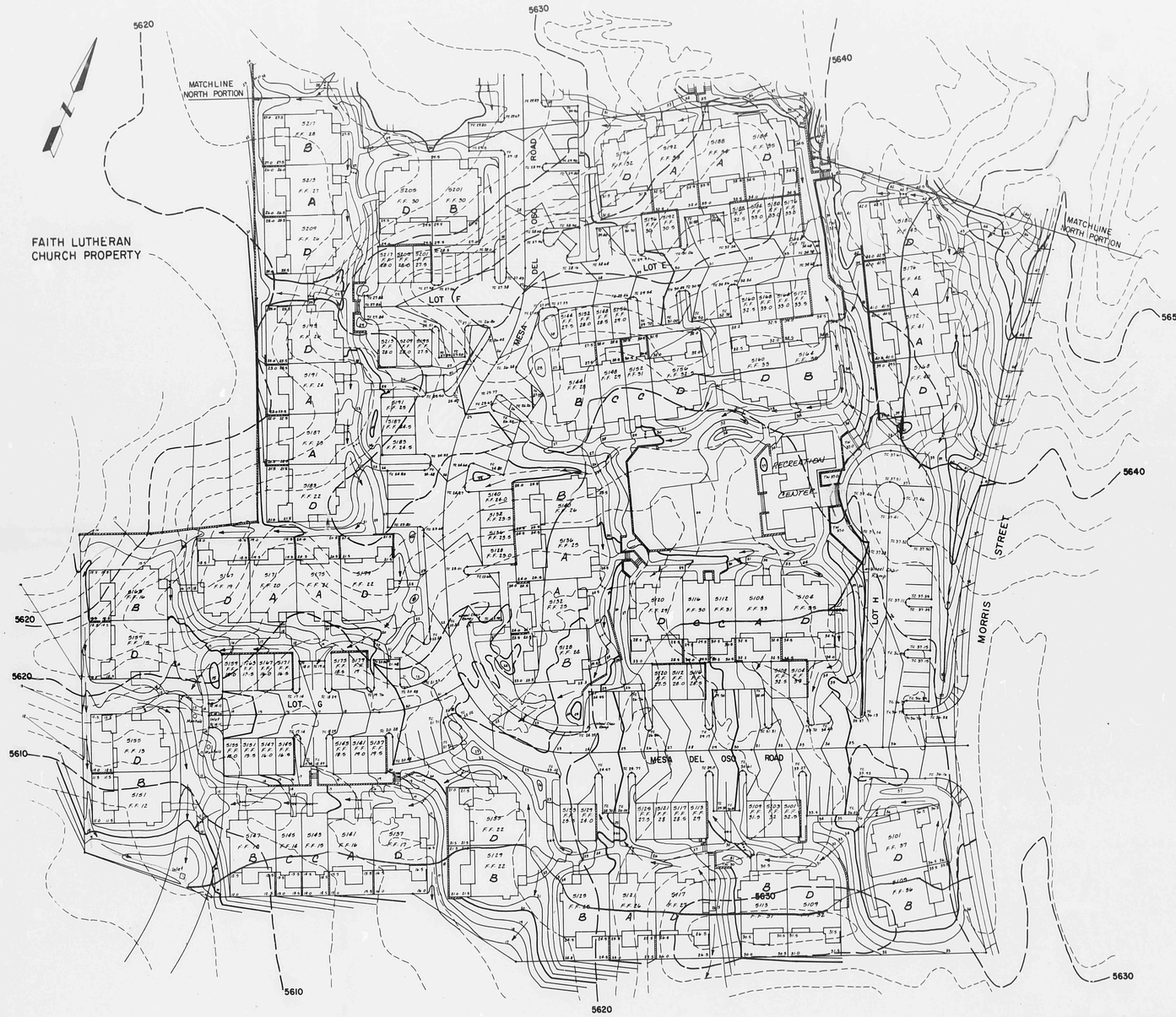
HYDROLOGY

F21/D31

FOUR PLANS



NOTES

1. THE TOP 6" OF FILL BENEATH BUILDINGS AND GARAGES SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY (PER ASTM D-1557). ALL OTHER AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY. FILL SHALL BE BROUGHT TO OPTIMUM MOISTURE ± 2%.
2. NO FROZEN MATERIAL SHALL BE PLACED IN FILL.
3. ALL MATERIAL PLACED IN FILL SHALL HAVE BEEN EXCAVATED ON THIS PROJECT OR FROM DESIGNATED BORROW AREA.
4. MATERIAL UNSUITABLE FOR FILL SHALL BE REMOVED FROM THE SITE.
5. PRIOR TO GRADING, THE EXISTING SURFACE SHALL BE STRIPPED OF ORGANIC MATTER. THESE STRIPPINGS MAY BE USED FOR SURFACING LANDSCAPED AREAS ONLY.
6. ALL PADS SHALL BE GRADED TO 3' BEYOND SPECIFIED FINISHED HORIZONTAL DIMENSIONS.
7. FINISHED PAD ELEVATIONS ARE 8" BELOW FINISH FLOOR ELEVATIONS.
8. THE FINISHED FLOOR ELEVATION SPECIFIED FOR GARAGES IS AT THE CENTER OF THE GARAGE. GARAGE SLABS SHALL SLOPE FROM REAR TO FRONT AT 2%.
9. THE FINISHED FLOOR ELEVATION FOR PATIO AREAS WILL BE 6" BELOW THE BUILDING FINISHED FLOOR ELEVATION. PATIO FINISHED PAD ELEVATIONS WILL BE 10" BELOW THE BUILDING FINISHED FLOOR ELEVATION.
10. MASONRY WALLS, RETAINING WALLS, OR COMBINATION MASONRY AND RETAINING WALLS SHALL NOT EXCEED 8.0' IN HEIGHT.
11. RETAINING WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SHEET 4 OF 4. ALTERNATIVE DESIGNS WILL BE ACCEPTABLE IF PREPARED BY A REGISTERED CIVIL ENGINEER AND APPROVED BY THE CITY OF ALBUQUERQUE BUILDING INSPECTION DIVISION.
12. NO SLOPES SHALL EXCEED 3:1 (HORIZONTAL: VERTICAL).
13. ROUGH GRADING OF THE SITE SHALL BE DONE SO THAT ALL AREAS BEYOND BUILDING LIMITS AND OUTSIDE OF STREETS AND PARKING AREAS ARE LEFT 0.3' BELOW FINISHED GRADE ELEVATION. SUBGRADE TOLERANCE IN THESE AREAS SHALL BE ± 0.3'.
14. SUBGRADE TOLERANCE ON BUILDING PADS SHALL BE ± 0.1'.
15. SUBGRADE TOLERANCE ON AREAS WITHIN STREETS AND PARKING AREAS SHALL BE ± 0.3'.
16. COPIES OF THE SOILS REPORT FOR THIS PROPERTY MAY BE OBTAINED FROM F. M. FOX & ASSOCIATES, 3412 BRYN MAWR, N.E., ALBUQUERQUE, NEW MEXICO 87107.

Errosion control Plan Needed
Grading for Earth Channel through
Oso Grande tract D-2

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF FLOW
- RETAINING WALL (18" OR LESS)
- RETAINING WALL (GREATER THAN 18")
- SIDEWALK CULVERT (SEE PROPOSED PAVING DESIGN)

AS-BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE
INSPECTION & ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE STATION IS A STANDARD ACS BRASS TABLET STAMPED "17-F21" SET FLUSH IN THE SIDEWALK IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF SPAIN ROAD AND EUBANK BOULEVARD
ELEVATION = 5573.51

SURVEY INFORMATION
NO. | BY

REFERENCES
MAP NO. F-21 | W.O. NO.
EST. NO.

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN
DESIGNED BY DWW DATE 3/82
DRAWN BY MCG&PH DATE 3/82
CHECKED BY DMYM DATE 3/82

PREPARED UNDER THE DIRECTION OF
David Mitchell 3-29-82

APPROVED FOR ROUGH GRADING ±1.0
CITY ENGINEER DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE:
MESA DEL OSO
GRADING PLAN (SOUTH PORTION)

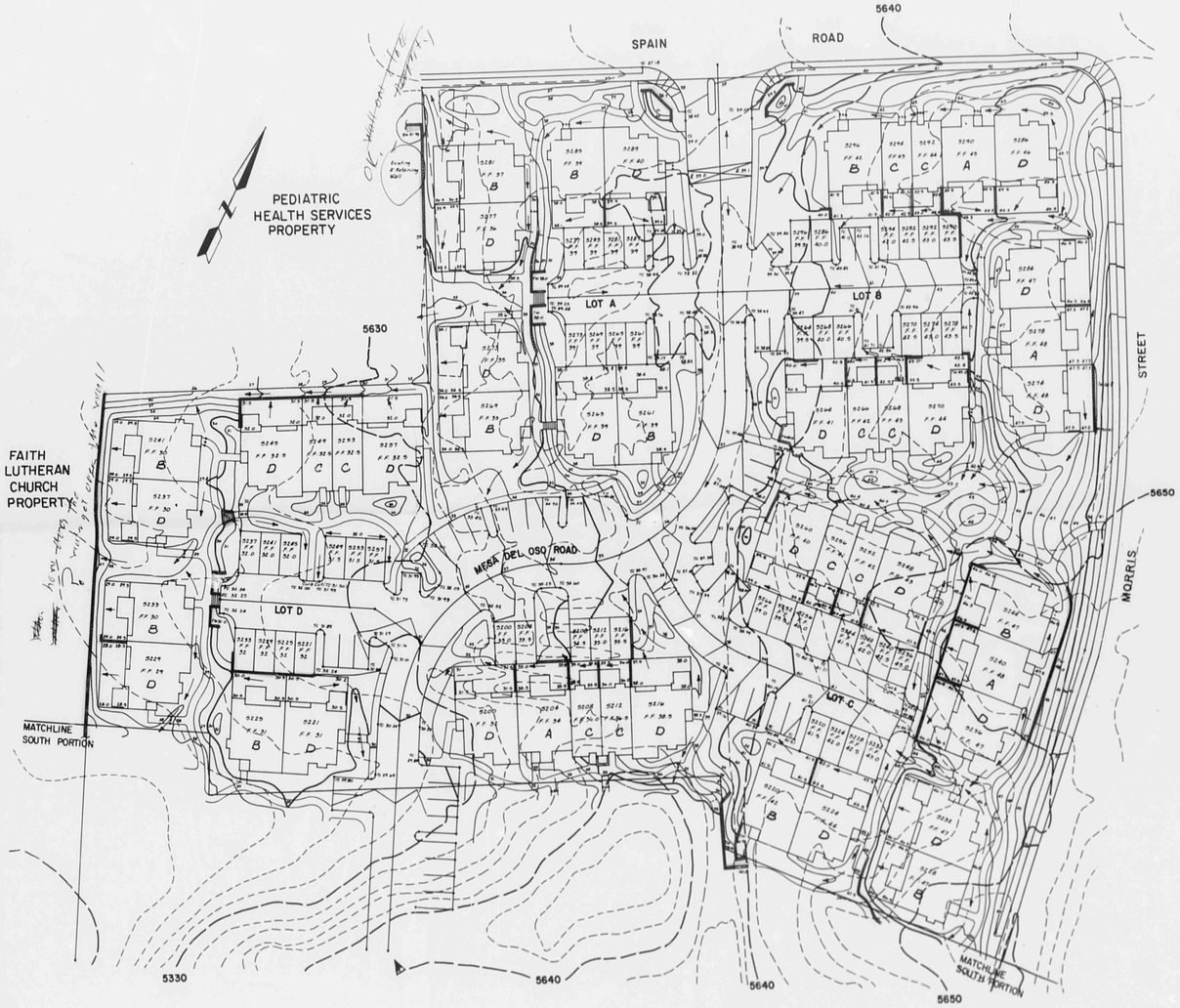
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.- Design			Traffic		
A.C.E.- Hydrology			Water		

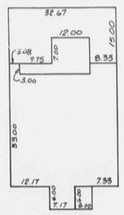
DRAWING NO.
SHEET 1 OF 4

SCALE: 1" = 40'
JOB NO. 11892

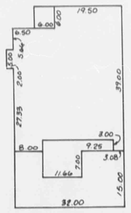
(4) F21/D31

BRUNING 44-132-52753



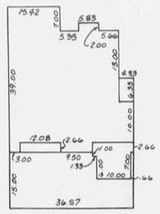


DETAIL A
TYPICAL A UNIT
SCALE 1"=20'

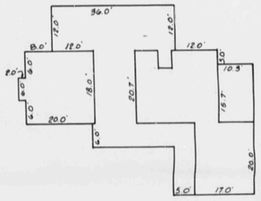


DETAIL B
TYPICAL B UNIT
SCALE 1"=20'

DETAIL C
TYPICAL C UNIT
SCALE 1"=20'



DETAIL D
TYPICAL D UNIT
SCALE 1"=20'



DETAIL E
RECREATION CENTER
SCALE 1"=20'

DETAIL F
TYPICAL GARAGE
SCALE 1"=20'

SEE NOTES SHEET 1

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF FLOW
- RETAINING WALL (18" OR LESS)
- RETAINING WALL (GREATER THAN 18")
- SIDEWALK CULVERT (SEE PROPOSED PAVING DESIGN)

AS-BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

THE STATION IS A STANDARD ACS BRASS TABLET STAMPED "17-F21" SET FLUSH IN THE SIDEWALK IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF SPAIN ROAD AND EUBANK BOULEVARD

ELEVATION = 5573.51

SURVEY INFORMATION

NO.	BY

REFERENCES

MAP NO. F-21
EST. NO.
W.O. NO.

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	DWW	DATE 3/82
DRAWN BY	MCQ & PH	DATE 3/82
CHECKED BY	DMYM	DATE 3/82

PREPARED UNDER THE DIRECTION OF

David M. G. Miller 3-29-82

APPROVED FOR ROUGH GRADING ±1.0'

CITY ENGINEER DATE

SCALE: 1" = 40'

JOB NO. 11892

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE:
MESA DEL OSO
GRADING PLAN (NORTH PORTION)

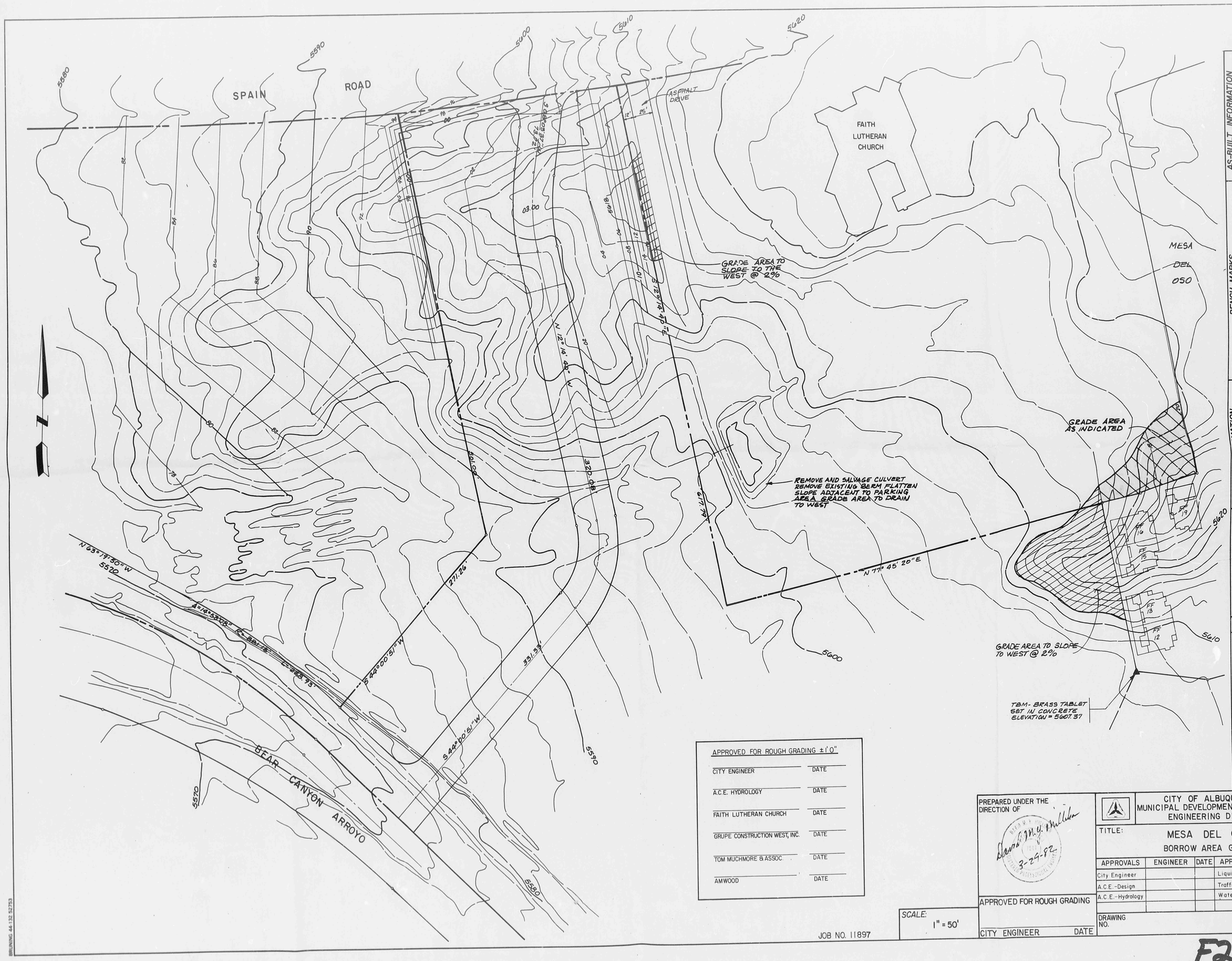
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

DRAWING NO.

SHEET 2 OF 4

F21/D31

BRUNING 44-132 52773



APPROVED FOR ROUGH GRADING ±1'0"

CITY ENGINEER	DATE
A.C.E. HYDROLOGY	DATE
FAITH LUTHERAN CHURCH	DATE
GRUPE CONSTRUCTION WEST, INC.	DATE
TOM MUCHMORE & ASSOC.	DATE
AMWOOD	DATE

JOB NO. 11897

SCALE: 1" = 50'

PREPARED UNDER THE DIRECTION OF

3-29-82

APPROVED FOR ROUGH GRADING

CITY ENGINEER DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: MESA DEL OSO
BORROW AREA GRADING

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

DRAWING NO.

SHEET 3 OF 4

F21/D31

AS-BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	DATE
ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

THE STATION IS A STANDARD ACS BRASS TABLET STAMPED "17-F21" SET FLUSH IN THE SIDEWALK IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF SPAIN ROAD AND EUBANK BOULEVARD

ELEVATION = 5573.51

SURVEY INFORMATION

NO.	BY	DATE

REFERENCES

MAP NO.	W.O. NO.
F-21	
EST. NO.	

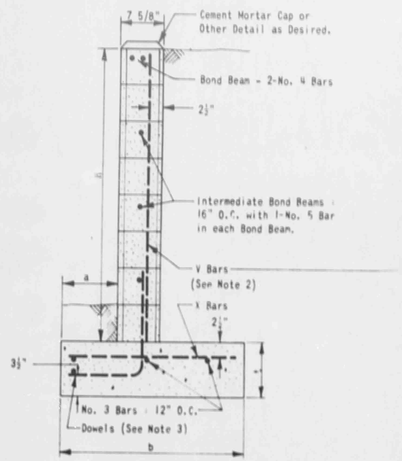
NO.	DATE	REMARKS	BY

REVISIONS

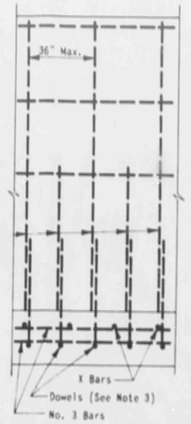
DESIGN

DESIGNED BY	R.W. & DMYM	DATE 3/82
DRAWN BY	MCQ	DATE 3/82
CHECKED BY	DMYM	DATE 3/82

BRUNING 44-132 52753



CROSS SECTION



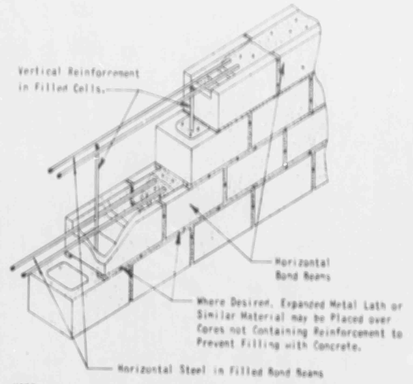
ELEVATION

REINFORCED CONCRETE MASONRY - 8" WALLS

H	a	b	t	V Bars	X Bars
ft.-in.	in.	ft.-in.	in.	(See Note 2)	
3'- 4"	8"	2'- 4"	10"	No. 4 @ 32"	No. 4 @ 27"
4'- 0"	10"	2'- 9"	10"	No. 4 @ 32"	No. 4 @ 27"
4'- 8"	12"	3'- 3"	10"	No. 5 @ 32"	No. 4 @ 27"
5'- 4"	14"	3'- 8"	10"	No. 4 @ 16"	No. 4 @ 30"
6'- 0"	15"	4'- 2"	12"	No. 6 @ 24"	No. 4 @ 25"

GENERAL NOTES:

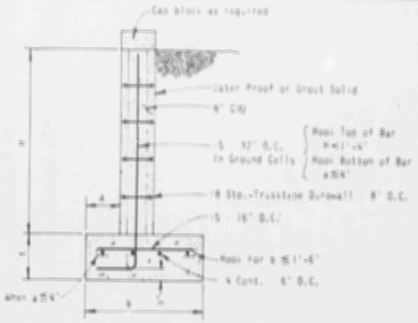
1. Reinforcement of a size and spacing other than indicated above may be used, provided such other reinforcement will furnish an area of steel at least equal to that indicated in the table.
2. Alternate V Bars may be stopped at the mid-height of the wall (H/2) if the spacing of the bars extending to the top will not exceed 36"
3. Dowels shall be at least equal in size and spacing to the V Bars, shall project a minimum of 30 bar diameters into the filled block cores and shall extend to the toe of the footing.
4. Walls designed for level backfill only.



NOTE:

1. Masonry Units to Conform to Grade N-1 ASTM C 90 of latest Revision.
2. Mortar and Grout to Conform to ASTM C 476 of latest Revision.

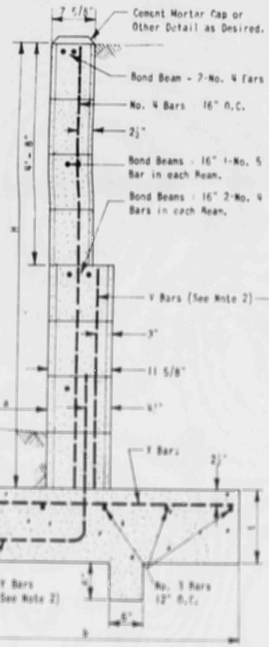
REINFORCED CONCRETE MASONRY WALL CONSTRUCTION



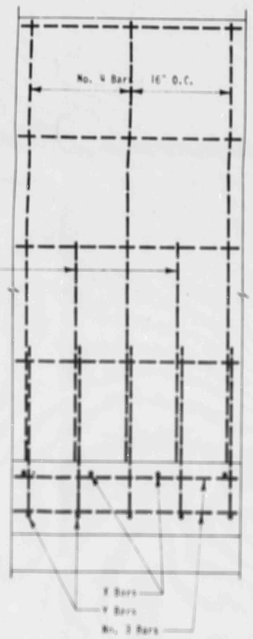
H	a	b	t
3'-4"	8"	2'-4"	10"
3'-8"	8"	2'-0"	10"
3'-0"	8"	1'-6"	10"
1'-4"	8"	1'-6"	10"
0'-8"	8"	1'-6"	10"
3'-4"	0	2'-4"	10"
2'-8"	0	2'-0"	10"
2'-0"	0	1'-6"	10"
1'-4"	0	1'-6"	10"
0'-8"	0	1'-6"	10"

REINFORCED CONCRETE MASONRY WALL 0 to 3'-4"

NOTE: IF STEEL IS PLACED 2" FROM THE LOADED FACE OF THE WALL AND THIS PRACTICE IS CAREFULLY CONTROLLED, 6" C.M.U. BLOCKS MAY BE USED IN LIEU OF 8" C.M.U. BLOCKS.



CROSS SECTION



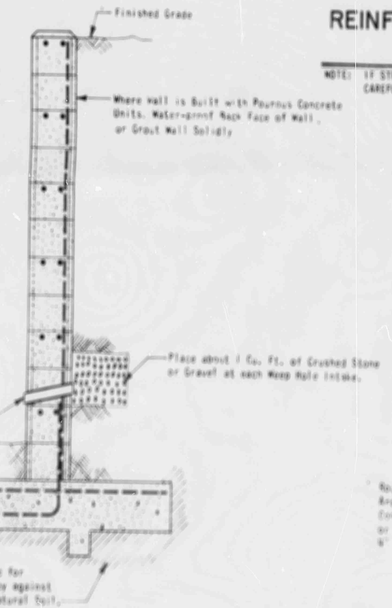
ELEVATION

REINFORCED CONCRETE MASONRY - 8" & 12" WALLS

H	a	b	t	V Bars	X Bars	Y Bars
ft.-in.	in.	ft.-in.	in.	(See Note 2)		(See Note 2)
6'- 0"	15"	4'- 2"	12"	———	No. 4 @ 30"	No. 5 @ 16"
6'- 8"	16"	4'- 6"	12"	No. 4 @ 24"	No. 4 @ 22"	No. 5 @ 14"
7'- 4"	18"	4'- 10"	12"	No. 6 @ 16"	No. 5 @ 26"	No. 5 @ 12"
8'- 0"	20"	5'- 4"	12"	No. 6 @ 16"	No. 5 @ 21"	No. 7 @ 16"

GENERAL NOTES:

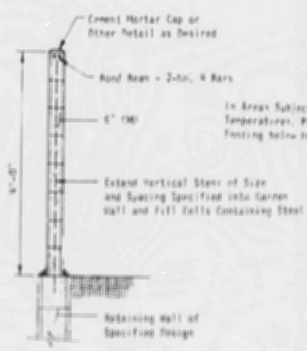
1. Reinforcement of a size and spacing other than given in the table may be used providing such other reinforcement furnishes an area of steel at least equal to that indicated in the table.
2. Y Bars shall project at least 30 bar diameters into filled cells in the masonry and shall extend to the top of the footing. Where desired, Y Bars may be extended to the top of the 12" wall section and the V Bars omitted.
3. Walls designed for level backfill only.



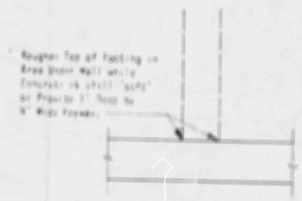
DRAINAGE PROVISIONS AND BACKFILLING PROCEDURES

NOTE:

Here filling against reinforced concrete masonry retaining wall should not be permitted until at least 7 days after placing the last full courses of grout. Super heavy equipment is used in back filling walls designed to resist earth pressure only, such equipment should not approach closer to the top of the wall than a distance equal to the height of the wall. Care should also be taken to avoid exerting large impact forces on the wall as could be caused by a large mass of moving earth.



GARDEN WALL EXTENSION FOR ALL RETAINING WALLS



GENERAL DETAIL FOR ALL WALLS

AS-BUILT INFORMATION
CONTRACTOR
WORK ACCEPTED BY — DATE
DRAWING REVISED BY — DATE

MICRO-FILM INFORMATION
REVIEWED BY — DATE
NO.

BENCH MARKS
THE STATION IS A STANDARD ACS BRASS TABLET STAMPED "F7-F 21" SET FLUSH IN THE SIDEWALK IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF SPAIN ROAD AND EUBANK BOULEVARD
ELEVATION=5573.51

SURVEY INFORMATION
FIELD NOTES
BY — DATE
NO.

REFERENCES
W.O. NO.
WAP NO. F-21
EST. NO.

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY — DATE
DRAWN BY — DATE
CHECKED BY — DATE

PREPARED UNDER THE DIRECTION OF

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: MESA DEL OSO
RETAINING WALL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. Design			Traffic		