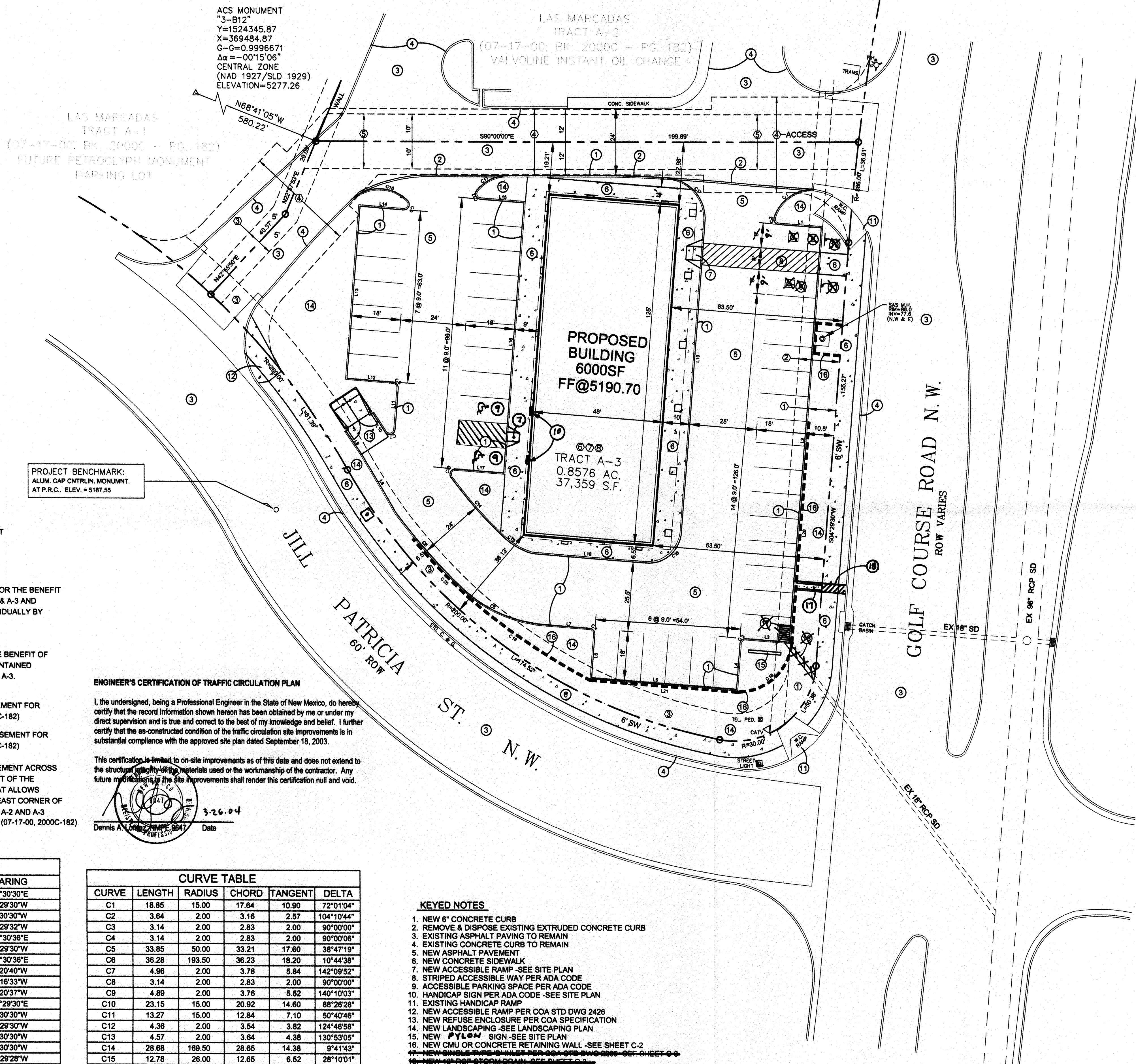
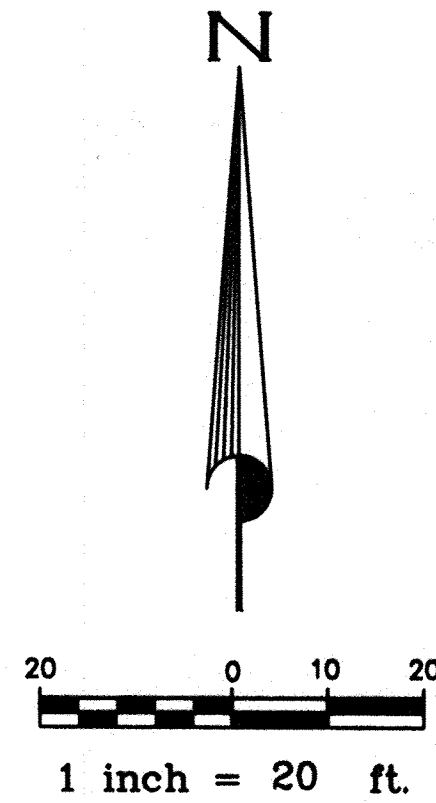




LEGEND

- 6001 — EXISTING CONTOUR ELEVATION
- 02.5 x EXISTING SPOT ELEVATION
- 01 — PROPOSED CONTOUR ELEVATION
- — — — — PROPERTY LINE
- 01.5 ♦ PROPOSED SPOT ELEVATION
- — — — — DIRECTION OF FLOW
- — — — — DRAINAGE SWALE
- ⊙ SITE LIGHT POLE
- ⊙ EXISTING FIRE HYDRANT
- ⊙ NEW FIRE HYDRANT
- ■ ■ ■ ■ NEW RETAINING WALL
- — — — — CONCRETE CURB
- STREET LIGHT
- TELEPHONE PEDESTAL
- DROP INLET
- △ CATV PEDESTAL

PROJECT DATA

PROPERTY ADDRESS
GOLF COURSE RD NW

LEGAL DESCRIPTION
TRACT A-1, LAS MARCADAS SUBDIVISION
PLAT RCD'D. 07-17-00 AS 2000C-192.

BENCH MARK
STA. "3-B12", A BRASS CAP AT THE TOP
EDGE OF ESCARPMENT, APPROX. 700'
WNW OF PROJECT SITE. ELEV. = 5277.26

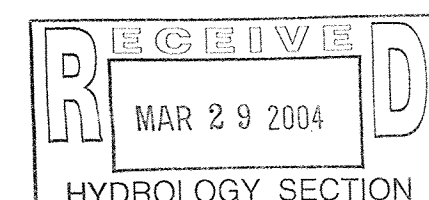
MAPPING
SITE TOPOGRAPHY BY
REX VOGLER, NMPS 10486
BOUNDARY SURVEY BY
ALDRICH LAND SURVEYING
TIMOTHY ALDRICH, NMPS 7719

SURVEY NOTES:

- 1: CONTOUR INTERVAL IS ONE (1) FOOT.
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION No. "22-L19", HAVING AN ELEVATION OF 5163.08.
- 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
- 4: THIS IS NOT A BOUNDARY SURVEY. BEARINGS AND DISTANCES SHOWN HEREON ARE FOR REFERENCE ONLY.
- 5: ONE FOOT CONTOUR INTERVAL ADD 5100 FEET TO SPOT ELEV'S.
- 6: TO ACCESS THIS PROPERTY FROM ANY POINT OTHER THAN EASEMENT ② ACCESS LOCATION, THE CITY OF ALBUQUERQUE TRANSPORTATION DEPARTMENT MUST BE CONTACTED.

THE FOLLOWING STATEMENT IS REQUIRED FOR TOPOGRAPHIC SURVEYS BY THE N.M. BOARD OF REGISTRATION FOR ENGINEERS & SURVEYORS:

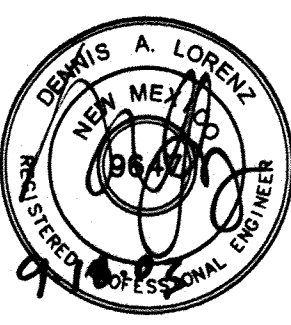
THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCED HEREON.



BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro NE Building 1 Suite 1200
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

TRACT A-3, LAS MARCADAS SUBDIVISION
DIMENSION SITE PLAN
ALBUQUERQUE, NEW MEXICO
BLI PROJECT 03521

REVISION DATE



P.O. BOX 3366
ALBUQUERQUE, NM 87190
TELE: (505) 281-9660
FAX: (505) 281-9665
EMAIL: tlorenz@brl.com

DATE

8-26-03

SHEET NUMBER

C-1

EASEMENTS

- ① 10' UTILITY EASEMENT (03-28-91, 91C-67)
- ② 15' TEMPORARY DRAINAGE EASEMENT (03-28-91, 91C-67)
- ③ 10' UTILITY EASEMENT (07-17-00, 2000C-182)
- ④ PRIVATE JOINT ACCESS EASEMENT FOR THE BENEFIT OF THE OWNERS OF TRACTS A-1, A-2 & A-3 AND TO BE MAINTAINED JOINTLY OR INDIVIDUALLY BY SAID LOT OWNERS. (07-17-00, 2000C-182)
- ⑤ 20' PRIVATE SAS EASEMENT, FOR THE BENEFIT OF TRACTS A-1, A-2 & A-3 AND TO BE MAINTAINED BY THE OWNERS OF TRACTS A-1 AND A-3. (07-17-00, 2000C-182)
- ⑥ A RECIPROCAL CROSS-ACCESS EASEMENT FOR TRACTS A-1, A-2 & A-3 (07-17-00, 2000C-182)
- ⑦ A RECIPROCAL CROSS-DRAINAGE EASEMENT FOR TRACTS A-1, A-2 & A-3 (07-17-00, 2000C-182)
- ⑧ PRIVATE CROSS-LOT DRAINAGE EASEMENT ACROSS TRACTS A-2 AND A-3 FOR THE BENEFIT OF THE OWNERS OF TRACTS A-1 AND A-2 THAT ALLOWS SURFACE DRAINAGE TO THE SOUTHEAST CORNER OF TRACT A-3. THE OWNERS OF TRACTS A-2 AND A-3 WILL NOT BLOCK OFFSITE DRAINAGE (07-17-00, 2000C-182)

PROJECT BENCHMARK:
ALUM. CAP CNTRLIN. MONUMT.
AT P.R.C. ELEV. = 5187.55

ENGINEER'S CERTIFICATION OF TRAFFIC CIRCULATION PLAN

I, the undersigned, being a Professional Engineer in the State of New Mexico, do hereby certify that the record information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief. I further certify that the as-constructed condition of the traffic circulation site improvements is in substantial compliance with the approved site plan dated September 18, 2003.

This certification is limited to on-site improvements as of this date and does not extend to the structure or materials used or the workmanship of the contractor. Any future modifications to the site improvements shall render this certification null and void.

Dennis A. Lorenz, P.E. 9847
Date 3-26-04

LINE TABLE

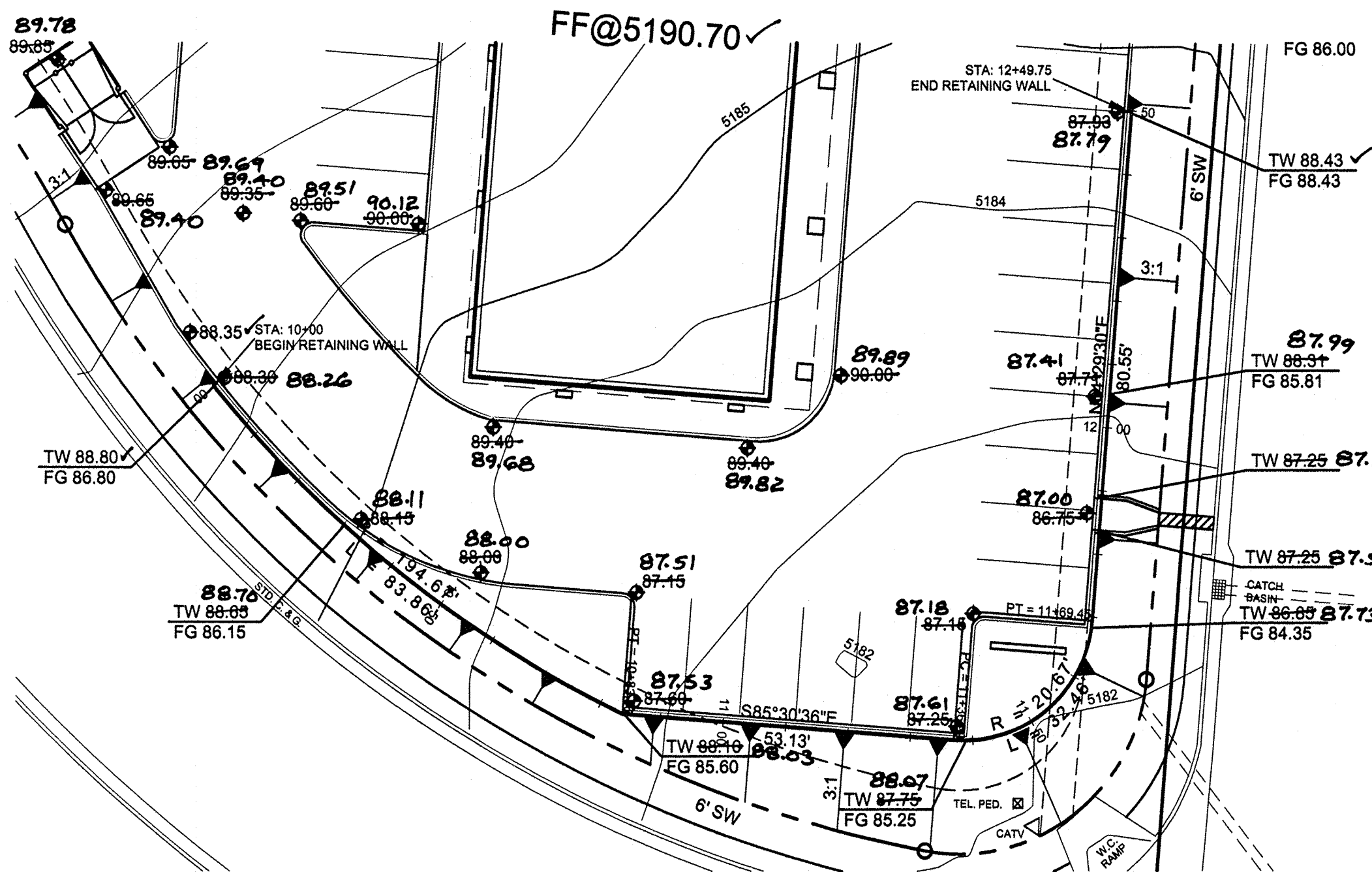
LINE	LENGTH	BEARING
L1	15.60	S85°30'30"E
L2	152.00	S04°29'30"W
L3	16.00	N85°30'30"W
L4	16.79	S04°29'32"W
L5	54.00	S85°30'36"E
L6	16.00	S04°29'30"W
L7	16.92	S85°30'36"E
L8	25.03	N30°20'40"W
L9	10.31	N34°16'33"W
L10	10.31	N33°20'37"W
L11	15.19	N04°29'30"E
L12	17.00	N85°30'30"W
L13	63.00	S04°29'30"W
L14	16.00	N85°30'30"W
L15	16.00	N85°30'30"W
L16	99.00	S04°29'28"W
L17	17.66	N85°30'30"W
L18	42.23	N85°30'36"W
L19	114.05	S04°29'24"W
L20	81.46	S04°29'30"W
L21	55.04	N85°30'36"W

CURVE TABLE

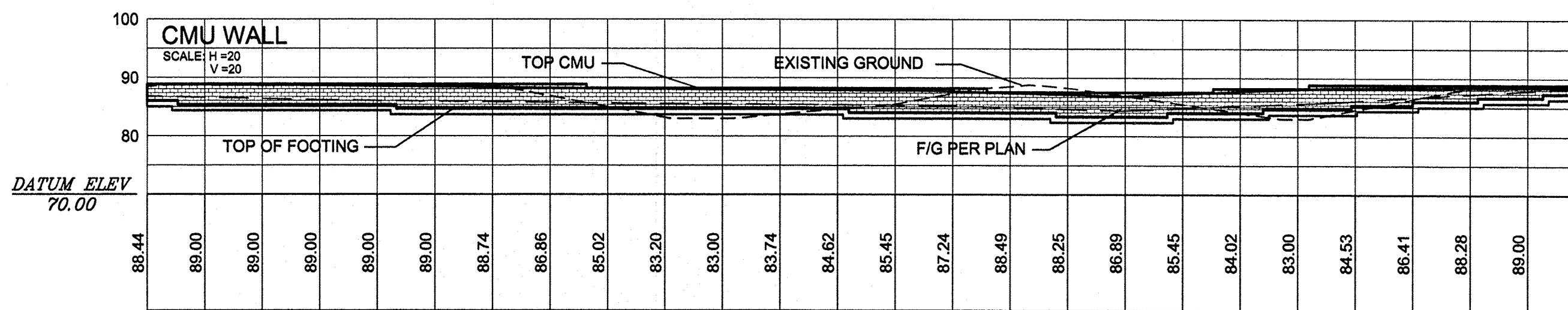
CURVE	LENGTH	RADIUS	CHORD	TANGENT	DELTA
C1	18.85	15.00	17.64	10.90	72°01'04"
C2	3.64	2.00	3.16	2.57	104°10'44"
C3	3.14	2.00	2.83	2.00	90°00'00"
C4	3.14	2.00	2.83	2.00	90°00'06"
C5	33.85	50.00	33.21	17.60	36°47'19"
C6	36.28	193.50	36.23	18.20	10°44'38"
C7	4.96	2.00	3.78	5.84	142°09'52"
C8	3.14	2.00	2.83	2.00	90°00'00"
C9	4.89	2.00	3.76	5.52	140°10'03"
C10	23.15	15.00	20.92	14.60	88°26'28"
C11	13.27	15.00	12.84	7.10	50°40'48"
C12	4.36	2.00	3.54	3.82	124°46'58"
C13	4.57	2.00	3.64	4.38	130°53'05"
C14	28.68	169.50	28.65	14.38	9°41'43"
C15	12.78	26.00	12.65	6.52	28°10'01"
C16	18.85	12.00	16.97	12.00	90°00'00"
C17	23.91	15.00	21.46	15.35	91°19'54"
C18	29.21	20.00	26.68	17.91	83°40'54"
C19	53.62	245.39	53.51	26.92	12°31'10"
C20	30.11	214.36	30.08	15.08	8°02'50"

KEYED NOTES

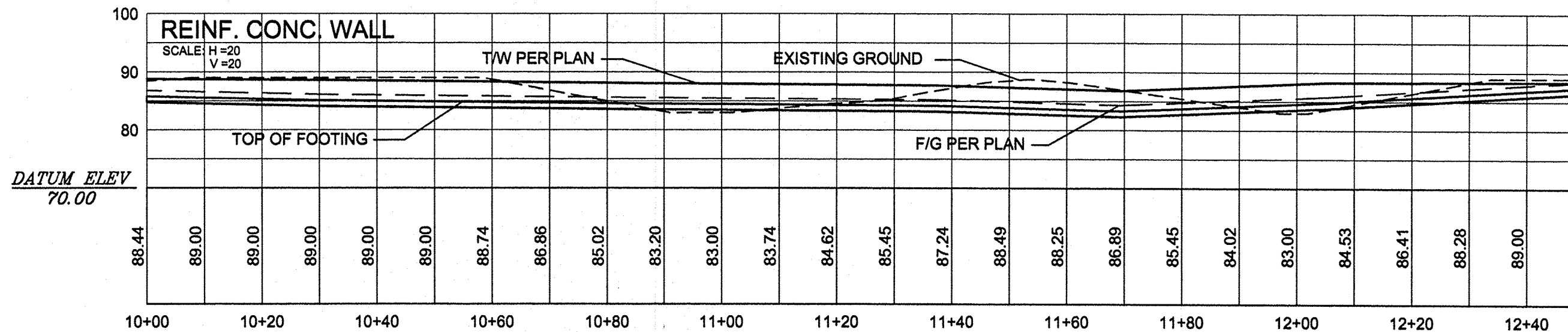
1. NEW 6" CONCRETE CURB
2. REMOVE & DISPOSE EXISTING EXTRUDED CONCRETE CURB
3. EXISTING ASPHALT PAVING TO REMAIN
4. EXISTING CONCRETE CURB TO REMAIN
5. NEW ASPHALT PAVEMENT
6. NEW CONCRETE SIDEWALK
7. NEW ACCESSIBLE RAMP - SEE SITE PLAN
8. STRIPED ACCESSIBLE WAY PER ADA CODE
9. ACCESSIBLE PARKING SPACE PER ADA CODE
10. HANDICAP SIGN PER ADA CODE - SEE SITE PLAN
11. EXISTING HANDICAP RAMP
12. NEW ACCESSIBLE RAMP PER COA STD DWG 2426
13. NEW REFUSE ENCLOSURE PER COA SPECIFICATION
14. NEW LANDSCAPING - SEE LANDSCAPING PLAN
15. NEW PYLON SIGN - SEE SITE PLAN
16. NEW CMU OR CONCRETE RETAINING WALL - SEE SHEET C-2
17. NEW SINGLE PIPE DRAIN PER COA STD DWG 0890 - SEE SHEET C-2
18. NEW 10" RCP DRAIN PER COA STD DWG 0890 - SEE SHEET C-2
19. NEW CONCRETE CHANNEL - SEE SHT C-2 & C-3
20. NEW SIDEWALK CULVERT - SEE SHT C-2 & C-3



PLAN



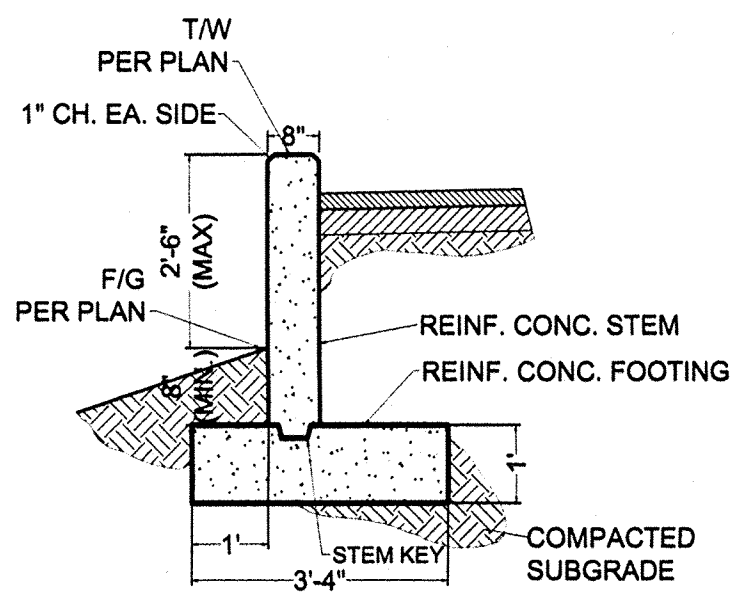
CMU WALL



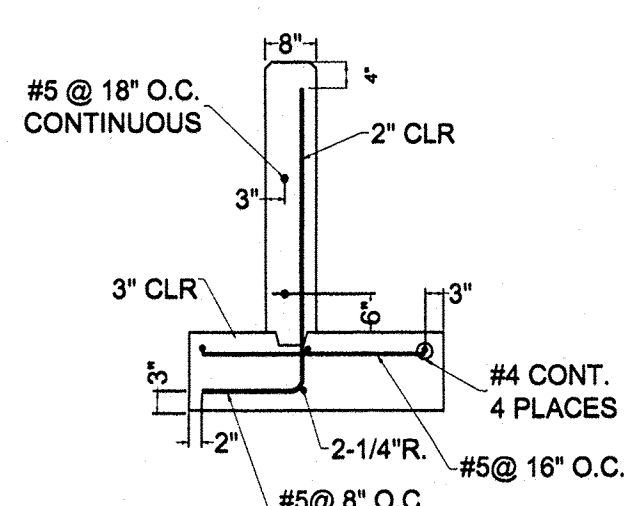
REINF. CONC. WALL

RETAINING WALL NOTES:

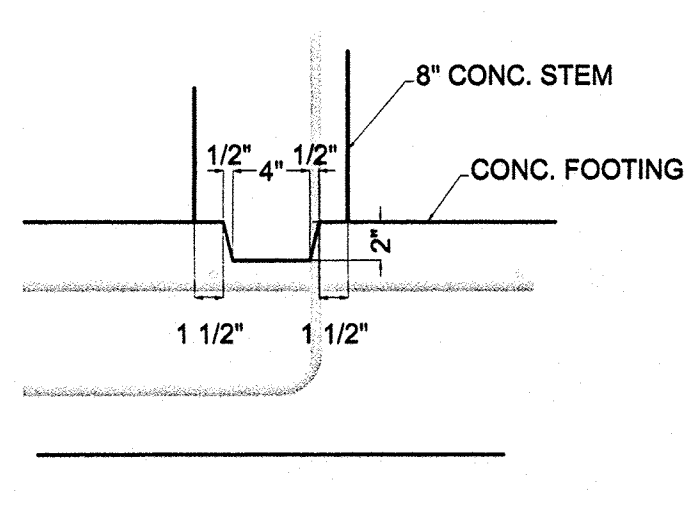
- All CMU cells shall be completely filled with concrete.
- All wall sections are designed based on special inspection per UBC.
- Contractor shall submit to Owner results of masonry test prisms built and tested per UBC STD 24-26, UBC SEC 2405.
- Footing subgrade and base shall be compacted to 95 % modified proctor per ASTM D-1557.
- 1/2" felt expansion joints shall be installed at 30 feet on center and at section changes.
- All masonry shall be laid in running bond only.
- THIS RETAINING WALL IS DESIGNED EXCLUSIVELY FOR USE ON TRACT A-1, LAS MARCADAS SUBDIVISION, ALBUQUERQUE, AND IS NOT APPLICABLE TO ANY OTHER SITE.
- Wall design assumes that a garden wall will not be constructed on top of the retaining wall.
- All vertical concrete and CMU surfaces to be backfilled shall be coated with emulsified asphalt, or other moisture barrier as approved by the Engineer.
- Before construction, the contractor shall field verify the horizontal and vertical location of any utilities which may be within the work area.
- Vertical crack control joints shall be formed at 10 feet on center.
- Wall shall not be backfilled until results of concrete compressive strength tests indicate that concrete has reached design strength of 4000 psi.
- Surface treatment of concrete exterior shall be selected by the owner.
- Walls are designed assuming the following:
fc=4000 psi; maximum aggregate size = 3/4"
fy=60,000 psi (ASTM A-615 GR 60)
fm=1500 psi
Unit weight of backfill = 110 pcf
Concrete/soil coeff of friction = 0.40
Allowable soil bearing pressure = 1500 psf
Active pressure = 30 psf/ft
Slope active pressure = 30 psf/ft
Passive pressure = 300 psf/ft



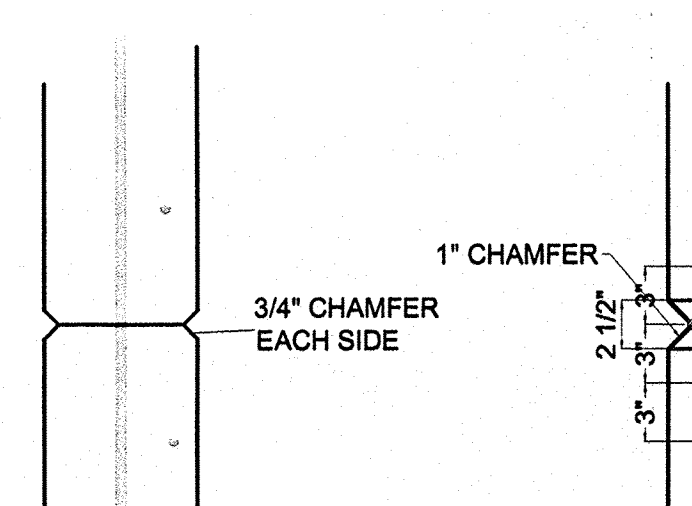
SECTION



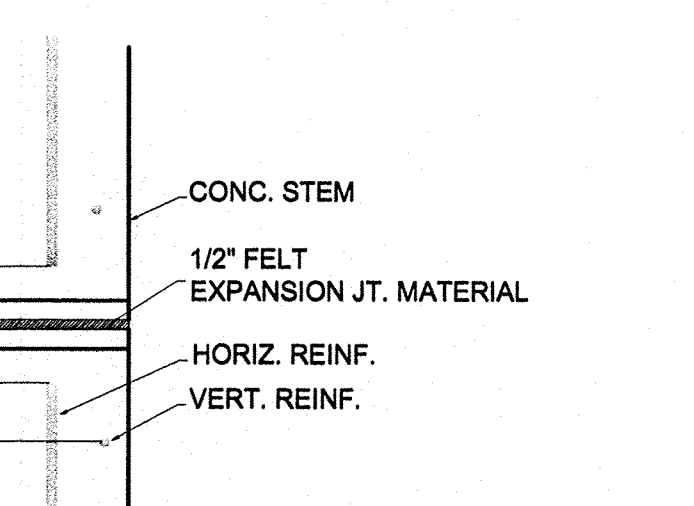
REINFORCEMENT



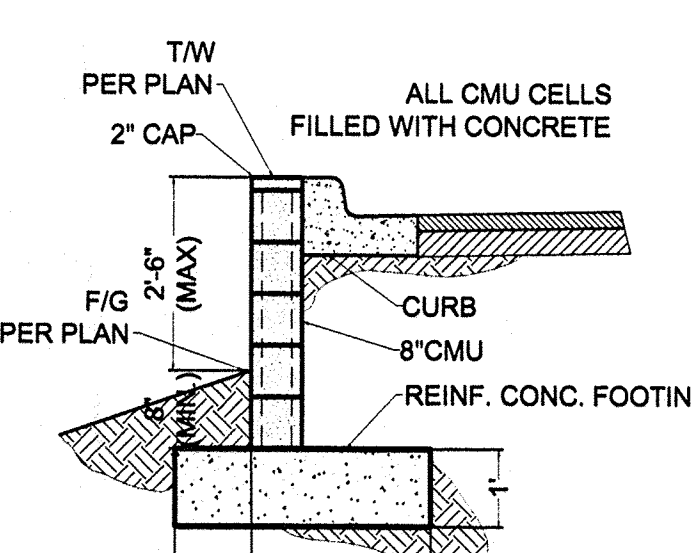
STEM KEY DETAIL



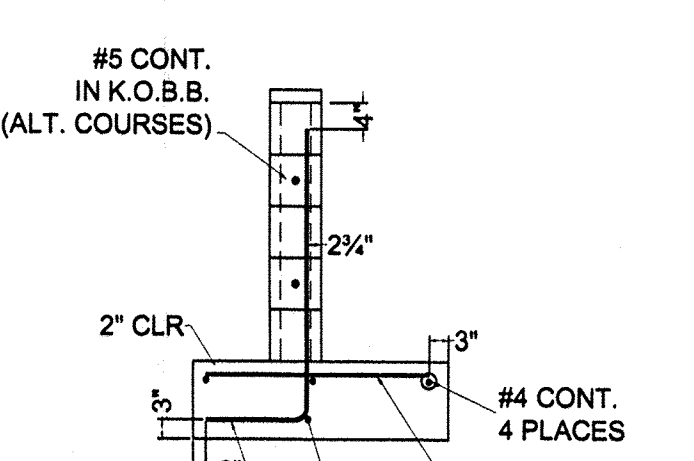
CRACK CONTROL JOINT DETAIL



EXPANSION JOINT DETAIL



SECTION



REINFORCEMENT

CMU WALL

RETAINING WALL DETAILS

NTS

TEMPORARY EROSION CONTROL PLAN

CONSTRUCTION ACTIVITY

CONSTRUCTION ACTIVITY WILL CONSIST OF EARTHMOVING, AND THE CONSTRUCTION OF UNDERGROUND UTILITIES, BUILDINGS, ASPHALTIC PAVEMENTS, CONCRETE SIDEWALKS AND LANDSCAPING IMPROVEMENTS. ALL BUILDING MATERIALS ARE TO BE STORED ON-SITE WITHIN A SECURED FENCED AREA. NO INDUSTRIAL DISCHARGES ARE ANTICIPATED DURING CONSTRUCTION.

TEMPORARY EROSION CONTROL PLAN

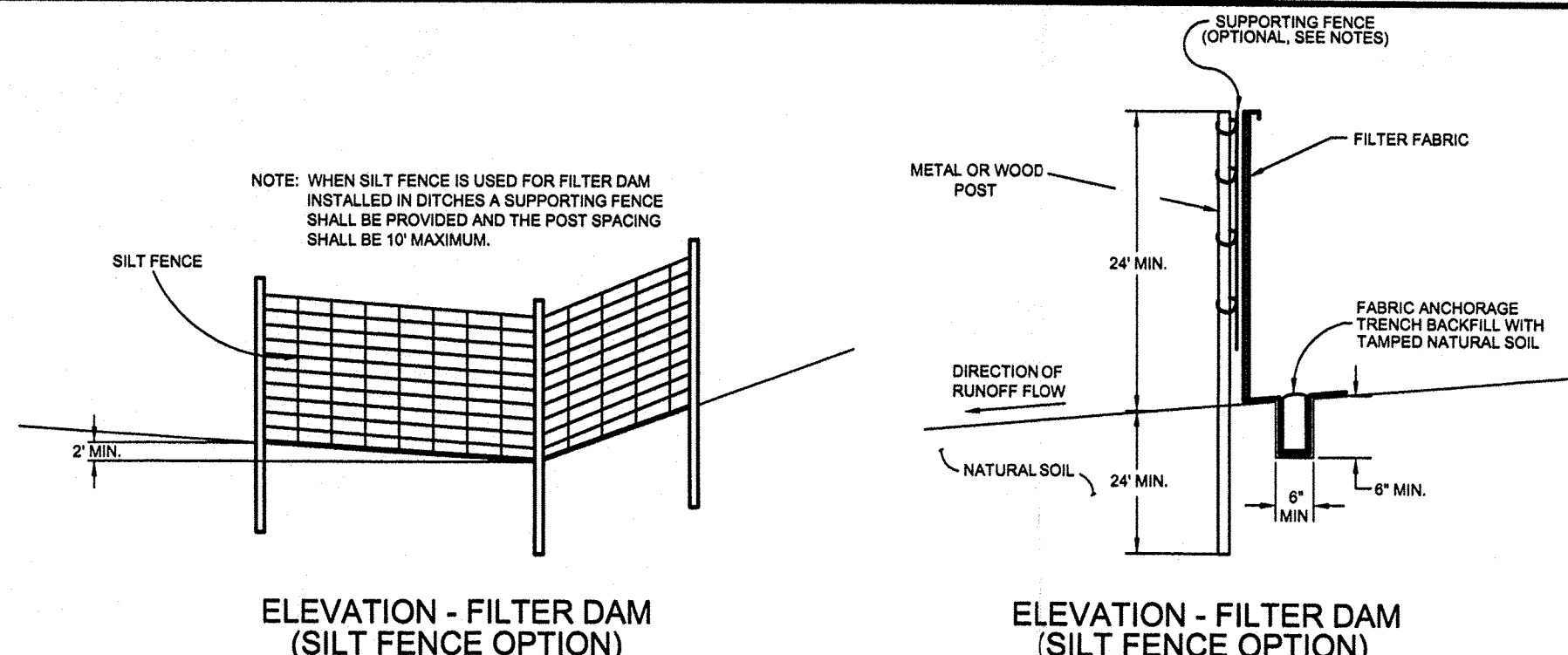
THE TEMPORARY EROSION CONTROL MEASURES TO BE TAKEN FOR THIS PROJECT ARE AS FOLLOWS:

- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED CONSTRUCTION PERMITS PRIOR TO COMMENCING ANY EARTHWORK ACTIVITIES.
- THIS PLAN MUST BE KEPT ON FILE AT THE CONSTRUCTION SITE AT ALL TIMES.
- SILT FENCING SHALL BE INSTALLED AT THE DOWNSTREAM CONSTRUCTION LIMITS AS SHOWN BY THE PLAN.
- THE ON-SITE DETENTION PONDS SHALL BE EXCAVATED TO THE DIMENSIONS AND ELEVATIONS INDICATED ON THE PLAN, AND SHALL BE UTILIZED FOR STORAGE OF EXCESS RUNOFF DURING CONSTRUCTION.
- ALL TEMPORARY EROSION CONTROLS SHALL BE PROPERLY MAINTAINED BY THE OPERATOR UNTIL FINAL SITE IMPROVEMENTS ARE COMPLETED.
- ALL DISTURBED AREAS SHALL BE LANDSCAPED AND RE-SEEDED PER THE PROJECT LANDSCAPING PLAN.

INSPECTION AND MAINTENANCE

INSPECTION AND MAINTENANCE OF THE PROTECTIVE CONTROLS THAT ARE A PART OF THIS PLAN SHALL BE PERFORMED AS FOLLOWS:

- IT IS THE RESPONSIBILITY OF THE OPERATOR TO PROVIDE TRAINED INSPECTORS AND TRAINING OF NEW INSPECTORS.
- THE PLAN REQUIRES INSPECTION EVERY 14 DAYS OR WITHIN 24 HOURS OF A STORM OF 0.5 INCH OR GREATER.
- ALL DISTURBED AREAS OF THE SITE, AREAS FOR MATERIAL STORAGE, AND ALL OF THE EROSION AND SEDIMENT CONTROLS THAT WERE IDENTIFIED AS PART OF THE PLAN, SHOULD BE INSPECTED. CONTROLS MUST BE IN GOOD OPERATING CONDITION UNTIL THE AREAS THEY PROTECT HAVE BEEN COMPLETELY STABILIZED AND THE CONSTRUCTION ACTIVITY IS COMPLETE.
- THE INSPECTOR SHOULD NOTE ANY DAMAGES OR DEFICIENCIES IN THE CONTROL MEASURES ON INSPECTION REPORT FORMS TO BE KEPT ON FILE AT THE CONSTRUCTION SITE.
- THE OPERATOR SHOULD CORRECT DAMAGE OR DEFICIENCIES AS SOON AS PRACTICABLE AFTER THE INSPECTION, AND ANY CHANGES THAT MAY BE REQUIRED TO CORRECT DEFICIENCIES IN THE PLAN SHOULD BE MADE AS SOON AS PRACTICABLE AFTER THE INSPECTION.
- A COURSE GRAVEL MAT SHALL BE PLACED AT THE PROJECTED ENTRY TO MITIGATE TRANSPORT OF SEDIMENT ONTO THE ADJACENT PAVED ROADWAYS.
- THE CONTRACTOR SHALL WATER ALL DISTURBED AREAS DAILY DURING DRY PERIODS.
- ALL EARTHWORK OPERATIONS SHALL BE SUSPENDED DURING HIGH WINDS.

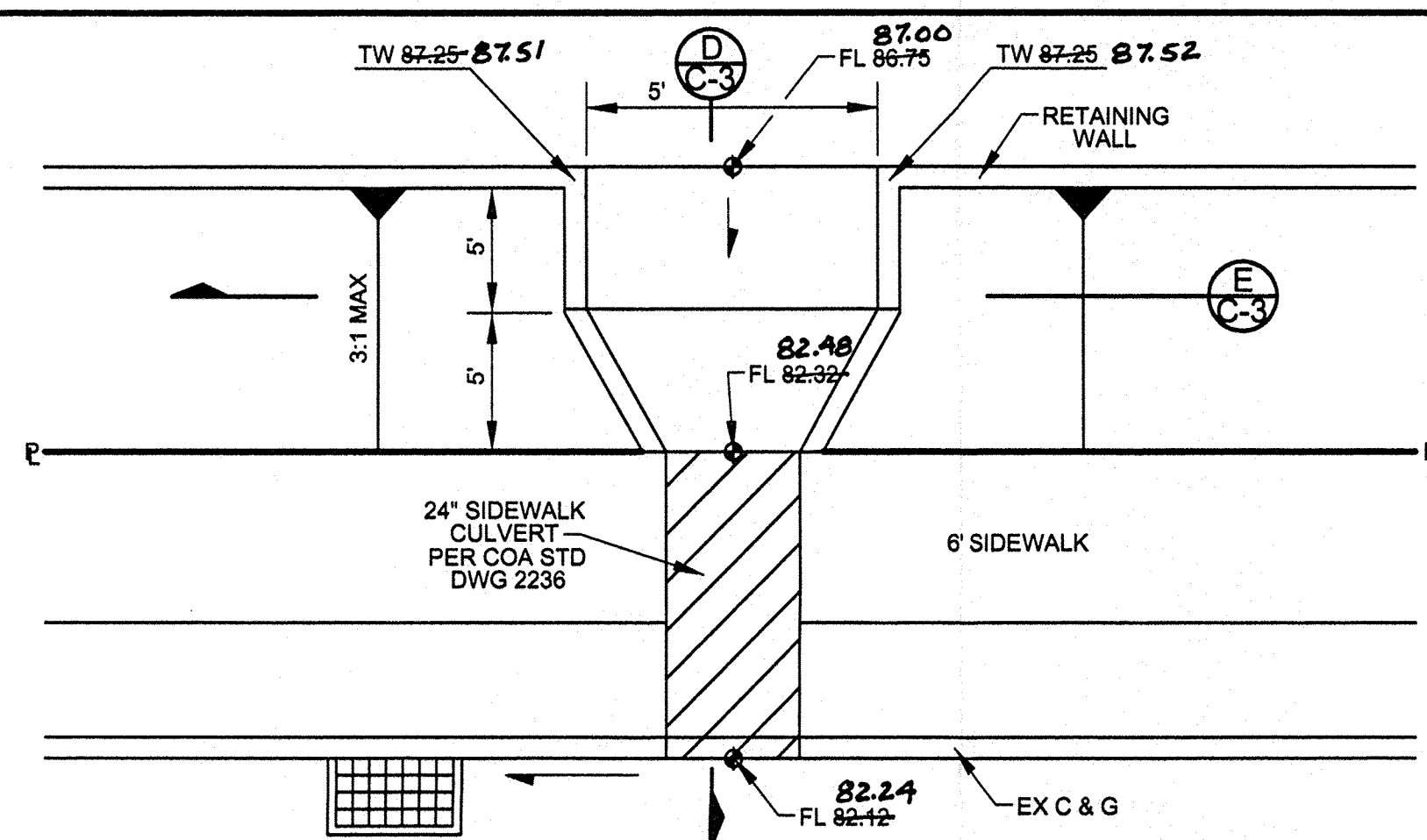


ELEVATION - FILTER DAM (SILT FENCE OPTION)

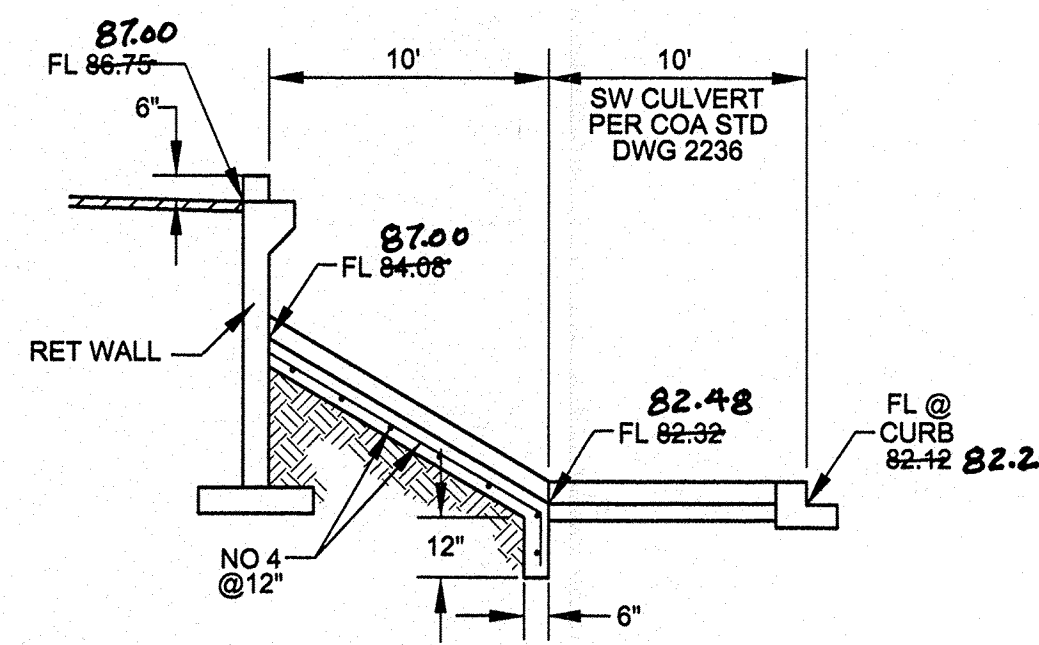
ELEVATION - FILTER DAM (SILT FENCE OPTION)

SILT FENCING DETAILS

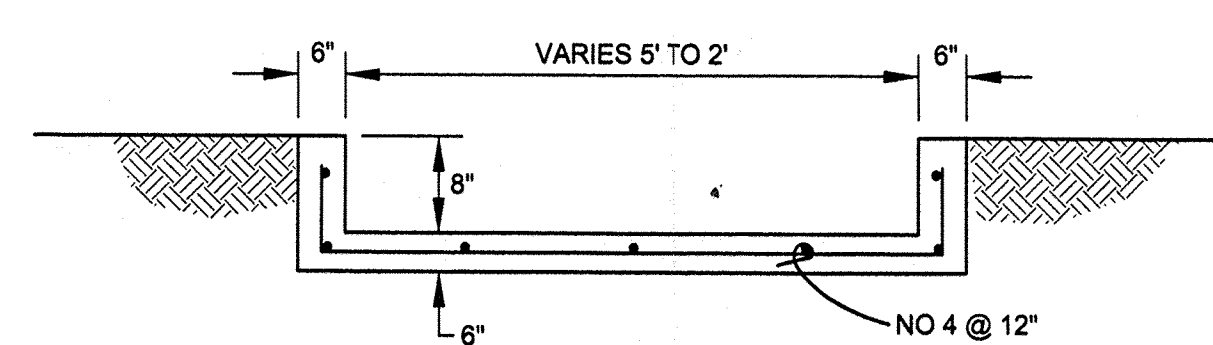
NTS



OUTLET CHANNEL PLAN



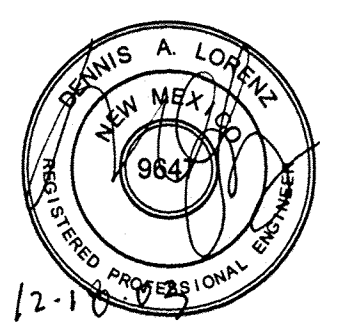
SECTION



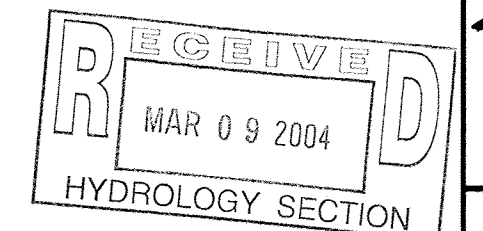
CHANNEL SECTION

TRACT A-3, LAS MARCADAS SUBDIVISION
GRADING AND DRAINAGE DETAILS
ALBUQUERQUE, NEW MEXICO
BLI PROJECT 03521

REVISION DATE



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PHONE: (505) 281-0550
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EMAIL: traulorenz@taps.edu



DATE

12-18-03

SHEET NUMBER

C-3