DRAINAGE PLAN

THIS PROJECT IS PART OF THE APPROVED CLIFFORD WEST BUSINESS PARK MASTER DRAINAGE PLAN (K10-D23) DATED 9-17-97. THE BACKBONE STORM SEWER SYSTEM HAS BEEN BUILT AND ACCEPTED BY THE CITY OF ALBUQUERQUE. AN 18" RCP STORM LATERAL STUB IS PROVIDED FOR LOT 10 AT THE WEST PROPERTY LINE APPROXIMATELY 40 FEET FROM THE SOUTHWEST PROPERTY CORNER. DRAINAGE FROM LOT 11 AND 12 IS PROVIDED THROUGH A 10' WIDE PRIVATE DRAINAGE EASEMENT LOCATED ALONG THE SOUTH PROPERTY LINE OF LOT 12 AND EXTENDING SOUTH BETWEEN LOTS 5 AND 6 TO AN EXISTING 18" RCP STORM SEWER LATERAL STUBBED AT THE RIGHT-OF-WAY LINE WITH AN INVERT = ±17.0'.

RECEIVED
JUL 27 2001
HYDROLOGY SECTION

THE ALLOWABLE DISCHARGE Q(LOT 10) = 0.63 cfs AND Q(LOT 11 & 12) = 2.05 cfs.

SUBASIN 1: THE DEVELOPED CONDITIONS RUNOFF WILL BE RESTRICTED TO THE MAXIMUM ALLOWABLE DISCHARGE THROUGH AN ORIFICE PLATE ATTACHED TO THE END OF THE 18" RCP IN THE JUNCTION BOX. THE ONSITE DRIVEWAY WILL BE USED TO TEMPORARILY DETAIN THE RUNOFF.

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HYDROLOGY SUMMARY (100 YEAR 6 HOUR)

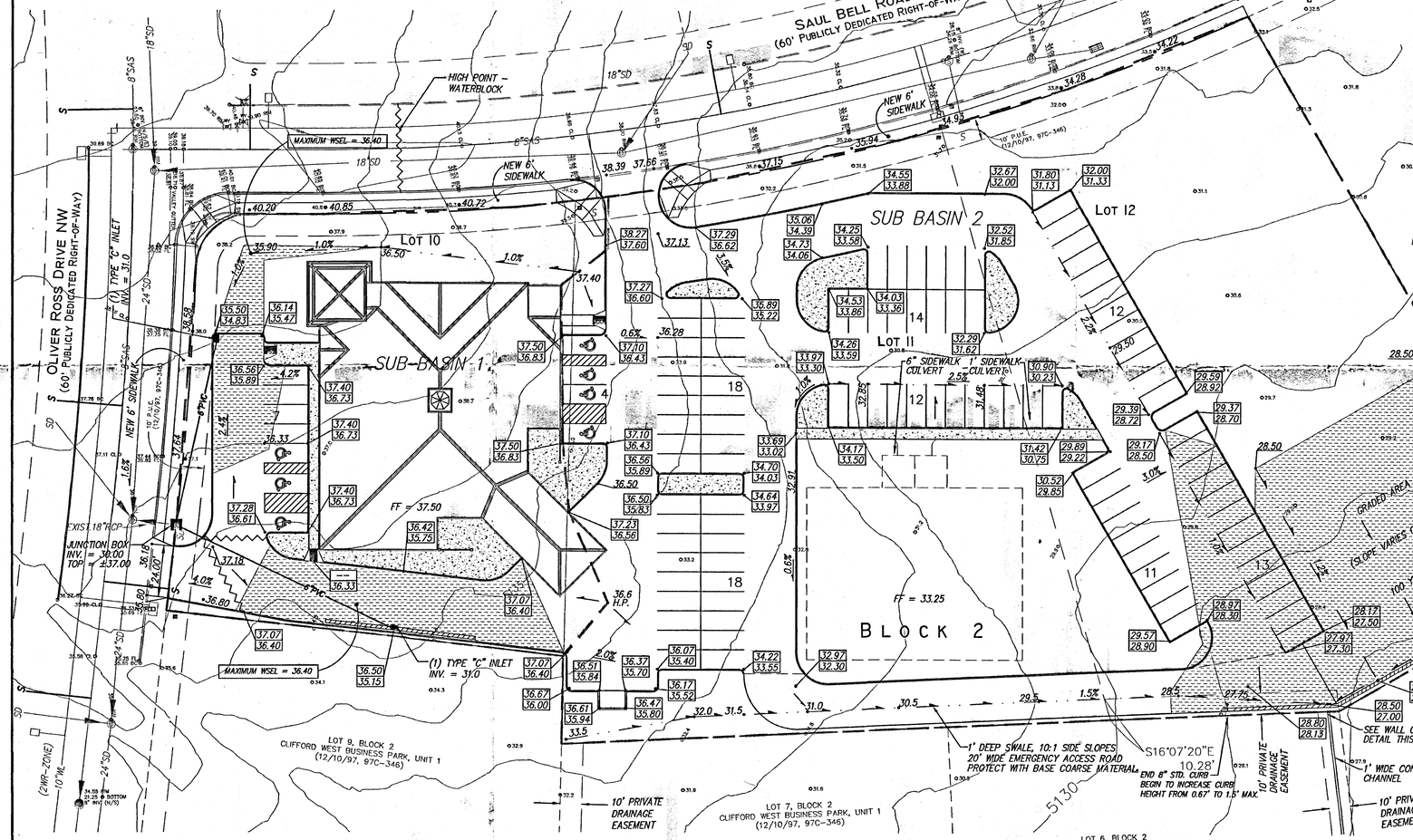
P(1 HR) = 1.90"
P(6 HR) = 2.20"

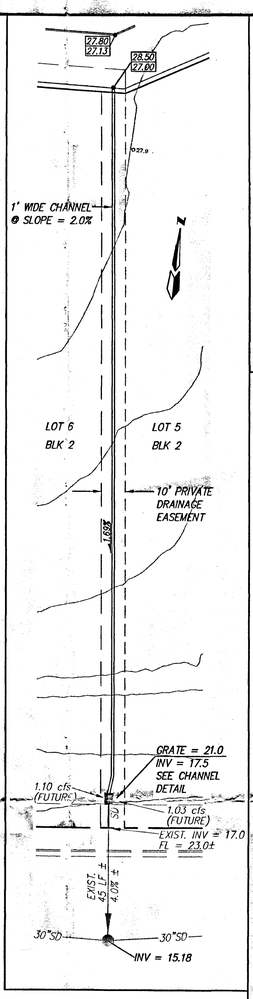
	DEVELOPED Q	ALLOWABLE Q	DESIGN AREA(*)	ORIFICE OPENING SQUARE DIMENSIONS
SUBASIN 1	3.47 cfs	0.63 cfs	0.052517 SQFT.	2.75" x 2.75"
SUBASIN 2	9.86 cfs	2.05 cfs	0.3987 SQFT.	

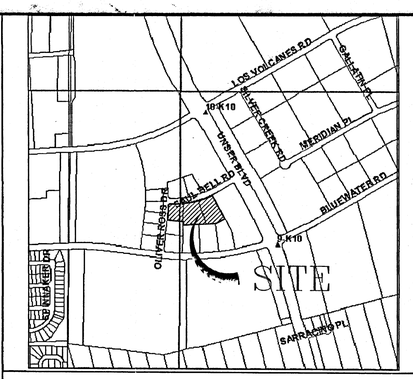
(*) ORIFICE EQN. : Q = 0.6x(AREA)x(2x32.2xH)**1/2

FOR SINGLE "C" INLET
Q = C x L x H**1/2

SIDE Q CAP = (3.0)(2.+2+4)(0.5) **1.5 = 8.48 cfs







VICINITY MAP ZONE MAP: K-9, K-10

NOTES

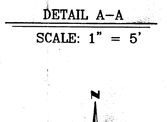
ADD 5100 FOR MEAN SEA LEVEL ELEVATIONS

LEGAL DESCRIPTION

LOTS 10, 11, & 12, BLOCK 2
CLIFFORD WEST BUSINESS PARK, UNIT 1

LEGEND

- EXISTING ELEVATION AT GROUND
- EXISTING SEWER MANHOLE
- EXISTING DRAINAGE MANHOLE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING SEWER SERVICE
- EXISTING TELEPHONE RISER
- EXISTING CABLE TV RISER
- EXISTING FIRE HYDRANT
- EXISTING DROP INLET
- EXISTING LOTS
- EXISTING CURB & GUTTER
- EXISTING WATERLINE
- EXISTING SAS
- EXISTING STORMDRAIN
- EXISTING EASEMENT
- NEW CURB & GUTTER
- NEW BUILDING
- NEW SWALE
- NEW STORM DRAIN
- NEW SPOT ELEVATION
- NEW FLOW
- NEW CONCRETE
- EXTENT OF 100 YR FLOOD PONDING AREA
- NEW SUBASIN BOUNDARY
- CURB HEIGHT VARIES FROM 8" TO 1.5'



DETAIL A-A
SCALE: 1" = 5'

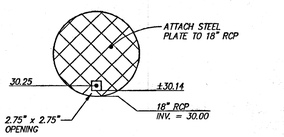
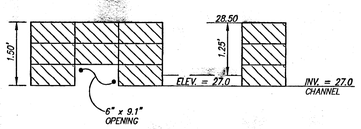
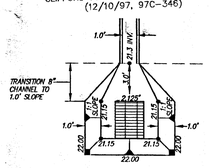


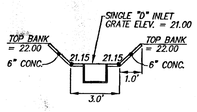
PLATE DETAIL FOR JUNCTION BOX
NTS

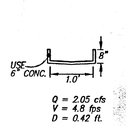


WALL OPENING DETAIL
NTS



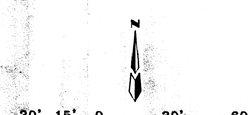
CHANNEL DETAIL
NTS





Q = 2.05 cfs
V = 4.8 fps
D = 0.42 ft.

CHANNEL DETAIL
NTS



SCALE: 1" = 30'

DAME HOELZER
NEW MEXICO
11967
REGISTERED PROFESSIONAL ENGINEER
7-25-01

RECEIVED
JUL 27 2001
HYDROLOGY SECTION

CLIFFORD WEST CHURCH

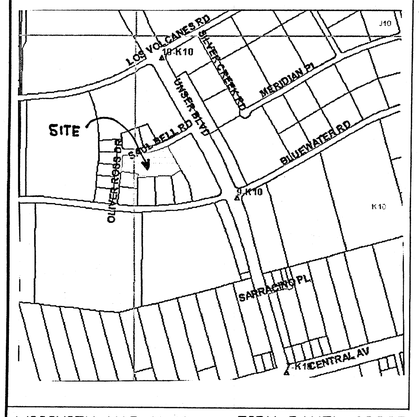
GRADING & DRAINAGE PLAN

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828-2200, FAX (505)797-9539

Designed: DLH	Drawn: ACH	Checked: DMG	Sheet 1 of 1
Scale: 1" = 30'	Date: 02-08-01	Job: A01021	

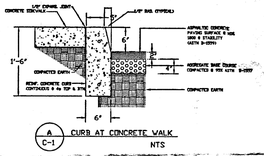
A01021CLC/1021GD30_R2/07-24-01/ACH NHM SPS DLH

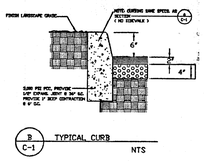
F:\DATA\DWGS\A01J0BS\A1021CLC\1021gd30_R2.dwg Wed Jul 25 08:19:32 2001 by ach



VICINITY MAP K-10 FIRM PANEL 0328D

N





NOTE TO CONTRACTOR:

1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
3. Two working days prior to any excavation, contractor must contact line locating Services (760-1990) for locating existing sub-surface utilities.
4. Prior to construction, the contractor shall excavate and verify the horizonal and vertical location of all potential constructions; Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay to the subject project.
5. Backfill compaction shall be according to commercial use or soils report(s) recommendations.
6. All work on this project shall be performed in accordance with applicable Federal, State and local laws, rules and regulations concerning construction safety and health.
7. Maintenance of this facilities shall be the responsibility of the owner of the property it serves

GRADING/PAVING PLAN

THE FOLLOWING ITEMS CONCERNING LOT 10A BLOCK 2 CLIFFORD WEST BUSINESS PARK UNIT 1 (8570 SAUL BELL RD. N.W.) ARE CONTAINED HEREON:

EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 3.393 ACRES MORE OR LESS, AND IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF SAUL BELL RD. AND OLIVER ROSS DR. N.W. CURRENTLY THE SITE IS OCCUPIED BY A 14,375 SQ. FT. CHURCH FACILITY ALONG WITH ASSOCIATED PAVED PARKING AND LANDSCAPED AREAS. AS SHOWN BY THE FLOOD INSURANCE RATE MAP, PANEL 0328, DATED SEPTEMBER 20, 1996. THIS SITE IS LOCATED WITHIN A DESIGNATED AO FLOOD ZONE. THE MASTER DRAINAGE PLAN FOR CLIFFORD WEST BUSINESS PARK HAS ALREADY ADDRESSED THE FLOD PLAIN ISSUE.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/PAVING PLAN, THE PROPOSED PROJECT WILL CONSIST OF ADDITIONAL NEW ASPHALT PAVING ON THE EAST SIDE OF THE EXISTING PARKING AREA. AN ADDITIONAL 0.763 ACRES OF NEW ASHALT PAVING IS PROPOSED. AN INCREASE OF 2,714 CF (5,456 CF - 2,742 CF = 2,714 CF) OF ADDITIONAL RUN-OFF WILL BE DEVELOPED BY CONSTRUCTING THE ADDITIONAL PAVED PARKING AREA. THE SMALL WALL DESIGNED IN THE ORIGINAL DRAINAGE PLAN TO CONTAIN THE 100-YEAR, 6-HOUR VOLUME WILL BE RAISED SO AS TO ACCOMMODATE THE ADDITIONAL VOLUME. THE OUTLET FLOW RATE PER FILE NUMBER K10-D37 DRAINAGE PLAN WILL STILL REMAIN THE SAME. THE 100-YEAR WATER SURFACE WILL INCREASE SLIGHTLY. THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE BOTH EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRES AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2 WAS USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF GENERATED.

PROJECT AREA = 0.763 ac.
FELLOWSHIP MISSIONARY BAPTIST CHURCH (ADDITIONAL PARKING)
ZONE 1
PRECIPITATION: 360 = 2.20 in.
1440 = 2.66 in.
10day = 3.67 in.

	EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A	0.44 in.	1.29 cfs/ac.
TREATMENT B	0.67 in.	2.03 cfs/ac.
TREATMENT C	0.99 in.	2.87 cfs/ac.
TREATMENT D	1.97 in.	4.37 cfs/ac.

	EXISTING CONDITIONS: AREA	PROPOSED CONDITIONS: AREA
TREATMENT A	0 ac.	0 ac.
TREATMENT B	0 ac.	0 ac.
TREATMENT C	0.763 ac.	0 ac.
TREATMENT D	0 ac.	0.763 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E =(0.44)x(0.00)+(0.67)x(0.00)+(0.99)x(0.76)+(1.97)x(0.00)/ 0.76 ac.
= 0.99 in.
V100-360 =(0.99)x(0.76)/ 12 = 0.062948 ac-ft = 2742 CF

EXISTING PEAK DISCHARGE:

Q100 =(1.29)x(0.00)+(2.03)x(0.00)+(2.87)x(0.76)+(4.37)x(0.00)= 2.19 CFS

PROPOSED EXCESS PRECIPITATION:

Weighted E =(0.44)x(0.00)+(0.67)x(0.00)+(0.99)x(0.00)+(1.97)x(0.76)/ 0.76 ac.
= 1.97 in.
V100-360 =(1.97)x(0.76)/ 12.0 = 0.125259 ac-ft = 5456 CF

V100-1440 =(0.13)+(0.76)x(2.66 - 2.20)/ 12 = 0.154508 ac-ft = 6730 CF

V100-10day =(0.13)+(0.76)x(3.67 - 2.20)/ 12 = 0.218727 ac-ft = 9528 CF

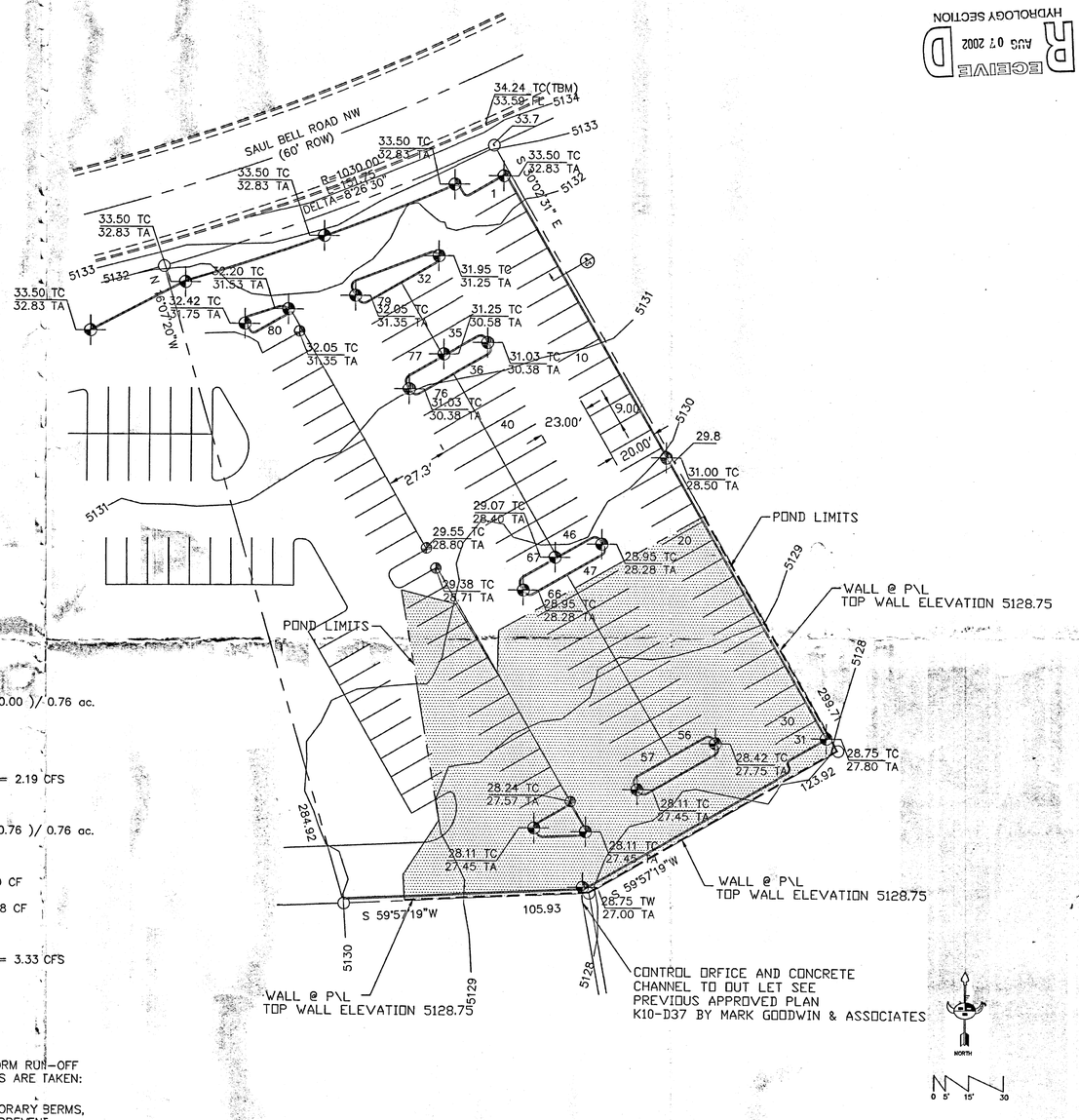
PROPOSED PEAK DISCHARGE:

Q100 =(1.29)x(0.00)+(2.03)x(0.00)+(2.87)x(0.00)+(4.37)x(0.76)= 3.33 CFS

INCREASE 3.33 CFS - 2.19 CFS = 1.13 CFS

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN:
   A. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
   B. ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
2. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THEREON.



SYMBOL LEGEND

EXISTING CONTOUR	5129
PROPOSED CONTOUR	27.00
PROPOSED SPOT ELEVATION	27.50
EXISTING SPOT ELEVATION	

ABBREVIATION LEGEND

TOP OF CURB	- TC = 27.25
FLOWLINE	- FL = 26.57
TOP OF WALL	- TW = 29.00

EXISTING OR PROPOSED CONCRETE SURFACE

LEGAL DESCRIPTION

A PORTION OF LOT 10A, BLCK 2, CLIFFORD WEST BUSINESS PARK, UNIT 1
BERNALILLO COUNTY, ALBUQUERQUE
NEW MEXICO.

BENCHMARK:

TOP OF EXISTING CURB AT THE NORTHEAST CORNER OF SITE

ELEVATION: 5134.24 (M.S.L.),

RECEIVED
AUG 07 2002
HYDROLOGY SECTION

DAVID GATTERMAN
NEW MEXICO
14920
REGISTERED PROFESSIONAL ENGINEER
8/5/02

JOB NO:
DATE: JULY 2002
REVISIONS

Sheet Title
GRADING/PAVING PLAN

Drawn By: BJM & HH Checked By: BJM & HH

ADDITIONAL PARKING

Project Name
FELLOWSHIP MISSIONARY BAPTIST CHURCH
8570 SAUL BELL RD. NW
ALBUQUERQUE, NEW MEXICO

SHEET NO.
GP

DRAINAGE PLAN

THIS PROJECT IS PART OF THE APPROVED CLIFFORD WEST BUSINESS PARK MASTER DRAINAGE PLAN (K10–D23) DATED 9–17–97. THE BACKBONE STORM SEWER SYSTEM HAS BEEN BUILT AND ACCEPTED BY THE CITY OF ALBUQUERQUE. AN 18" RCP STORM LATERAL STUB IS PROVIDED FOR LOT 10 AT THE WEST PROPERTY LINE APPROXIMATELY 40 FEET FROM THE SOUTHWEST PROPERTY CORNER. DRAINAGE FROM LOT 11 AND 12 IS PROVIDED THROUGH A 10' WIDE PRIVATE DRAINAGE EASEMENT LOCATED ALONG THE SOUTH PROPERTY LINE OF LOT 12 AND EXTENDING SOUTH BETWEEN LOTS 5 AND 6 TO AN EXISTING 18" RCP STORM SEWER LATERAL STUBBED AT THE RIGHT–OF–WAY LINE WITH AN INVERT = ±17.0'.

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FOR SINGLE "C" INLET
Q = C x L x H**1/2

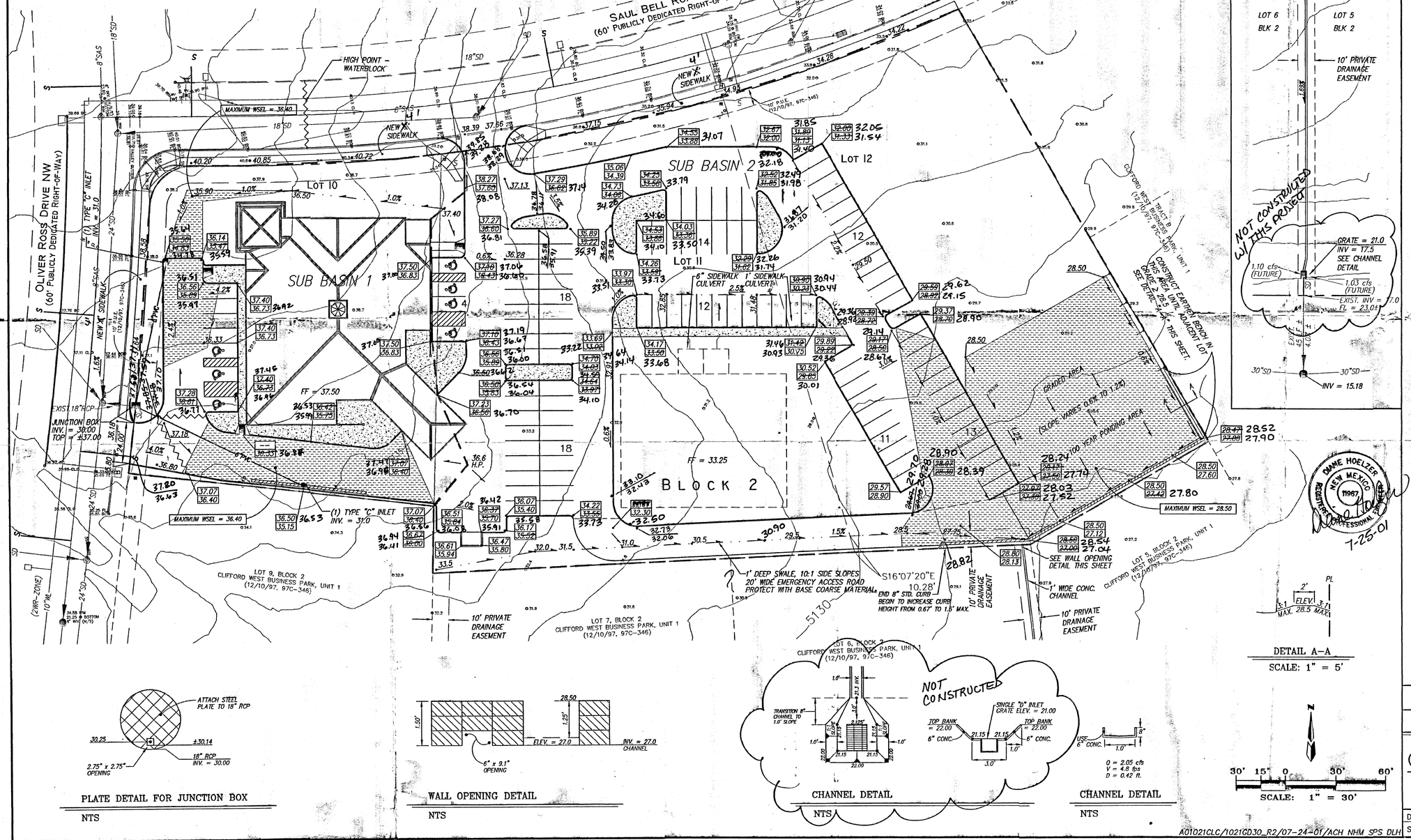
SIDE Q CAP = (3.0)(2.+2+4)(0.5) **1.5 = 8.48 cfs

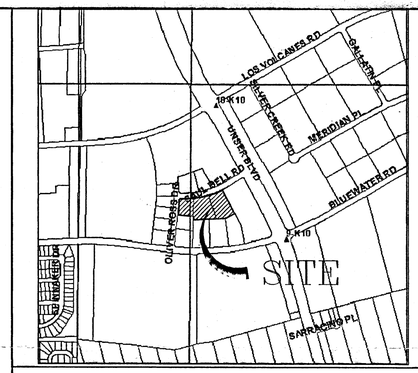
RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the contractors, Custom Grading Inc. and Cambro Construction Inc., and by the surveyor, Survey Southwest Ltd., and reflects the construction as actually accomplished. This plan as constructed is in substantial compliance with the Approved Plan.

Diane Hoelzer 8-28-02
Diane Hoelzer, PE NMPE 11967

DIANE HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER





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DIANE HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER 7-25-01

RECEIVED AUG 29 2002 HYDROLOGY SECTION

PLATE DETAIL FOR JUNCTION BOX
NTS

WALL OPENING DETAIL
NTS

CHANNEL DETAIL
NTS

Q = 2.05 cfs
V = 4.8 fps
D = 0.42 ft.

CHANNEL DETAIL
NTS

DETAIL A–A
SCALE: 1" = 5'

SCALE: 1" = 30'

CLIFFORD WEST CHURCH
GRADING & DRAINAGE PLAN

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828–2200, FAX (505)797–9539

Designed: DLH	Drawn: ACH	Checked: DMG	Sheet 1 of 1
Scale: 1" = 30'	Date: 02–08–01	Job: A01021	

A01021CLC/1021GD30_R2/07–24–01/ACH NHM SPS DLH

NO C.O. UNTIL OUTLET CONSTRUCTED
CHANNEL COMPLETED & SWALES
ENERGY ROAD CONSTRUCTED.

...\a1\ALDWGS\A01JOBS\A1021CLC\1021gd30_R2.dwg Wed Jul 25 08:19:32 2001 by ach

DRAINAGE PLAN

THIS PROJECT IS PART OF THE APPROVED CLIFFORD WEST BUSINESS PARK MASTER DRAINAGE PLAN (K10-023) DATED 9-17-97. THE BACKBONE STORM SEWER SYSTEM HAS BEEN BUILT AND ACCEPTED BY THE CITY OF ALBUQUERQUE. AN 18" RCP STORM LATERAL STUB IS PROVIDED FOR LOT 10 AT THE WEST PROPERTY LINE APPROXIMATELY 40 FEET FROM THE SOUTHWEST PROPERTY CORNER. DRAINAGE FROM LOT 11 AND 12 IS PROVIDED THROUGH A 10' WIDE PRIVATE DRAINAGE EASEMENT LOCATED ALONG THE SOUTH PROPERTY LINE OF LOT 12 AND EXTENDING SOUTH BETWEEN LOTS 5 AND 6 TO AN EXISTING 18" RCP STORM SEWER LATERAL STUBBED AT THE RIGHT-OF-WAY LINE WITH AN INVERT = ±17.0'.

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Diane Hoelzer 8-28-02
Diane Hoelzer, PE NMPE 11967

DIANE HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER

(1) Swale in emergency access Rd. 9-25-02

SAUL BELL ROAD NW (60' PUBLICLY DEDICATED RIGHT-OF-WAY)

OLIVER ROSS DRIVE NW (60' PUBLICLY DEDICATED RIGHT-OF-WAY)

HIGH POINT - WATERBLOCK

NEW 4' SIDEWALK

NEW 5' SIDEWALK

MAXIMUM WSEL = 36.40

SUB BASIN 1

SUB BASIN 2

LOT 10

LOT 11

LOT 12

LOT 13

LOT 14

LOT 15

LOT 16

LOT 17

LOT 18

BLOCK 2

FF = 37.50

FF = 33.25

JUNCTION BOX INV. = 38.00 TOP = ±37.00

EXIST. 18"RCP

(1) TYPE "C" INLET INV. = 37.0

(1) TYPE "C" INLET INV. = 31.0

6" SIDEWALK CULVERT

1' SIDEWALK CULVERT

36.6 H.P.

ROCK LANDSCAPING

(6"-12") DEEP SWALE, 10:1 SIDE SLOPES; 20' WIDE EMERGENCY ACCESS ROAD PROTECT WITH BASE COARSE MATERIAL

S16°07'20"E 10.28'

END 8" STD. CURB DETAIN TO INCREASE CURB HEIGHT FROM 0.67" TO 1.5" MAX.

CONSTRUCT EARTHEN BERM IN THIS AREA UNTIL ADJACENT LOT GRADED SEE DETAIL "A" THIS SHEET.

GRADED AREA (SLOPE VARIES 0.5% TO 1.5%)

100 YEAR PONDING AREA

SEE WALL OPENING DETAIL THIS SHEET

1' WIDE CONC. CHANNEL

10' PRIVATE DRAINAGE EASEMENT

10" PRIVATE DRAINAGE EASEMENT

LOT 9, BLOCK 2 CLIFFORD WEST BUSINESS PARK, UNIT 1 (12/10/97, 97C-346)

LOT 7, BLOCK 2 CLIFFORD WEST BUSINESS PARK, UNIT 1 (12/10/97, 97C-346)

LOT 5, BLOCK 2 CLIFFORD WEST BUSINESS PARK, UNIT 1 (12/10/97, 97C-346)

LOT 6, BLOCK 2 CLIFFORD WEST BUSINESS PARK, UNIT 1 (12/10/97, 97C-346)

CLIFFORD WEST DRIVE NW (60' PUBLICLY DEDICATED RIGHT-OF-WAY)

10' P.U.E. (12/10/97, 97C-346)

MAXIMUM WSEL = 28.50

NOT CONSTRUCTED

TRANSITION 8" CHANNEL TO 1.0' SLOPE

SINGLE "D" INLET GRATE ELEV. = 21.00

TOP BANK = 22.00

6" CONC.

Q = 2.05 cfs
V = 4.8 fps
D = 0.42 ft.

PLATE DETAIL FOR JUNCTION BOX

ATTACH STEEL PLATE TO 18" RCP

30.25

±30.14

18" RCP INV. = 30.00

2.75" x 2.75" OPENING

NTS

WALL OPENING DETAIL

1.50'

1.25'

ELEV. = 27.0

INV. = 27.0 CHANNEL

6" x 9.1" OPENING

NTS

CHANNEL DETAIL

NTS

CHANNEL DETAIL

NTS

DETAIL A-A

SCALE: 1" = 5'

SCALE: 1" = 30'

1" WIDE CHANNEL @ SLOPE = 2.0%

GRATE = 21.0
INV = 17.5
SEE CHANNEL DETAIL

1.10 cfs (FUTURE)

1.03 cfs (FUTURE)

EXIST. INV = 17.0
FL = 23.04

30"SD

INV = 15.18

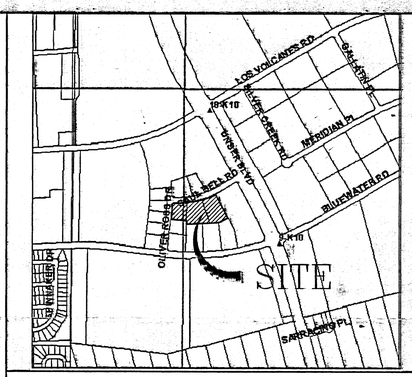
NOT CONSTRUCTED W/ THIS PHASE

LOT 6 BLK 2

LOT 5 BLK 2

10' PRIVATE DRAINAGE EASEMENT

VICINITY MAP



ZONE MAP: K-9, K-10

NOTES

ADD 5100 FOR MEAN SEA LEVEL ELEVATIONS

LEGAL DESCRIPTION

LOTS 10, 11, & 12, BLOCK 2
CLIFFORD WEST BUSINESS PARK, UNIT 1

LEGEND

- 00.0 — EXISTING ELEVATION AT GROUND
- (S) — EXISTING SEWER MANHOLE
- (D) — EXISTING DRAINAGE MANHOLE
- W — EXISTING WATER METER
- W — EXISTING WATER VALVE
- S — EXISTING SEWER SERVICE
- T — EXISTING TELEPHONE RISER
- C — EXISTING CABLE TV RISER
- EXISTING FIRE HYDRANT
- EXISTING DROP INLET
- EXISTING LOTS
- EXISTING CURB & GUTTER
- 10"W — EXISTING WATERLINE
- 8"SAS — EXISTING SAS
- 24"SD — EXISTING STORMDRAIN
- EXISTING EASEMENT
- NEW CURB & GUTTER
- NEW BUILDING
- NEW SWALE
- NEW STORM DRAIN
- 28.18 / 27.51 — NEW SPOT ELEVATION
- 0.6% — NEW FLOW
- NEW CONCRETE
- EXTENT OF 100 YR FLOOD PONDING AREA
- NEW SUBASIN BOUNDARY
- CURB HEIGHT VARIES FROM 8" TO 1.5'

RECEIVED
SEP 25 2002
HYDROLOGY SECTION

DIANE HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER
9-25-01

CLIFFORD WEST CHURCH
GRADING & DRAINAGE PLAN

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828-2200, FAX (505)797-9539

Designed: DH	Drawn: ACH	Checked: DMG	
Scale: 1" = 30'	Date: 02-08-01	Job: AUTOZ1	Sheet 1 of 1

AUTOZ1\CLC\10Z1GD301.R2 07-24-01/ACH NAD83 SPCS DEM

Wed Jul 25 08:19:32 2001 by ach

PROJECT # 1000918

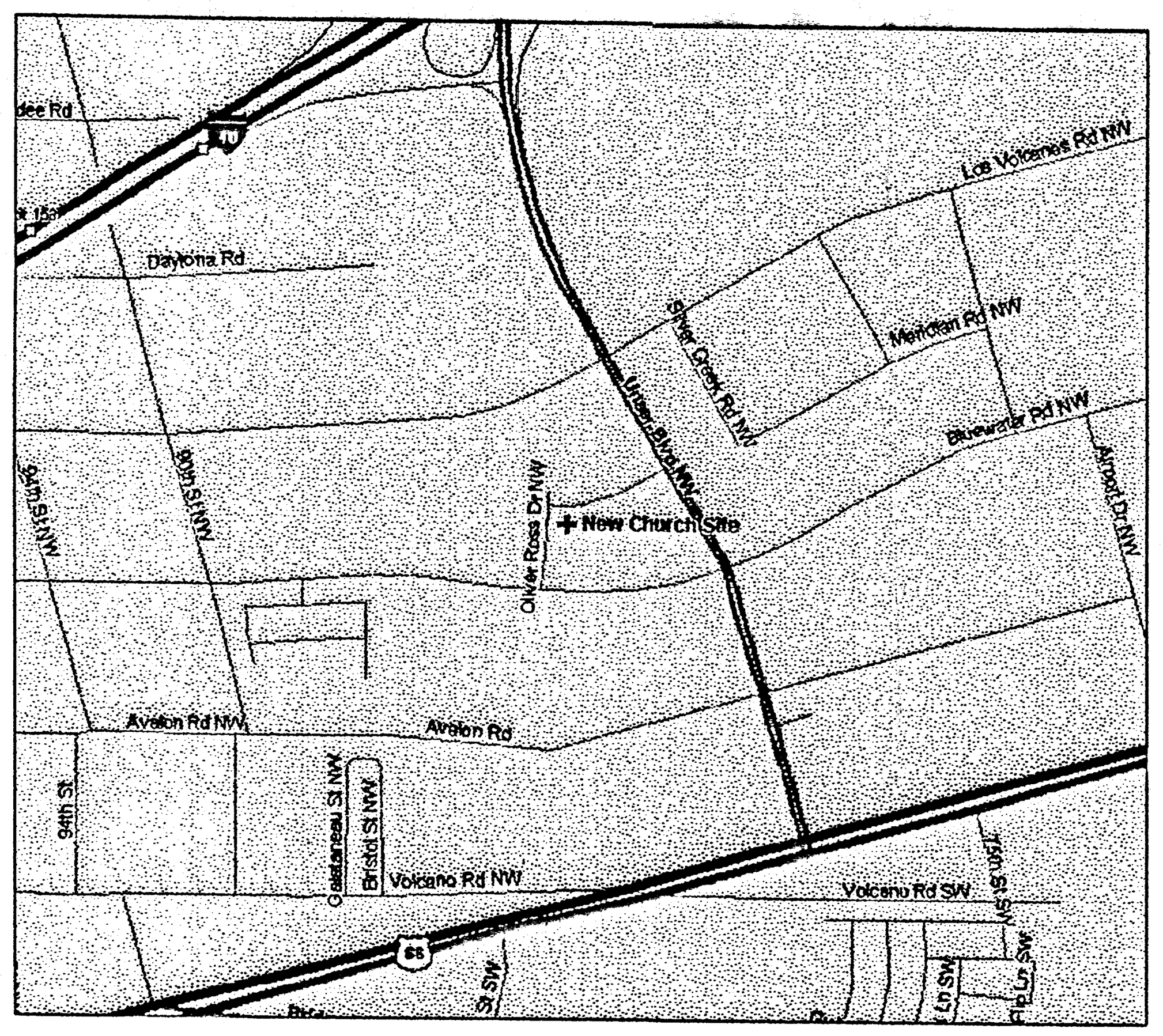
Application # 01450-00000-00648

Site Development Plan for Building Permit

The site development plan is consistant with the Clifford West Business Park Master Development Plan approved 12-9-97 through DRB No. Z-97-11 and (plat) 97-138.

Planning Director, City of Albuquerque	Date 8/30/01
City Engineer, AMAFCA	Date 5/30/01
Transportation Development	Date 8-20-01
Parks and Recreation	Date 5-30-01
Utility Development	Date 5-30-01
Solid Waste Department Approval	Date

RECEIVED SEP 25 2002 HYDROLOGY SECTION



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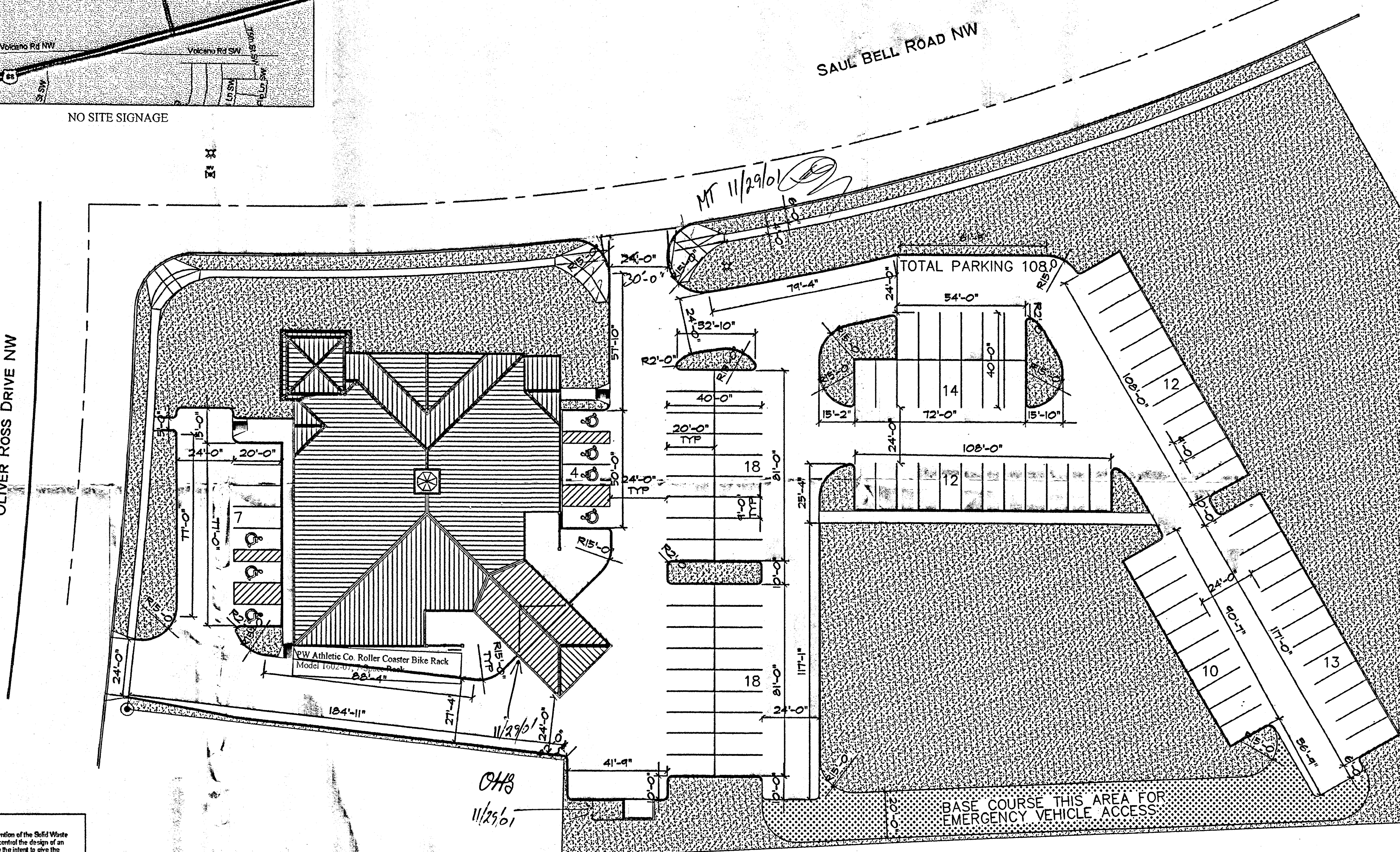
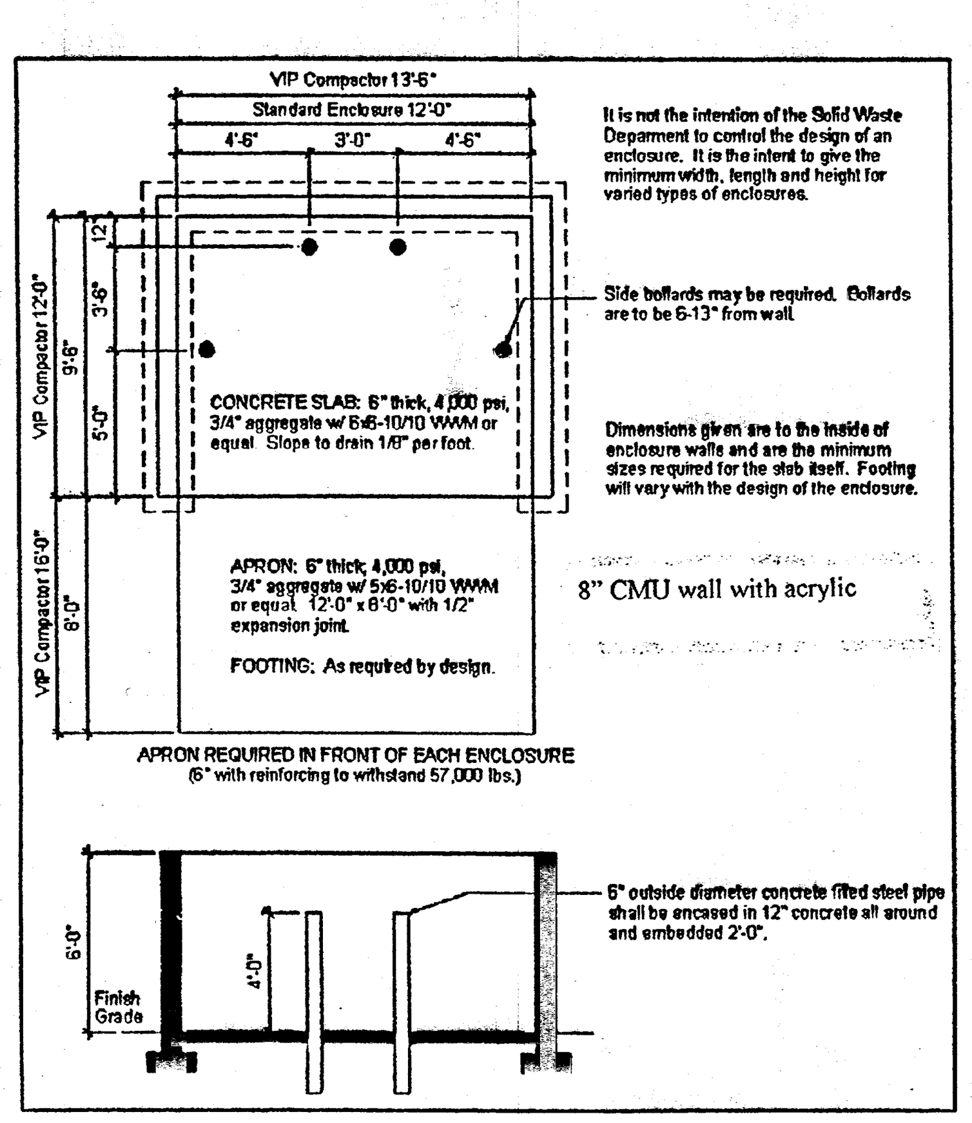
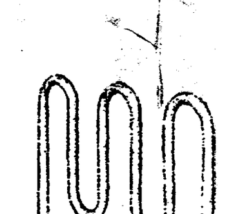
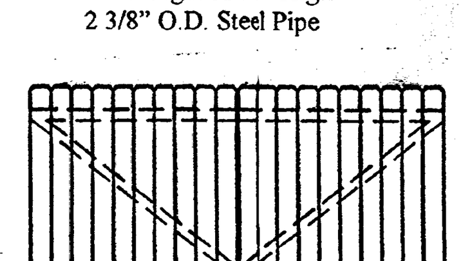






Roller Coaster Bike Rack
64" Length X 36" High
2 3/8" O.D. Steel Pipe



TYPICAL WOODEN WASTE CONTAINER SCREENING GATE

THIS IS TO CERTIFY AS TO THE IMPROVEMENTS SHOWN ON THIS DRAWING ONLY. AS NOTATED.
E. RALPH WALDEN
DIRECTOR OF DESIGN FOR PAUL & ASSOC. INC.

8-21-01

1 C1.01 SITE PLAN
FILE: 01-site SCALE: 1"=30'-0"

PLAN NORTH

SCALE: 1" = 30'

RECEIVED SEP 25 2002 HYDROLOGY SECTION

SHEET FILE NAME: ALB-SITE
DRAWN BY: RDW, CRY
CHECKED BY:
APPROVED BY:
DATE: 03/19/01
REVISIONS: 1 JUNE 28, 2001

PAUL & ASSOCIATES, INC.
CHURCH BUILDING CONSTRUCTION MANAGEMENT
SIEBENLIST ★ ARCHITECTS
TYLER, TEXAS

A NEW FACILITY FOR THE FELLOWSHIP MISSIONARY BAPTIST CHURCH
ALBUQUERQUE, NEW MEXICO

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SHEET C1.01

E:\Albuquerque-Fellowship MBC\Traylor\032201\ALB-SITE.dwg Wed Aug 15 14:36:19 2001 Plotted by Chad

DRAINAGE PLAN

THIS PROJECT IS PART OF THE APPROVED CLIFFORD WEST BUSINESS PARK MASTER DRAINAGE PLAN (K10-D23) DATED 9-17-97. THE BACKBONE STORM SEWER SYSTEM HAS BEEN BUILT AND ACCEPTED BY THE CITY OF ALBUQUERQUE. AN 18" RCP STORM LATERAL STUB IS PROVIDED FOR LOT 10 AT THE WEST PROPERTY LINE APPROXIMATELY 40 FEET FROM THE SOUTHWEST PROPERTY CORNER. DRAINAGE FROM LOT 11 AND 12 IS PROVIDED THROUGH A 10' WIDE PRIVATE DRAINAGE EASEMENT LOCATED ALONG THE SOUTH PROPERTY LINE OF LOT 12 AND EXTENDING SOUTH BETWEEN LOTS 5 AND 6 TO AN EXISTING 18" RCP STORM SEWER LATERAL STUBBED AT THE RIGHT-OF-WAY LINE WITH AN INVERT = ±17.0'.

THE ALLOWABLE DISCHARGE Q(LOT 10) = 0.63 cfs AND Q(LOT 11 & 12) = 2.05 cfs.

SUBASIN 1: THE DEVELOPED CONDITIONS RUNOFF WILL BE RESTRICTED TO THE MAXIMUM ALLOWABLE DISCHARGE THROUGH AN ORIFICE PLATE ATTACHED TO THE END OF THE 18" RCP IN THE JUNCTION BOX. THE ONSITE DRIVEWAY WILL BE USED TO TEMPORARILY DETAIN THE RUNOFF.

SUBASIN 2: THE DEVELOPED CONDITIONS RUNOFF WILL BE RESTRICTED TO THE MAXIMUM ALLOWABLE DISCHARGE THROUGH A RESTRICTED OPENING IN THE FLOODWALL ALONG THE SOUTH PROPERTY LINE BEFORE DISCHARGING INTO A CONCRETE CHANNEL AND THEN INTO THE EXISTING 18" RCP AS SHOWN ON THIS GRADING AND DRAINAGE PLAN.

HYDROLOGY SUMMARY (100 YEAR 6 HOUR)

P(1 HR) = 1.90"
P(6 HR) = 2.20"

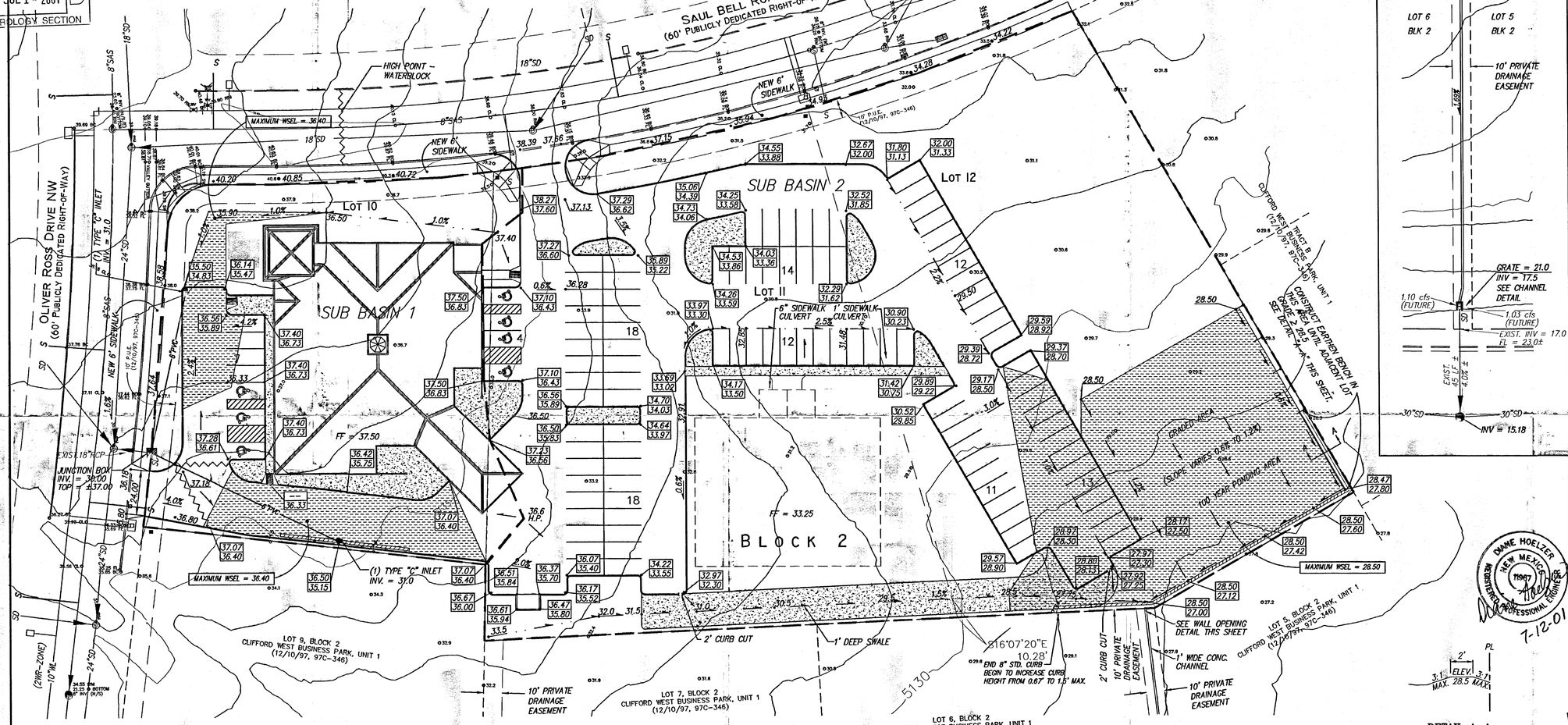
	DEVELOPED Q	ALLOWABLE Q	DESIGN AREA(*)	ORIFICE OPENING SQUARE DIMENSIONS
SUBASIN 1	3.47 cfs	0.63 cfs	0.052517 SQFT.	2.75" x 2.75"
SUBASIN 2	9.86 cfs	2.05 cfs	0.3907 SQFT.	

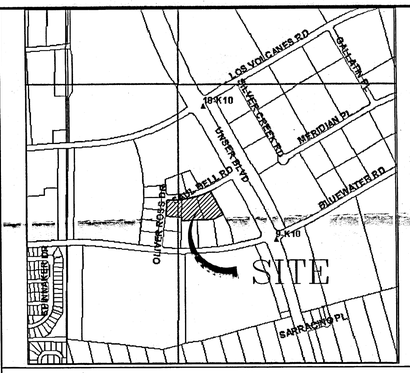
(*) ORIFICE EQN. : Q = 0.6x(AREA)x(2x32.2xH)**1/2

FOR SINGLE "C" INLET
Q = C x L x H**1/2

SIDE Q CAP = (3.0)(2.+2+4)(0.5)**1.5 = 8.48 cfs

RECEIVED JUL 12 2001 HYDROLOGY SECTION





VICINITY MAP ZONE MAP: K-9, K-10

NOTES

ADD 5100 FOR MEAN SEA LEVEL ELEVATIONS

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- EXISTING CURB & GUTTER
- EXISTING WATERLINE
- EXISTING SAS
- EXISTING STORMDRAIN
- EXISTING EASEMENT
- NEW CURB & GUTTER
- NEW BUILDING
- NEW SWALE
- NEW STORM DRAIN
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- EXTENT OF 100 YR FLOOD PONDING AREA
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- CURB HEIGHT VARIES FROM 8" TO 1.5'

DIANE HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER 7-12-01

RECEIVED JUL 12 2001 HYDROLOGY SECTION

DETAIL A-A
SCALE: 1" = 5'

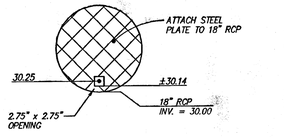
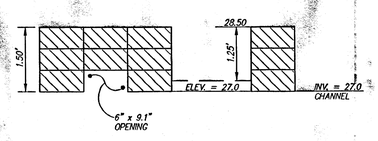
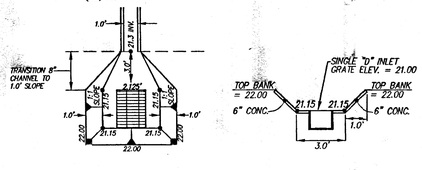


PLATE DETAIL FOR JUNCTION BOX
NTS



WALL OPENING DETAIL
NTS



CHANNEL DETAIL
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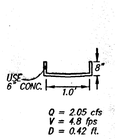

CHANNEL DETAIL
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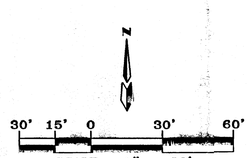

CLIFFORD WEST CHURCH
GRADING & DRAINAGE PLAN

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
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Designed: DLH	Drawn: ACH	Checked: DMG	Sheet 1 of 1
Scale: 1" = 30'	Date: 02-08-01	Job: A01021	

A01021CLC/1021GD30_R1/07-12-01/ACH NHM SPS

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