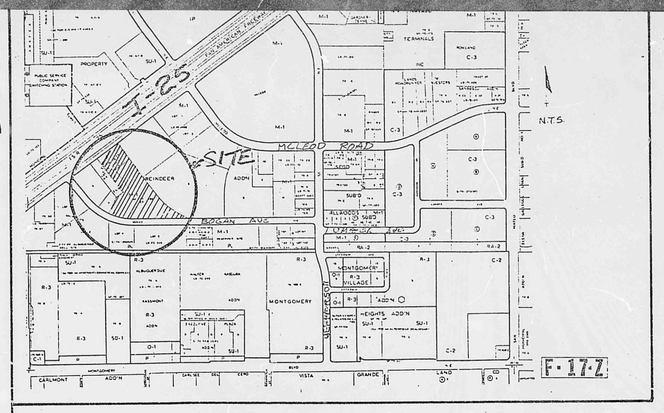
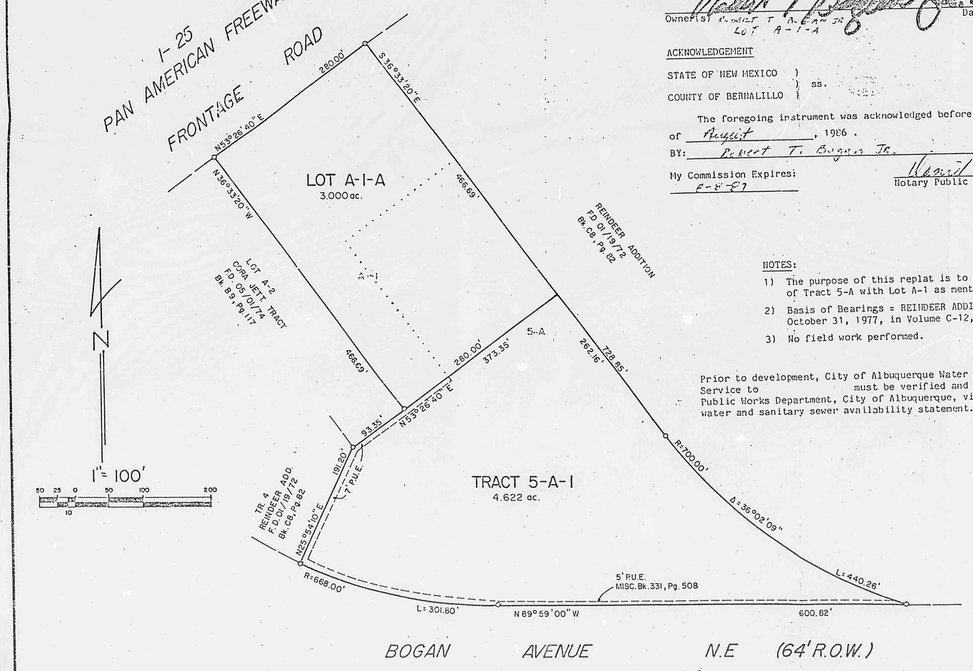
HYDROLOGY

F17/D57
FOUR PLANS

F17/D57
4 Plans

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT




Daniel E. Boyle Jr. 27 August 1986
Owner(s) Daniel E. Boyle Jr. Date
Tr. 5-A-1

ACKNOWLEDGEMENT

STATE OF NEW MEXICO )
) ss.
COUNTY OF BERNALILLO )

The foregoing instrument was acknowledged before me this 27th day of August, 1986.
BY: Daniel E. Boyle Jr.
My Commission Expires: 8-8-87
Daniel M. Graney
Notary Public

Owner(s) W.D. Bakery
Tr. 5-A-1
Bakery of Albuquerque, Inc.

ACKNOWLEDGEMENT

STATE OF NEW MEXICO )
) ss.
COUNTY OF BERNALILLO )

The foregoing instrument was acknowledged before me this 28th day of August, 1986.
BY: Hiram Waterside
My Commission Expires: 12/7/87

Owner(s) Robert T. Bogan Jr. 28 AUG 86
LOT A-1-A Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO )
) ss.
COUNTY OF BERNALILLO )

The foregoing instrument was acknowledged before me this 28th day of August, 1986.
BY: Robert T. Bogan Jr.
My Commission Expires: 8-8-87
Daniel M. Graney
Notary Public

NOTES:

1) The purpose of this replat is to combine a portion of Tract 5-A with Lot A-1 as mentioned.
2) Basis of Bearings = REINDEER ADDITION, filed October 31, 1977, in Volume C-12, folio 143.
3) No field work performed.

Prior to development, City of Albuquerque Water and Sanitary Sewer Service to must be verified and coordinated with the Public Works Department, City of Albuquerque, via a request for a water and sanitary sewer availability statement.

# LOT A-1-A, CORA JETT TRACT & TRACT 5-A-1, REINDEER ADD.

## BEING A REPLAT OF LOT A-1 & TR. 5-A ALBUQUERQUE, NEW MEXICO AUGUST, 1986

LEGAL DESCRIPTION

The undersigned owner(s) of the land hereon shown do hereby consent to the Replat of the land hereon shown:

Lot A-1 of the Summary Plat of Lot A, of CORA JETT TRACT, Albuquerque, New Mexico, now being Lots A-1 and A-2 of said tract, as the same is shown and designated on said Summary Plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico on May 1, 1974, in Volume B9, folio 117, TOGETHER WITH Tract 5-A of REINDEER ADDITION to the City of Albuquerque, New Mexico, as the same is shown and designated on the replat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico on October 31, 1977, in Volume C-12, folio 143.

and is with the free consent and in accordance with the desires of the undersigned owner(s) and proprietor(s) thereof.

Owner(s) Roy A. Downey 8/1/86
Tr. 5-A-1 Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO )
) ss.
COUNTY OF BERNALILLO )

The foregoing instrument was acknowledged before me this 1st day of August, 1986.
BY: Roy A. Downey
My Commission Expires: 5-7-87
Daniel M. Graney
Notary Public

CITY/COUNTY APPROVALS:

| | |
|---|---|
| Property Management | Date 8-29-86 |
| City Surveyor | Date 08/29/86 |
| City Water Resources | Date 8/29/86 |
| City Engineer | Date 8/29/86 |
| A.M.R.P.C.A. NA | Date |
| Traffic Engineer NA | Date |
| Parks and Recreation | Date |
| City Planning Director S.P.No. SP-86-324 | Date 9-4-86 |

SURVEYOR'S CERTIFICATION

I, Franklin E. Wilson, a registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision, meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, and that it is true and correct to the best of my knowledge and belief.

Franklin E. Wilson, N.M.L.S. No. 6446 Date

SOUTHWEST SURVEYING COMPANY, INC. 333 Lomas N.E., Albuquerque, N.M. 87102
(505) 247-4444

OFFICIAL SEAL
DANIEL M. GRANEY
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires 8-8-87

ACKNOWLEDGEMENT

STATE OF NEW MEXICO )
COUNTY OF ) ss.

The foregoing instrument was acknowledged before me this 27th day of August, 1986, by Franklin E. Wilson.
My Commission Expires: 8/8/87
Daniel M. Graney
Notary Public

NPR 86-661

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: Goodman's, Inc. ZONE ATLAS/DRNG. FILE #: F17 / D57

LEGAL DESCRIPTION: Lot A-1-A (Easterly portion) Cora Jett Tract, Tract 5-A-1, Reindeer Addition

CITY ADDRESS: I-25 Frontage Road, North Bogan Street, Albuquerque, New Mexico

ENGINEERING FIRM: Easterling & Associates, Inc. CONTACT: Douglas W. Copeland

ADDRESS: 5643 Paradise Blvd., NW, Alb., NM 87114 PHONE: 898-8021

OWNER: Goodman's inc. CONTACT:

ADDRESS: 2701 PanAmerican Fwy NE PHONE: 345-1621

ARCHITECT: G.W. Walker & Company CONTACT: Robert Becker

ADDRESS: 150 Louisiana Blvd., NE, Alb., NM 87108 PHONE: 268-4551

SURVEYOR: Southwest Surveying Company, Inc. CONTACT: Franklin Wilson

ADDRESS: 333 Lomas Blvd., NE, Alb., NM 87102 PHONE: 247-4444

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

APR 02 1987 HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES
___ NO
X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____
EPC NO. _____
PROJ. NO. _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT
___ DRAINAGE PLAN
___ CONCEPTUAL GRADING & DRAINAGE PLAN
___ GRADING PLAN
___ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
X BUILDING PERMIT APPROVAL
___ FOUNDATION PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
___ OTHER _____ (SPECIFY)

Re:
DATE SUBMITTED: 3/31/87
BY: Douglas W. Copeland

FILE 705201

## CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: F17 DATE: 1-14-87
PLANNING DIVISION NOS: EPC: _____ DRB: _____
SUBJECT: Goodman Inc Design Interiors
STREET ADDRESS (IF KNOWN):
SUBDIVISION NAME: at frontage Rd and Bogan

APPROVAL REQUESTED:

___ PRELIMINARY PLAT
___ SITE DEVELOPMENT PLAN
___ OTHER
___ FINAL PLAT
X BUILDING PERMIT
___ ROUGH GRADING

| WHO | REPRESENTING |
|---|---|
| ATTENDANCE: Doug Copeland | |
| Carlos A Montoya | |

FINDINGS:

(1) Drainage plan per DPM
(2) Need to coordinate work on state property with Highway Dept
(3) Culvert under access road need to be sized for 100 year storm
(4) Need to address drainage in frontage rd swale to determine depth of flow (elevation of 100 year storm). Finish floor needs to be 1 foot above water surface
(5) Free discharge appears approximate - engineer needs to address.
(A) Site at bottom of watershed
(B) int. of site
(C) other properties are free discharge
(D) minimum impact on downstream drainage facilities

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Carlos Montoya SIGNED: Douglas W. Copeland
TITLE: TITLE:
DATE: 1-14-87 DATE: 1/14/87

**NOTE** PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

## NOTES

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1985 EDITION," EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1985 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6" X 6", 10 GA. W.W.M.).
10. **OWNERSHIP OF DOCUMENTS:** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF **EASTERLING & ASSOCIATES, INC.** AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WIRTTEN AUTHORIZATION OF **EASTERLING & ASSOCIATES, INC.**
11. **CONSTRUCTION SAFETY:** THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. **EROSION CONTROL:** THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFORE, BE A PROBLEM.
13. **CONSTRUCTION PHASE:** THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

## DRAINAGE REPORT

**EXISTING:**

THE SITE IS UNDEVELOPED WITH 200 FEET OF FRONTAGE ONTO THE EAST FRONTAGE ROAD OF I-25 BETWEEN BOGAN STREET AND MCLEOD ROAD. A SHALLOW DRAINAGE CHANNEL EXISTS IN THE FRONTAGE ROAD RIGHT-OF-WAY. FLOOD HAZARD MAPS SHOW THAT RUNOFF FROM THE 100-YEAR EVENT ARE CONTAINED WITHIN THE CHANNEL BANKS. OFF-SITE FLOWS CONTRIBUTING TO THE FLOW FOR THE CHANNEL IN FRONT OF THE PROPERTY ARE CALCULATED TO BE $Q_{100}$ = 62.8 CFS. OFF-SITE OVERLAND FLOWS FROM ADJACENT PROPERTY IMPACT THE SITE AS SHOWN ON THE PLAN. THE PROPERTY SLOPES GENTLY DOWN TOWARD THE FRONTAGE ROAD.

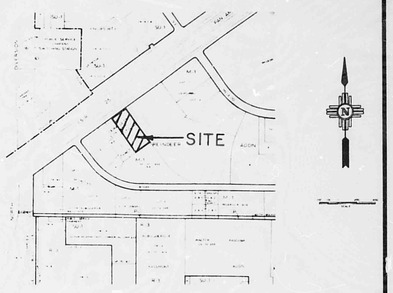
**PROPOSED:**

A SINGLE DRIVEWAY WILL PROVIDE ACCESS OFF OF THE FRONTAGE ROAD. TWO 30" CMP, WITH END SECTIONS AT INLET AND OUTLET ENDS, ARE REQUIRED FOR PASSING CHANNEL FLOWS. REFERENCE FHWA HEC 5 "HEADWATER DEPTH FOR CORRUGATED STEEL PIPE CULVERTS WITH INLET CONTROL". HW = 3.5 FEET; d = 2.5 FEET; ENTRANCE TYPE = STEEL END SECTION; LOSS COEFFICIENT Ke = 0.50; Q = 33 CFS PER PIPE, FOR 2 PIPES Q = 66 CFS.

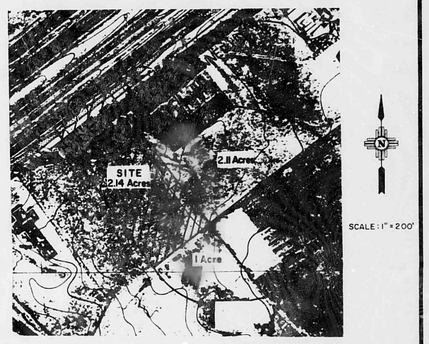
THE SITE WILL BE GRADED SO THAT A PORTION OF THE SITE WILL GRAVITY FLOW INTO THE CHANNEL. THE BACK HALF OF THE PROPERTY WILL FLOW INTO A COMBINATION TRUCK WELL/DETENTION POND. THE POND IS IN THE REAR OF THE BUILDING WITHIN THE 6' HIGH BLOCK WALL SECURITY FENCE. THE POND WILL BE EMPTIED WITH A SUMP PUMP SIZED TO DRAIN THE 100-YEAR RUNOFF VOLUME WITHIN 24 HOURS. THE SUMP PUMP WILL OPERATE AUTOMATICALLY AND DISCHARGE INTO THE PARKING LOT AND RUN TO THE CHANNEL AT THE FRONTAGE ROAD. EMERGENCY SPILLWAYS ARE PROVIDED AT TWO LOCATIONS SHOULD THE SUMP PUMP FAIL AND A SECOND RAINFALL EVENT OCCUR. FREE DISCHARGE IS WARRANTED FOR DEVELOPED RUNOFF FROM AREA 1 AND 3 IN SO MUCH AS $Q_{100}$ DEVELOPED FOR AREA 1 AND 3 EQUALS $Q_{100}$ UNDEVELOPED FOR THE ENTIRE SITE. ADDITIONALLY, THE SITE IS LOW IN THE WATERSHED AND WOULD PEAK BEFORE THE UPSTREAM FLOWS REACH THE SITE. THE SITE IS AN INFILL SITE. THE VOLUNTARY PONDING PROVIDED IN THE REAR OF THE SITE SHOULD OFFSET ANY NEGATIVE IMPACTS ASSOCIATED WITH DEVELOPING THE SITE AS PLANNED.

CMU RETAINING WALLS AND REINFORCED CONCRETE CUT-OFF WALLS ARE USED AT GRADE SEPARATIONS ALONG THE PROPERTY LINE.

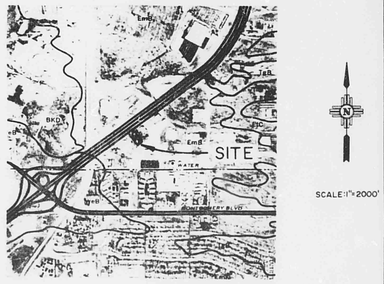
## VICINITY MAP ZONE ATLAS MAP NO. F-17-Z




## FLOOD HAZARD MAP & OFFSITE FLOWS FROM A.M.D.S. MAP NO. F-17




## SOILS MAP FROM SOIL SURVEY, BERN. CO. U.S.D.A., S.C.S. NO 21




## LEGAL DESCRIPTION

A certain tract of land comprising the Easterly portion of Lot A-1-A of the plat of Lot A-1-A, CORA JETT TRACT and Tract 5-A-1, REINDEER ADDITION, being a replat of Lot A-1 and Tract 5-A, Albuquerque, New Mexico, as the same is shown and designated on said plat thereof filed in the office of the County Clerk of Bernalillo County, New Mexico on September 4, 1986, and being more particularly described as follows:

BEGINNING at the Northeasterly corner, a point on the South right-of-way of I-25 frontage road; thence leaving said right-of-way S 36° 33' 20" E, 466.69 feet to the Southeasterly corner; thence, S 53° 26' 40" W, 200.00 feet to the Southwesterly corner; thence, N 36° 33' 20" W, 466.69 feet to the Northwesterly corner, a point on said frontage right-of-way; thence, N 53° 26' 40" E, 200.00 feet along said right-of-way to the point of beginning, and containing 93,338.00 square feet, more or less.

## HYDROLOGY

| | AREA | D A AC | H FT | S FT/FT | L FT | $T_c$ MIN | SOIL TYPE | % IMP | C N | C | $P_2$ IN | $P_{10}$ IN | $P_{100}$ IN | $i_2$ IN/HR | $i_{10}$ IN/HR | $i_{100}$ IN/HR | VOL 2 C.F. | VOL 10 C.F. | VOL 100 C.F. | $Q_2$ C.F.S. | $Q_{10}$ C.F.S. | $Q_{100}$ C.F.S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEVELOPED | 1 | 0.478 | 2.0 | .0059 | 340' | <10 | B | 92 | 98 | 0.93 | 0.98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | 1,284 | 1,718 | 3,418 | 0.95 | 1.15 | 2.13 |
| DEVELOPED | 2 | 1.218 | 9.0 | .0265 | 340 | <10 | B | 92 | 98 | 0.94 | 0.98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | 3,272 | 4,377 | 8,710 | 2.44 | 2.96 | 5.48 |
| DEVELOPED | 3 | 0.45 | 6.0 | .0111 | 540 | <10 | B | 92 | 98 | 0.95 | 0.98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | 1,209 | 1,617 | 3,218 | 0.91 | 1.11 | 2.05 |
| EXISTING | 1,2,3 | 2.148 | 8.0 | .0170 | 470 | <10 | B | 0 | 70 | 0.40 | 0.98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | Ø | 233 | 2,495 | 1.83 | 2.23 | 4.12 |
| OFFSITE | FROM N.E. | 2.11 | 8 | .0160 | 500 | <10 | B | Ø | 70 | 0.40 | .98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | Ø | 229 | 2,450 | 1.80 | 2.19 | 4.04 |
| OFFSITE | FROM S.E. | 1.00 | 2 | .010 | 200 | <10 | B | Ø | 70 | 0.40 | .98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | Ø | 109 | 1,162 | .85 | 1.04 | 1.92 |
| OFFSITE | CHAN FLOW | 15.0 | 20 | .0114 | 1,700 | 13.4 | B | 85 | 92 | 0.87 | .98 | 1.19 | 2.20 | 2.13 | 2.59 | 4.79 | | | | 28.7 | 40.5 | 62.6 |

## SOILS INFORMATION FROM SOIL SURVEY, BERNALILLO CO. U.S.D.A., S.C.S.

| SOIL SERIES AND MAP SYMBOLS | DEGREE AND KIND OF LIMITATIONS FOR: SEPTIC TANK ABSORPTION FIELDS | SEWAGE LAGOONS | SHALLOW EXCAVATIONS | DWELLINGS WITHOUT BASEMENTS | SANITARY LANDFILL (TRENCH TYPE) | LOCAL ROAD AND STREETS | SUITABILITY AS SOURCE OF: ROAD FILL | SAND | GRAVEL | TOPSOIL | SOIL FEATURES AFFECTING: POND RESERVOIR AREAS | DIKES, LEVEES, AND OTHER EMBANKMENTS | HYDROLOGIC SOIL GROUP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Embudo: EmB, EsC. For Tijeras part of EsC, see Tijeras series. | Slight[1] | Severe: seepage. | Moderate: small stones. | Slight[1] | Severe: seepage. | Slight | Good | Poor: excess fines. | Poor: excess fines. | Poor: small stones. | Seepage | Piping; compressible. | B |

**EmB—Embudo gravelly fine sandy loam, 0 to 5 percent slopes.** This level to gently sloping soil is on the East Mesa. It has the profile described as representative of the series. Included in mapping are areas around Central Avenue and Tramway Road in Albuquerque where the surface layer is thick and slightly darker than is typical and the substratum is finer and cobbly. Also included are areas of Tijeras, Millett, and Tesuque soils. Runoff is medium, and the hazard of water erosion is moderate.

This soil is used for watershed, wildlife habitat, community development, and range. It is subject to periodic flooding. Control of moisture is needed for proper compaction. Dryland capability subclass VIIe; native plant community 4.

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| | | | |

# GOODMAN'S INC. DESIGN INTERIORS

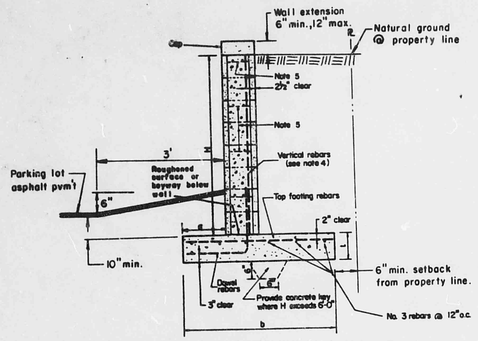
GRADING & DRAINAGE PLAN

REV. 3/31/87 DWC

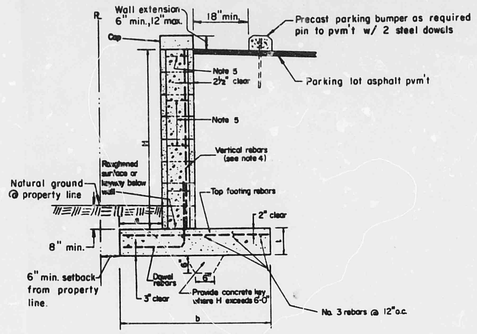
DOUGLAS W. COPELAND NEW MEXICO REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

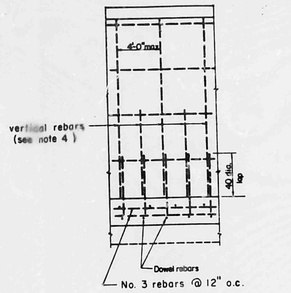
| Designed: DWC | Drawn: BRG | Checked: DWC | Sheet 1 of 3 |
|---|---|---|---|
| Job No: 705201 | Date: 2/11/87 | | |




A/3 TYPICAL SECTION

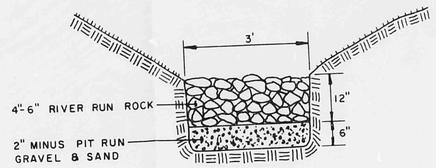



B/3 TYPICAL SECTION

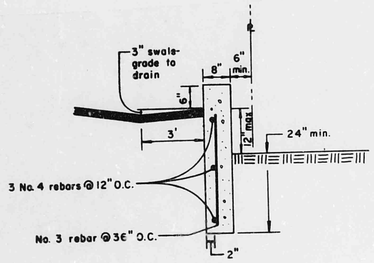



REINFORCEMENT DETAIL

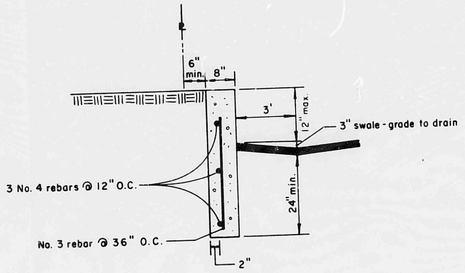
C/3 DETAIL




G/3 TYPICAL SECTION



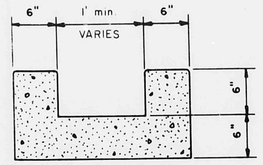

D/3 TYPICAL SECTION




E/3 TYPICAL SECTION

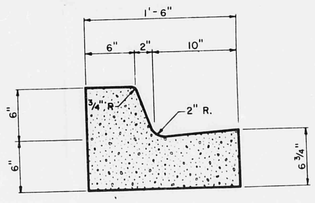
| Block width | H | a | b | t | Dowel and vertical reinforcement | Top footing reinforcement |
|---|---|---|---|---|---|---|
| 8" | 3'4" | 12" | 2'8" | 9" | No. 3@32" oc | No. 3@27" oc |
| | 4'0" | 12" | 3'0" | 9" | No. 4@32" oc | No. 3@27" oc |
| | 4'8" | 12" | 3'3" | 10" | No. 5@32" oc | No. 3@27" oc |
| | 5'4" | 14" | 3'8" | 10" | No. 4@16" oc | No. 4@30" oc |
| | 6'0" | 15" | 4'2" | 12" | No. 6@24" oc | No. 4@25" oc |
| 12" | 3'4" | 12" | 2'8" | 9" | No. 3@32" oc | No. 3@27" oc |
| | 4'0" | 12" | 3'0" | 9" | No. 3@32" oc | No. 3@27" oc |
| | 4'8" | 12" | 3'3" | 10" | No. 4@32" oc | No. 3@27" oc |
| | 5'4" | 14" | 3'8" | 10" | No. 4@24" oc | No. 3@25" oc |
| | 6'0" | 15" | 4'2" | 12" | No. 4@16" oc | No. 4@30" oc |

REINFORCING REQUIREMENTS



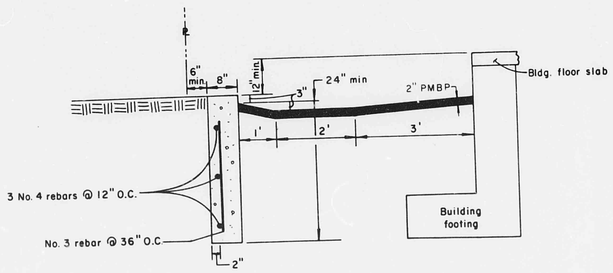

CONCRETE RUNDOWN

H/3 TYPICAL SECTION




MEDIAN CURB & GUTTER

I/3 TYPICAL SECTION




F/3 TYPICAL SECTION

## GENERAL NOTES - RETAINING WALLS

1. CONCRETE MASONRY UNITS FOR RETAINING WALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF "SPECIFICATIONS FOR HOLLOW LOAD BEARING CONCRETE MASONRY UNITS," ASTM C90-64T.

2. MORTAR AND GROUT SHOULD COMPLY WITH THE REQUIREMENTS OF "SPECIFICATIONS FOR MORTAR AND GROUT FOR REINFORCED MASONRY," ASTM C476-63. USE FINE GROUT WHERE GROUT SPACE IS LESS THAN THREE INCHES IN LEAST DIMENSION. USE COARSE GROUT WHERE THE LEAST DIMENSION OF THE GROUT SPACE IS THREE INCHES OR MORE. AGGREGATES FOR GROUT SHALL CONFORM TO ASTM STANDARD SPECIFICATIONS C404-61.

3. STEEL REINFORCEMENT SHOULD BE CLEAN, FREE FROM HARMFUL RUST, AND SHOULD COMPLY WITH APPLICABLE ASTM STANDARDS FOR DEFORMED BARS AND STEEL WIRE WITH STANDARD DEFORMATIONS AND A YIELD STRENGTH OF 40,000 PSI.

4. ALTERNATE VERTICAL REINFORCING BARS FOR CMU RETAINING WALLS MAY BE TERMINATED AT THE MID-HEIGHT OF THE WALL. EVERY THIRD BAR MAY BE TERMINATED AT THE UPPER THIRD-POINT OF THE WALL HEIGHT UNLESS SHOWN OTHERWISE.

5. THE WALL SHOULD HAVE HORIZONTAL JOINT REINFORCEMENT AT EVERY COURSE OR ELSE A HORIZONTAL BOND BEAM WITH TWO NO. 4 BARS EVERY 16 IN.

6. CONCRETE CUT-OFF WALLS SHALL BE USED FOR FILL HEIGHTS OF 0-12". CMU RETAINING WALLS SHALL BE USED FOR FILL HEIGHTS FROM 1'-6'.

7. PROVIDE CONSTRUCTION JOINTS FOR CUT-OFF WALLS AT 10' O.C., PROVIDE 3/4" EXPANSION JOINTS AT 50' O.C. AND ADJACENT TO BUILDING FOUNDATIONS, SLABS, AND WALLS.

8. BACKFILL FOR CUT-OFF AND RETAINING WALLS SHALL NOT BE PLACED UNTIL WALLS HAVE REACHED DESIGN STRENGTH. COMPACT BACKFILL TO 95% OF AASHTO T-99. WEIGHT OF ASSUMED SOIL BACKFILL (GRANULAR SOIL WITH CONSPICUOUS CLAY CONTENT) IS 100 PCF AND EQUIVALENT FLUID PRESSURE IS 45 PCF. THERE IS NO SURCHARGE AND MAXIMUM SOIL BEARING PRESSURE IS 1,500 PSF.

9. CONTRACTOR SHALL VARY TOP OF WALL AND TOP OF FOOTING ELEVATIONS AS NECESSARY TO MAINTAIN MINIMUM AND MAXIMUM WALL EXTENSION AND FOOTING COVER REQUIREMENTS.

10. PRE-CAST PARKING BUMPERS ARE REQUIRED FOR PARKING STALLS DIRECTED INTO THE WALL.

11. CONCRETE BLOCKS SHALL BE SAME COLOR AND SURFACE TEXTURE AS BLOCKS USED IN ADJACENT BUILDING STRUCTURE.

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| NO. | REVISIONS | BY | DATE |
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**GOODMANS INC. DESIGN INTERIORS**

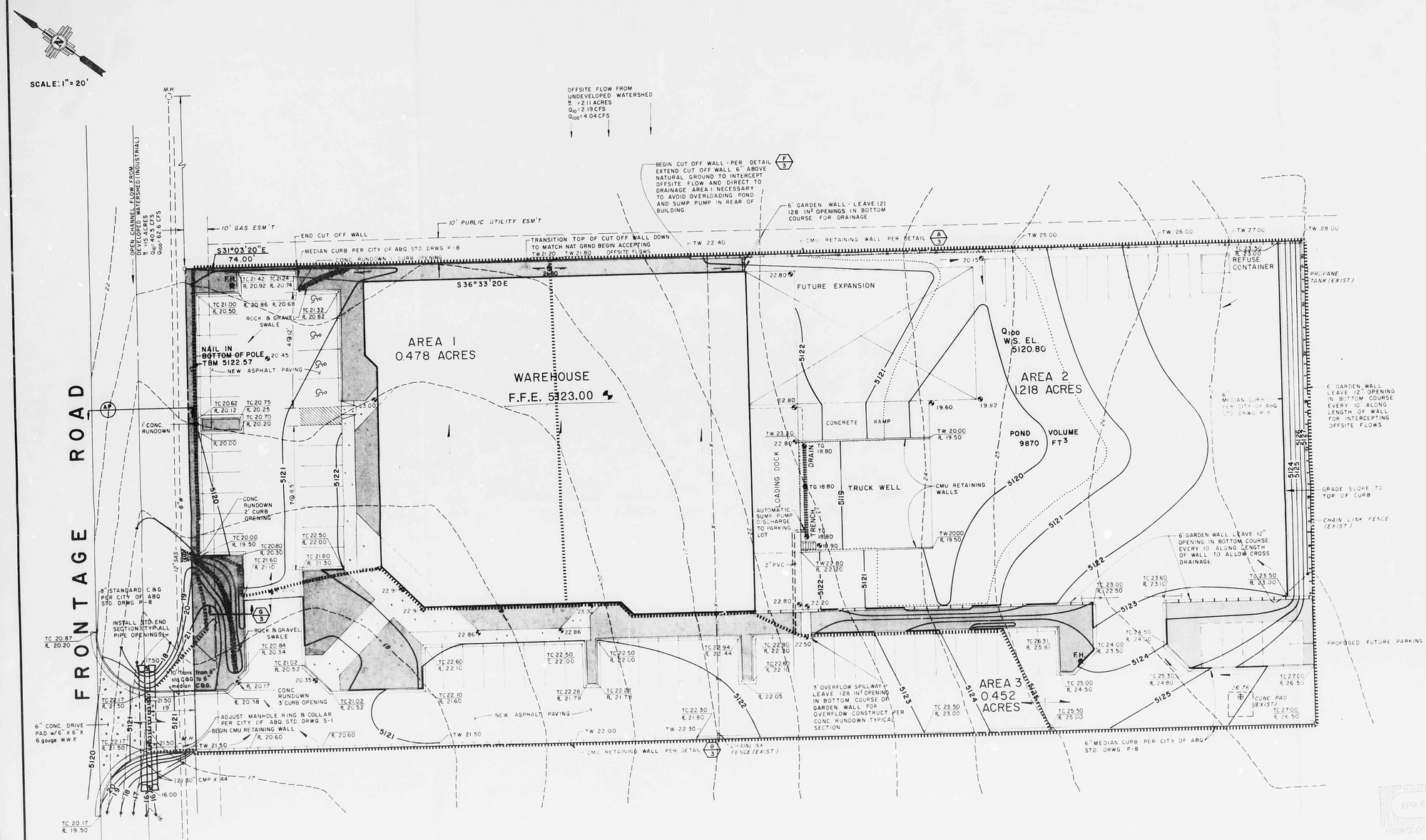
TYPICAL DETAILS

3/31/87

DOUGLAS W. CORNELIUS NEW MEXICO 9355 REGISTERED PROFESSIONAL ENGINEER

*EASTERLING & ASSOCIATES, INC.*
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

| Designed | Drawn | Checked | Sheet |
|---|---|---|---|
| DWC | BRG | DWC | 3 of 3 |
| Job No.: 705201 | Date: 2/11/87 | | |




| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | REVISED PER CITY LETTER DATED 3-24-87 | BRG | 3-30-87 |

NOTE: CERTIFICATION OF FINISH FLOOR ELEVATION MUST BE DONE BY ENGINEER UPON COMPLETION OF PROPOSED CONSTRUCTION

B.M. I25-18, STATE-N.M., YEAR-1969, MAP NO. F17, ELEV. - 5125.70.

Description: The station is located 4.5 miles NE of downtown Albuquerque, on the east side of the East Frontage Road of U. S. Interstate Highway 25 (I-25).

To reach the station from the intersection of Montgomery Blvd., and the East Frontage Road of I-25, go north on the East Frontage Road 0.60 mile to "Green's Sanitary Specialist Inc." (Bldg. #4900) and the station on the right.

Station mark is a standard NMSHC brass tablet, stamped "NMSHC I-25-18", set in top of a concrete post flush with ground.

**POND HYDRAULICS**

THE REAR PARKING AREA AND TRUCK WELL WILL BE GRADED TO SERVE AS A DETENTION POND. THE 100-YEAR WATER SURFACE ELEVATION IS CALCULATED TO BE 5,120.80 BASED ON A 100-YEAR RUNOFF VOLUME OF 9,870 CUBIC FEET. A FLYGT CORPORATION, MODEL BS-2051 SUMP PUMP WILL BE INSTALLED TO PUMP POND WATERS INTO THE PARKING LOT TO THE SOUTH. THE SUMP PUMP HAS AN ESTIMATED FLOW OF 113 GALLONS PER MINUTE WORKING AGAINST A 10-FOOT HEAD, THROUGH A 2-INCH DISCHARGE LINE, MEASURING 50 FEET LONG. THE SUMP PUMP WILL BE OPERATED MANUALLY AND IS CAPABLE OF EMPTYING THE POND WITHIN 10.9 HOURS. TWO EMERGENCY SPILLWAYS ARE PROVIDED SHOULD THE PUMP FAIL TO FUNCTION PROPERLY.

**(AP) CHANNEL HYDRAULICS**

| | |
|---|---|
| S = 0.023 FT/FT | S = 0.023 FT/FT |
| d = 0.7 FEET | d = 1.6 FEET |
| WATER SURFACE ELEV. = 5120.60 | WATER SURFACE ELEV. = 5121.50 (1.5' BELOW F.F.E.) |
| A = 15 FT² | A = 49 FT² |
| WP = 24 FT | WP = 45 FT |
| V = 5.5 FT/SEC | V = 8.0 FT/SEC |
| Q = 82.6 CFS > $Q_{100}$ | $Q_{max}$ = 391 CFS |

# GOODMAN'S INC. DESIGN INTERIORS

## GRADING & DRAINAGE PLAN


EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114


| Designed | Drawn | Checked | Sheet |
|---|---|---|---|
| DWC | BRG | DWC | 2 of 3 |
| Job No: 705201 | Date: 2/11/87 | | |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