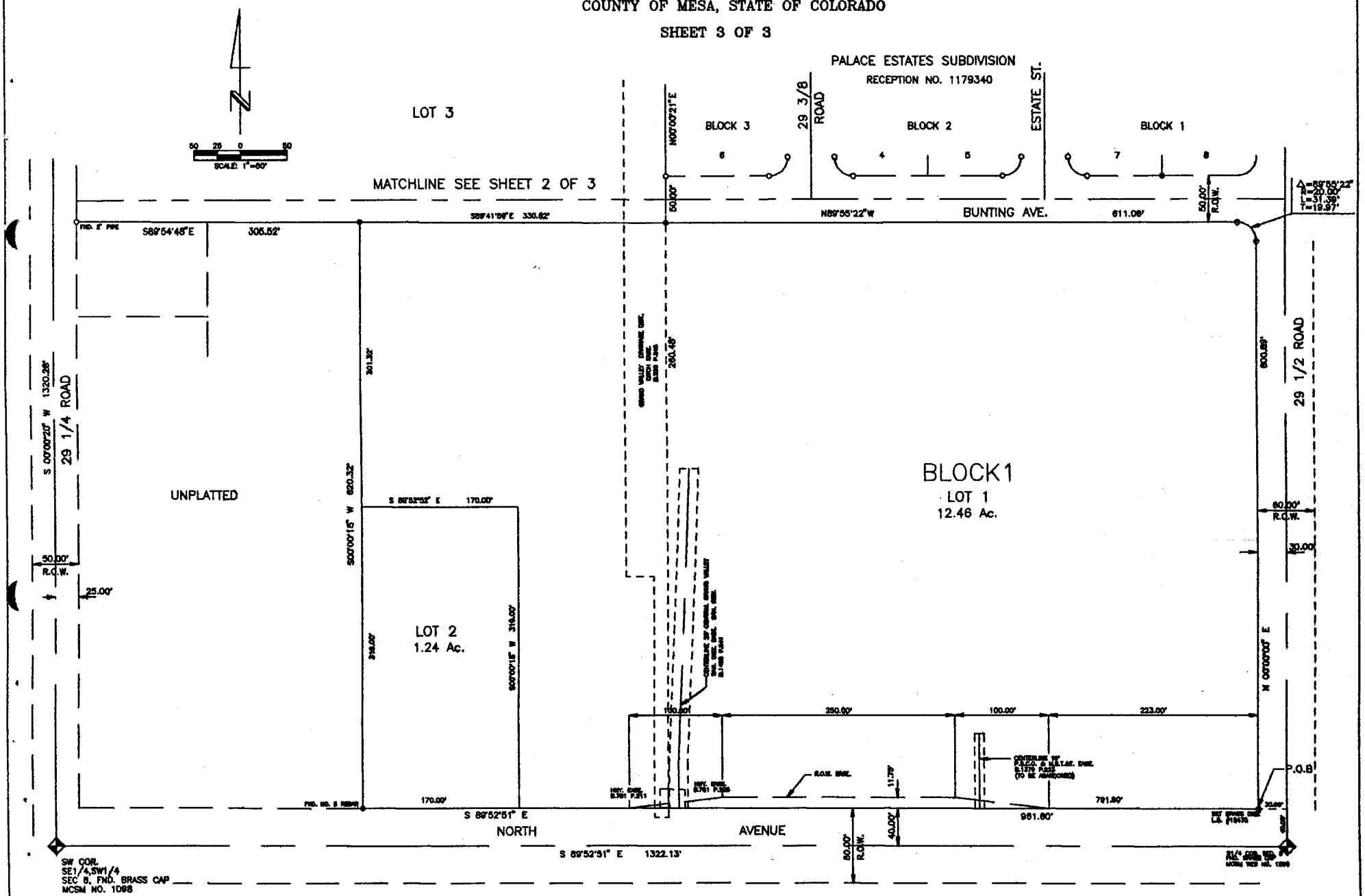
Remove
Office

S.A. MIRO, INC.
CONSULTING ENGINEERS
4582 S. ULSTER ST. PKWY. SUITE 1405 DENVER, COLORADO 80237 (303) 741-3737

NORTH AVENUE MARKETPLACE SUBDIVISION

LOCATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 8, T1S, R1E, OF THE UTE MERIDIAN
COUNTY OF MESA, STATE OF COLORADO

SHEET 3 OF 3



S.A. MIRO, INC.
CONSULTING ENGINEERS
4582 S. ULSTER ST. PKWY. SUITE 1405 DENVER, COLORADO 80237 (303) 741-3737

NORTH AVENUE MARKETPLACE SUBDIVISION

LOCATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 8, T1S, R1E, OF THE UTE MERIDIAN
COUNTY OF MESA, STATE OF COLORADO

KNOW ALL MEN BY THESE PRESENTS:

THAT THE UNDERSIGNED DRYCHESTER RETAIL II, INC. IS THE OWNER OF THAT REAL PROPERTY SITUATED IN THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 1 EAST OF THE UTE MERIDIAN, COUNTY OF MESA, STATE OF COLORADO MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION 8; THENCE N00°00'00"E, A DISTANCE OF 40.00 FEET; THENCE N89°52'51"W, A DISTANCE OF 30.00 FEET TO THE POINT OF BEGINNING;

THENCE N00°00'00"E ALONG THE WEST RIGHT OF WAY OF 29 1/2 ROAD AND PARALLEL WITH THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, A DISTANCE OF 359.99 FEET TO THE SOUTHEAST CORNER OF PALACE ESTATES SUBDIVISION, A PLAT ON FILE AND RECORDED IN THE OFFICE OF THE MESA COUNTY CLERK AND RECORDER NO. 1179340; THENCE CONTINUING N00°00'00"E ALONG THE EAST LINE OF SAID PALACE ESTATES SUBDIVISION, A DISTANCE OF 240.90 FEET TO A POINT OF CURVE; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 89°55'22", A RADIUS OF 20.00 FEET, AND AN ARC LENGTH OF 31.39 FEET TO A POINT OF TANGENT; THENCE N89°55'22"W ALONG THE SOUTH RIGHT OF WAY OF BUNTING AVENUE, A DISTANCE OF 611.06 FEET; THENCE N00°00'21"E, A DISTANCE OF 660.62'; THENCE N89°56'48"W, A DISTANCE OF 638.04 FEET TO A POINT ON THE EAST RIGHT OF WAY OF 29 1/4 ROAD; THENCE S00°00'00"W ALONG THE SAID EAST RIGHT OF WAY OF 29 1/4 ROAD, A DISTANCE OF 660.15 FEET; THENCE S89°54'48"E, A DISTANCE OF 305.52 FEET; THENCE S00°00'15"W, A DISTANCE OF 620.32' FEET TO A POINT ON THE NORTH RIGHT OF WAY OF NORTH AVENUE; THENCE S89°52'51"E ALONG THE SAID NORTH RIGHT OF WAY OF NORTH AVENUE, A DISTANCE OF 961.60 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 23.34 ACRES MORE OR LESS.

BASIS OF BEARINGS IS THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, BEING N00°00'00"E.

THAT SAID OWNER HAS CAUSED THE SAID REAL PROPERTY TO BE LAID OUT AND SURVEYED AS NORTH AVENUE MARKETPLACE SUBDIVISION, A SUBDIVISION OF A PART OF THE CITY OF GRAND JUNCTION, COUNTY OF MESA, STATE OF COLORADO.

THAT SAID OWNER DOES HEREBY DEDICATE AND SET APART ALL OF THE STREETS AND RIGHTS OF WAY AS SHOWN ON THE ACCOMPANYING PLAT TO THE CITY OF GRAND JUNCTION FOR THE USE OF THE PUBLIC FOREVER AND HEREBY DEDICATES TO THE CITY OF GRAND JUNCTION FOR THE PUBLIC THOSE PORTIONS OF REAL PROPERTY WHICH ARE LABELED AS UTILITY EASEMENTS ON THE ACCOMPANYING PLAT, AS PERPETUAL EASEMENTS FOR THE INSTALLATION AND THE MAINTENANCE OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING BUT NOT LIMITED TO ELECTRIC LINES, GAS LINES, AND TELEPHONE LINES; TOGETHER WITH THE RIGHT TO TRIM INTERFERING TREES AND BRUSH; TOGETHER WITH THE PERPETUAL RIGHT OF INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF SUCH LINES, SAID EASEMENTS AND RIGHTS SHALL BE UTILIZED IN A REASONABLE AND PRUDENT MANNER. THAT ALL EXPENSES FOR STREET PAVING OR IMPROVEMENTS SHALL BE FURNISHED BY THE SELLER OR PURCHASER, NOT THE CITY OF GRAND JUNCTION.

IN WITNESS THEREOF SAID OWNER, DRYCHESTER RETAIL II, INC. HAS CAUSED THEIR NAME TO BE HEREUNTO SUBSCRIBED THIS DAY_____OF_____A.D., 1991.

_____
William R. Rothacker
Authorized Agent for
Drychester Retail II, Inc.

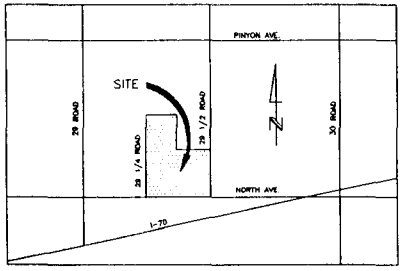
(STATE OF COLORADO)
(COUNTY OF MESA) ss

The foregoing instrument was acknowledged before me this _____ day of _____ A.D. 1991, by WILLIAM R. ROTHACKER, authorized agent for DRYCHESTER RETAIL II, INC.

My commission expires _____
Witness by hand and official Seal.

NOTES:

1. THE BASIS OF BEARINGS IS THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 8, BEING N00°00'00"E.
2. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
3. ○ INDICATES A BRASS DISK SET BY L.S. # 18475.
4. ◆ BRASS CAP FOUND, AS SHOWN.
5. • INDICATES A NO. 5 REBAR OR 2" PIPE FOUND, AS SHOWN.



VICINITY MAP
NO SCALE

CITY OF GRAND JUNCTION APPROVAL

This plat of NORTH AVENUE MARKETPLACE SUBDIVISION, a subdivision of the City of Grand Junction, County of Mesa, and State of Colorado was approved and accepted on this _____ day of _____ A.D., 1991.

_____
City Manager

_____
President, City Council

_____
Chairman, City Planning Commission

_____
City Planning Director

_____
City Engineer

CLERK AND RECORDER'S CERTIFICATE

(STATE OF COLORADO)
(COUNTY OF MESA) ss

I hereby certify that this instrument was filed in my office at _____ o'clock _____ M., this _____ day _____ A.D., 1991, and is duly recorded in plat Book No. _____ Page ___, Reception No. _____.

Fee $_____

_____
Deputy

_____
Clerk and Recorder

SURVEYOR'S CERTIFICATE

I, Mark Douglas Schear, do hereby certify that the accompanying plat of North Avenue Subdivision, a subdivision of a part of the City of Grand Junction, County of Mesa, has been prepared under my direction and accurately represents a field survey of same. Also said plat conforms to all applicable survey requirements of the Zoning and Development Code of the City of Grand Junction and all applicable state laws and regulations.

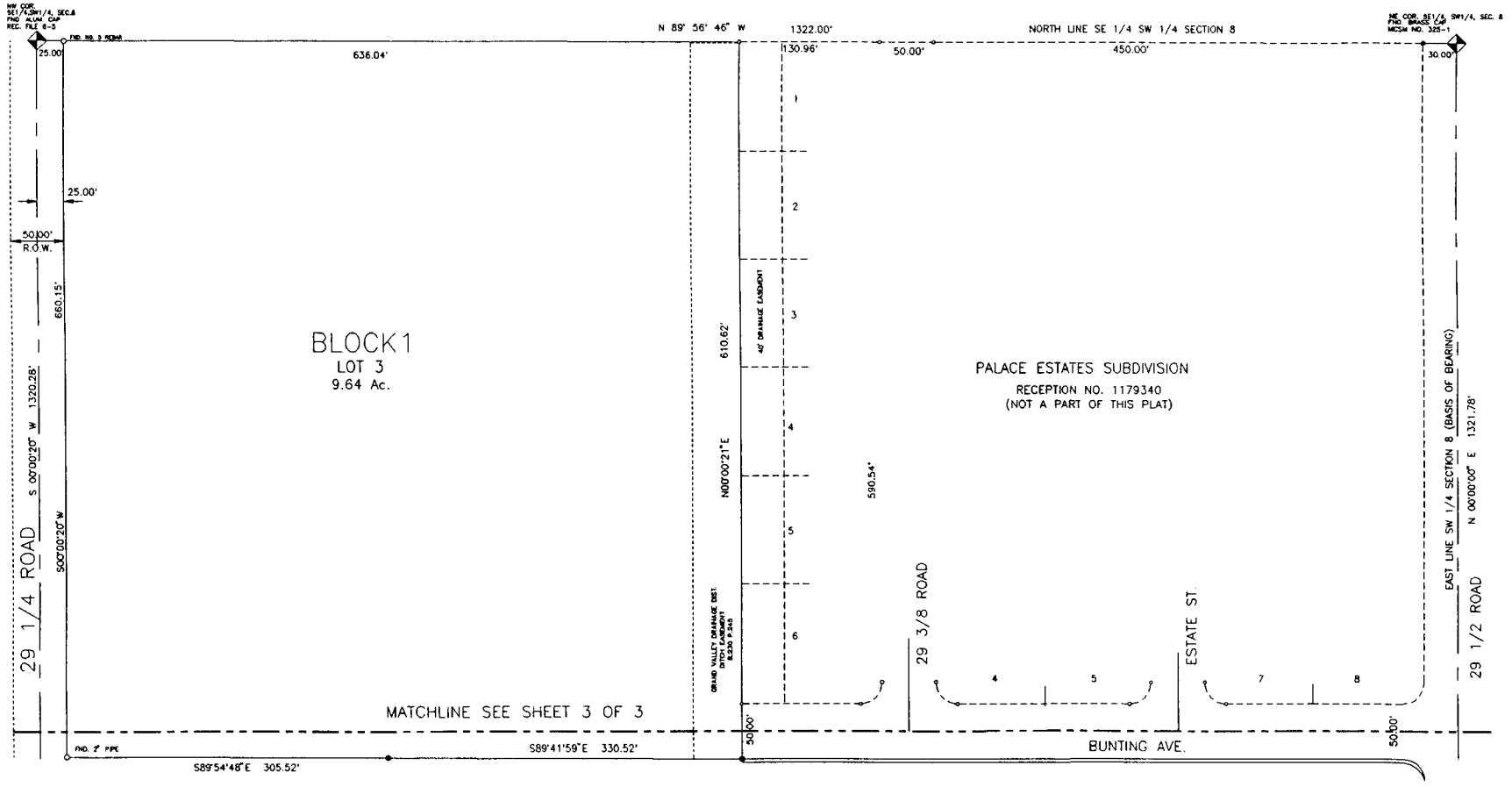
_____ _____
Mark Douglas Schear Date
Colorado Reg. No. 18475

S.A. MIRO, INC.
CONSULTING ENGINEERS
4582 S. ULSTER ST. PKWY. SUITE 1405 DENVER, COLORADO 80237 (303) 741-3737

NORTH AVENUE MARKETPLACE SUBDIVISION

LOCATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 8, T1S, R1E, OF THE UTE MERIDIAN
COUNTY OF MESA, STATE OF COLORADO

SHEET 2 OF 3



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NORTH AVENUE MARKETPLACE SUBDIVISION

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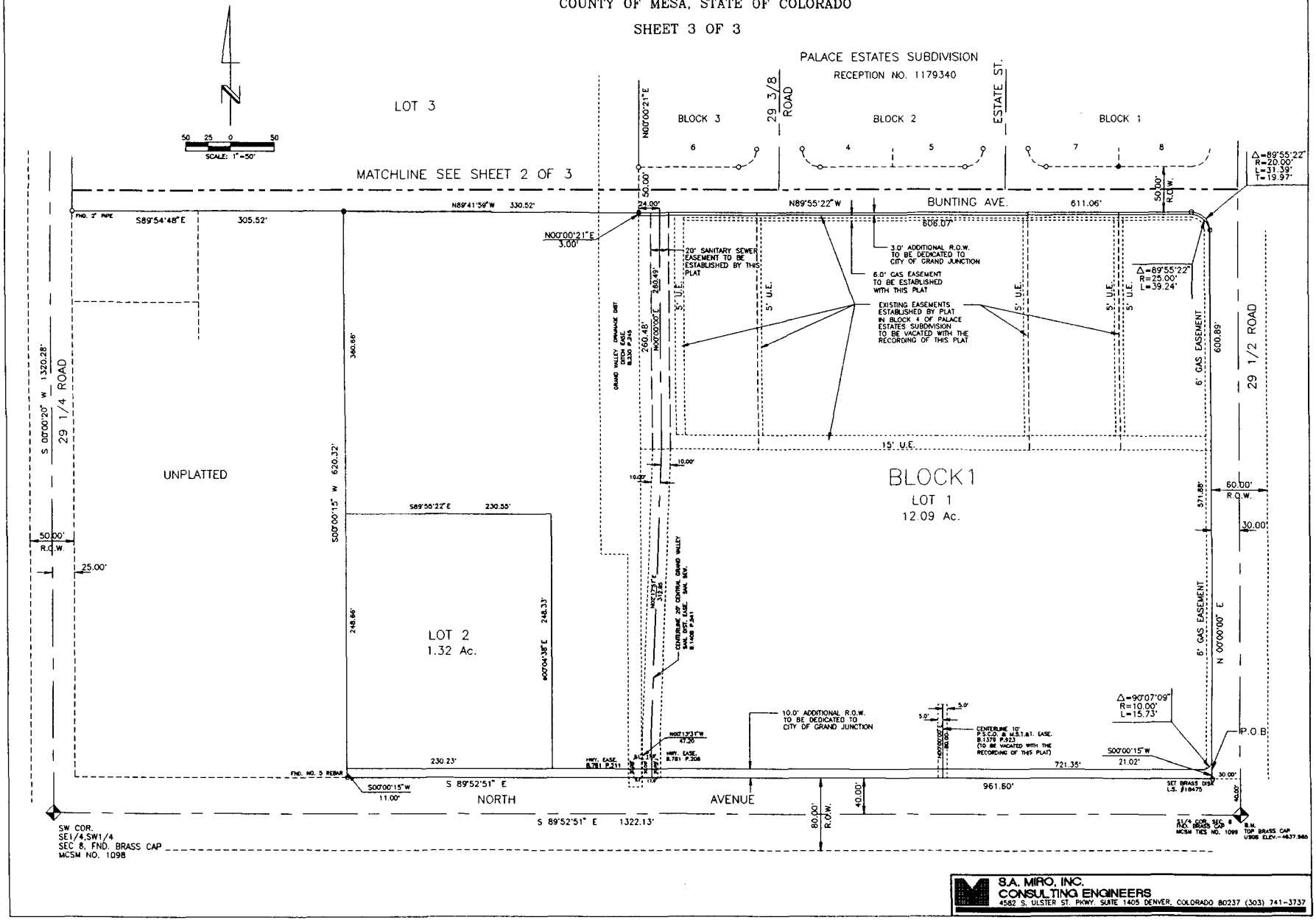
COUNTY OF MESA, STATE OF COLORADO

SHEET 3 OF 3



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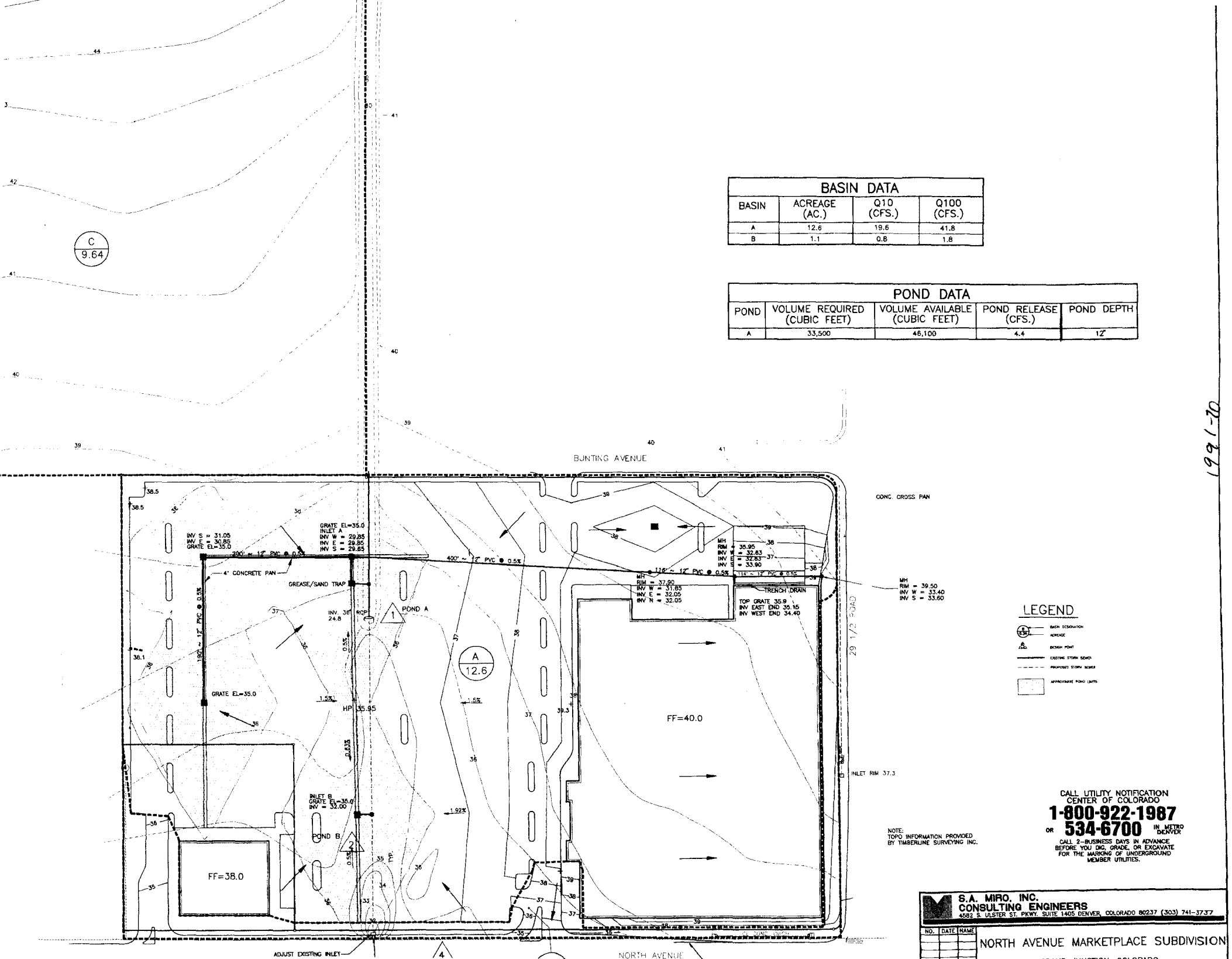
BASIN DATA			
BASIN	ACREAGE (AC.)	Q10 (CFS.)	Q100 (CFS.)
A	12.6	19.6	41.8
B	1.1	0.8	1.8

POND DATA				
POND	VOLUME REQUIRED (CUBIC FEET)	VOLUME AVAILABLE (CUBIC FEET)	POND RELEASE (CFS.)	POND DEPTH
A	33,500	46,100	4.4	12'



NOTE:
TOPO INFORMATION PROVIDED BY TIMBERLINE SURVEYING INC.

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR **534-6700** IN METRO DENVER
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

S.A. MIRO, INC.
CONSULTING ENGINEERS
4582 S. ULSTER ST. PKWY. SUITE 1405 DENVER, COLORADO 80237 (303) 741-3737

NO.	DATE	NAME

NORTH AVENUE MARKETPLACE SUBDIVISION

1991-10