

CITY OF ALBUQUERQUE



January 18, 2016

Richard J. Berry, Mayor

Dennis A. Lorenz, P.E.
Lorenz Design & Consulting, LLC
2501 Rio Grande Blvd NW, Suite A
Albuquerque, NM, 87104

**RE: Holiday Bowl
Grading and Drainage Plan
Engineer's Stamp Date 12-15-2015 (File: J19D082A)**

Dear Mr. Lorenz:

Based upon the information provided in your submittal received 12-16-2015, the above referenced Grading and Drainage Plan is approved for Building Permit and SO-19 Permit.

Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

A copy of this approval letter must be on hand when applying for the excavation/barricading permit. The work in the City ROW must be inspected and accepted. The Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Orig: Drainage file



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: HOLIDAY BOWL BUILDING ADDITION Building Permit #: _____ City Drainage #: 190082A
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: TRACT G, LA MESA DEL NORTE ADDITION
City Address: 7515 LOMAS BOULEVARD NE

Engineering Firm: LORENZ DESIGN & CONSULTING, LLC Contact: DENNIS LORENZ
Address: 2501 RIO GRANDE BLVD NW, SUITE A, ALBUQUERQUE, NEW MEXICO 87104
Phone#: 505-888-6088 Fax#: 505-242-6655 E-mail: DENNISL@LORENZNM.COM

Owner: GARY SKIDMORE Contact: GARY SKIDMORE
Address: 7515 LOMAS BLVD NE, ALBUQUERQUE, NEW MEXICO 871110
Phone#: 505-268-3308 Fax#: _____ E-mail: _____

Architect: DAVIS VESICA Contact: DAVID VESICA
Address: 1012 MARQUEZ PLACE, # 310b, SANTA FE, NEW MEXICO 87505
Phone#: 505-294-1665 Fax#: _____ E-mail: VESICA@SONIC.NET

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☐ ENGINEER/ ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☒ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

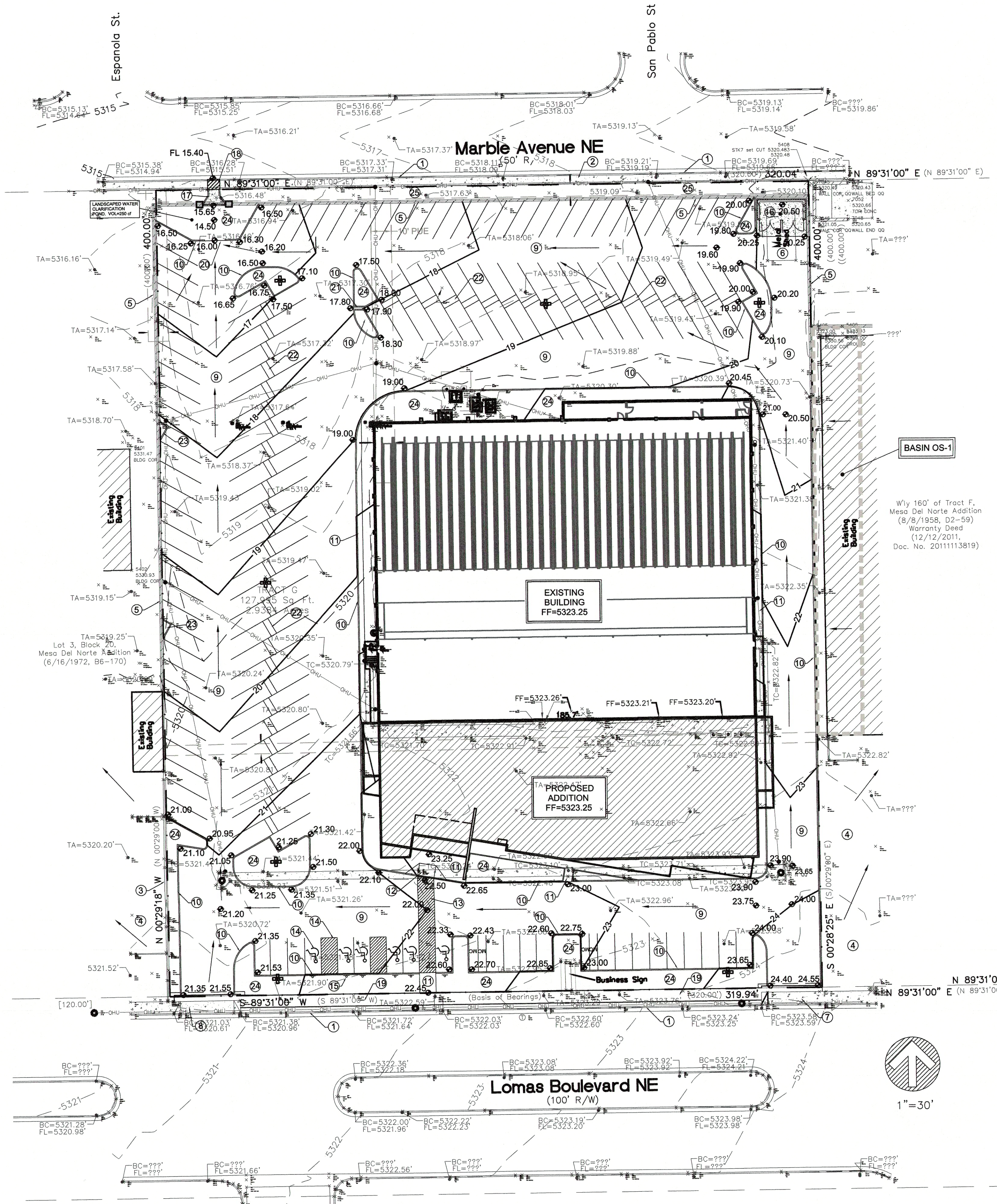
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☒ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____



RECEIVED
12-16-15

DATE SUBMITTED: DECEMBER 16, 2015 By: DENNIS LORENZ, PE

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____



**DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY
NOTICE TO CONTRACTOR**

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
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 STANDARD
SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 1985 EDITION, AS AMENDED THROUGH UPDATE NO. 7.
3. THREE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING
SERVICE.
785-1234 FOR THE LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL
CONSTRUCTIONS. 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 TRAFFIC/STREET USE.
6. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING
SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS: _____
INSPECTOR _____ DATE _____

SEE SITE DEMOLITION
PLAN FOR REMOVAL
AND DISPOSAL LIMITS

IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE,
EFFECTIVE MAY 22, 2014, ALL NEW DEVELOPMENT PROJECTS ARE REQUIRED TO
MANAGE THE RUNOFF WHICH OCCURS DURING THE 90TH PERCENTILE STORM
EVENT. IN ORDER TO COMPLY WITH THIS CRITERIA, WHERE PRACTICAL, ALL
SURFACE DRAINAGE SHALL BE ROUTED THROUGH LANDSCAPED AREAS BEFORE
RELEASE INTO DOWNSTREAM DRAINAGE FACILITIES. THIS PLAN RECOMMENDS
ALL LANDSCAPED AREAS BE DEPRESSED A MINIMUM OF 3-INCHES BELOW THE
ADJACENT PAVED SURFACE TO RETAIN THE FIRST FLUSH RUNOFF.

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

Pursuant to the Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Grading and Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the renovation of the Holiday Bowling Center, located at 7515 Lomas Blvd NE. The renovation includes a 28,000 square foot building addition with paving, landscaping, utility, grading, and drainage improvements to support the project. The purpose of this Plan is to support building permit approval. The scope of this plan is to present grading and drainage criteria for the safe management of excess runoff impacting the site from upstream drainage basins, and controlling excess runoff from the project site in a well-managed, non-erosive manner.

EXISTING CONDITIONS

The property is located at 7515 Lomas Blvd NE, between Pennsylvania Street and Wyoming Blvd NE. The site is presently fully developed. The Holiday Bowling Center was developed in the 1950's. The existing 23,000 square foot building was developed in accordance with the criteria in force at the time. The site is fully surfaced with asphalt pavement. No Landscaping improvements are present.

Site topography slopes to the northwest. All excess runoff flows north by paved swales within the parking lot to the northwest corner of the site, where flows drain through an existing block wall to Marble Avenue NE. The existing drainage outlet has become clogged. There is no evidence that the site drains freely to Marble Avenue. It appears that excess runoff ponds at the northwest corner of the site. The east and west property boundaries are sealed by solid perimeter walls. A portion of the building located to the east drains into the side yard of the site (Basin OS-1). The remainder of the property to the east drains away from the site. No other off-site flows impact the site.

As shown by the FIRM Panel (Sheet C-3), the site does not lie within a mapped 100 year Flood Zone.

PROPOSED IMPROVEMENTS

As stated above, the project consists of the construction of a 28,000 square foot building addition with paving, landscaping, utility, grading, and drainage improvements. Where practical all developed runoff will be routed through landscaping to capture the first flush before release into the perimeter streets. All excess runoff will be managed by respecting historical drainage conditions. All excess runoff will drain the northwest corner of the site. A new drainage structure will be provided to safely drain developed flows through a sidewalk culvert to Marble Avenue. SO-15 permitting will apply. First Flush volume is provided as required by Ordinance.

Construction will disturb an area of more than 1.0 acres; therefore a Storm Water Pollution Prevention Plan will be required.

CALCULATIONS

The calculations shown hereon define the 100-year/8 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

PROJECT HYDROLOGY									
Holiday Bowling Center									
ZONE:		3		AHYMO					
P HOUR		2.60							
P 10 DAY		4.90							
EXISTING CONDITIONS									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	
SITE	2.94	0.00	0.04	0.00	2.94	2.34	14.86	0.573	
OS-1	0.10	0.00	0.00	0.00	0.10	2.36	0.50	0.020	
PROPOSED CONDITIONS									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	
SITE	2.94	0.00	0.11	0.22	2.61	2.23	14.15	0.545	
OS-1	0.10	0.00	0.00	0.00	0.10	2.36	0.50	0.020	

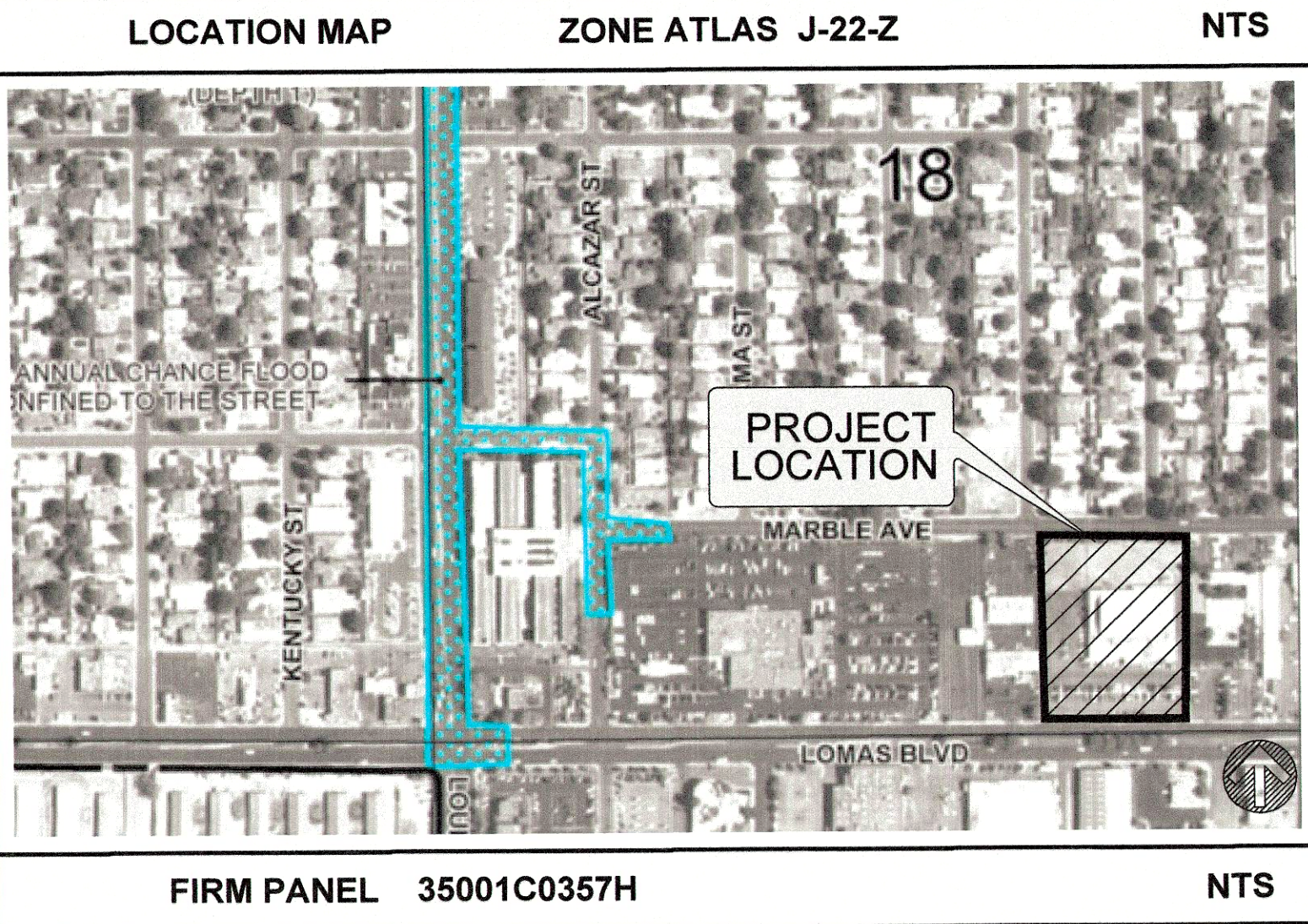
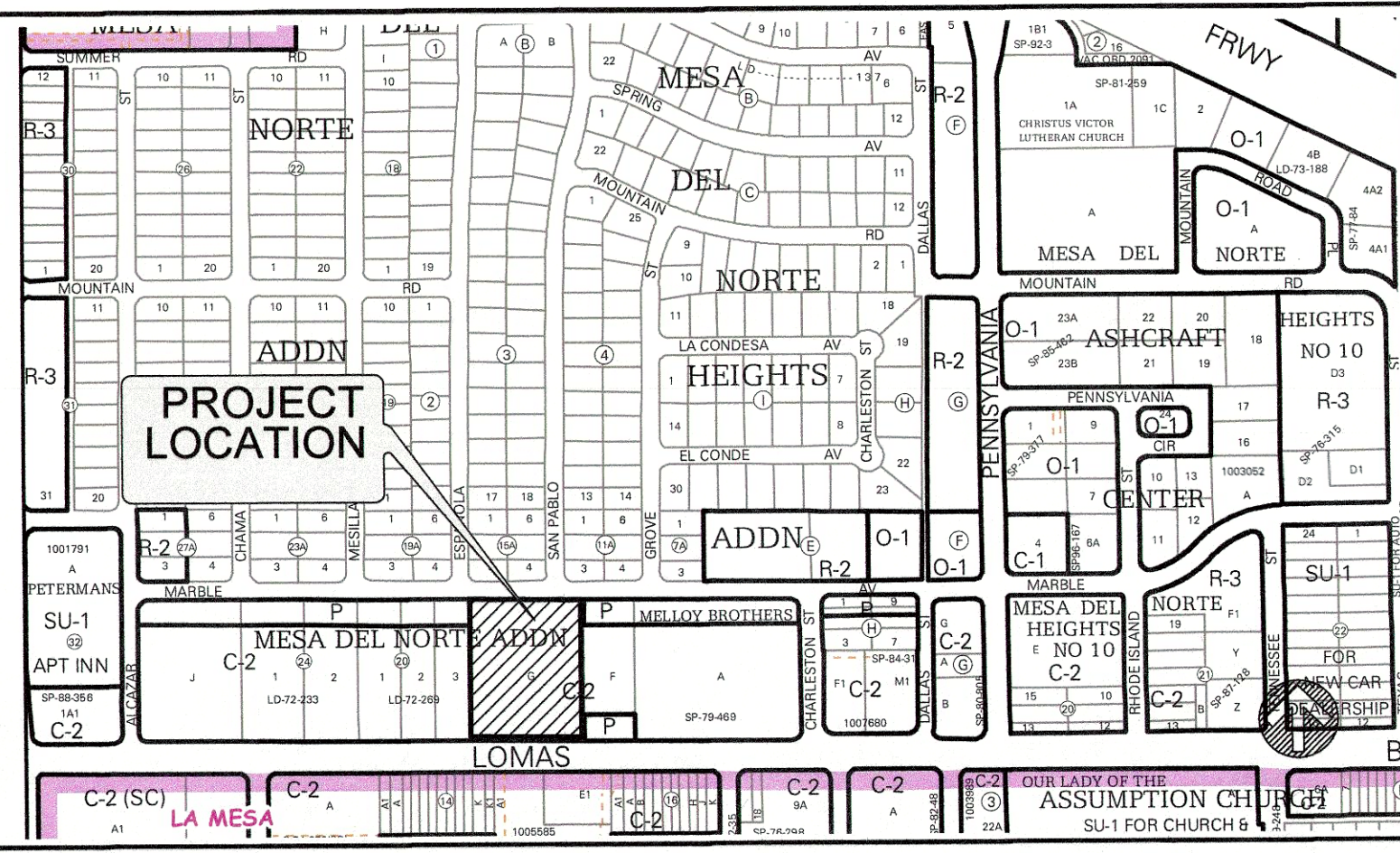
FIRST FLUSH CALCULATION

90th Percentile depth = 0.44"
Less initial abstractions = -0.10"
Required retained depth = 0.34"

Pond requirement = $A_d(0.34) = 2.61 \text{ ac}(43,560 \text{ ft}^2/0.34) = 3,214 \text{ ft}^3$
Volume provided = Landscaped area $\times 0.25' = 14,375 \text{ sf}(0.25') = 3,594 \text{ ft}^3$
Plus additional volume provide at water clarification pond = 75 cf
Total First Flush Volume Provided = 3,669 cf

DRAINAGE PLAN NOTES

- LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. LDC assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes LDC to prepare the Certification, we must be notified PRIOR to placement of the fill.
- LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations are finished grade or top of pavement, unless noted otherwise.
- The City of Albuquerque has received its EPA MS4 Permit for stormwater quality with an effective date of March 1, 2012.



LEGEND

ITEM	EXISTING	PROPOSED
CURB AND GUTTER	---	---
6" CONCRETE CURB	---	---
CURB ELEVATIONS	---	---
SPOT ELEV.	---	16.7
RIGHT OF WAY	---	---
EASEMENT	---	---
CENTERLINE	---	---
RETAINING WALL	R/R	---
TOP OF ASPHALT ELEV.	TA 16.2	TA 16.2
FLOWLINE ELEV	EX FL 16.2	FL 16.2
DRAINAGE SWALE	---	---
STORM INLET	---	---
STORM DRAIN PIPE	---	SD
DOWNSPOUT	---	---
DRAINAGE BASIN DIVIDE	---	---
DRAINAGE BASIN ID	---	A-1

KEYED NOTES

- EXISTING CONCRETE STANDARD CURB AND GUTTER.
- EXISTING PUBLIC SIDEWALK TO REMAIN.
- EXISTING CONCRETE CURB.
- EXISTING ASPHALT PAVEMENT.
- EXISTING BLOCK WALL TO REMAIN.
- EXISTING SHED TO BE RELOCATED. COORDINATE WITH OWNER.
- EXISTING DRIVEPAD TO REMAIN. CONSTRUCT ACCESSIBLE SIDEWALK. SEE SHEET DETAIL H/C-3.
- EXISTING DRIVEPAD TO REMAIN. CONSTRUCT ACCESSIBLE SIDEWALK. SEE SHEET DETAIL H/C-3.
- REMOVE AND DISPOSE EXISTING ASPHALT. REPLACE WITH ASPHALT PAVEMENT PER SECTION A/C-3.
- CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL C/C-3.
- CONSTRUCT CONCRETE SIDEWALK.
- CONSTRUCT ACCESSIBLE RAMP AT 12:1 SLOPE MAX. SHEET DETAIL E/C-3.
- PROVIDE STRIPED PEDESTRIAN CROSSING PER CODE.
- PROVIDE HANDICAP PARKING PAVEMENT MARKINGS PER CODE - TYP.
- INSTALL HANDICAP SIGN ASSEMBLY PER CODE - TYP. SEE DETAIL G/C-3.
- CONSTRUCT NEW REFUSE ENCLOSURE. SEE DETAIL E/C-4.
- CONSTRUCT 10' WIDE CONCRETE CHANNEL. SEE DETAIL A/C-4.
- CONSTRUCT 2-24" SIDEWALK CULVERTS PER CITY STANDARD DETAIL 2236.
- CONSTRUCT 8" PUBLIC SIDEWALK PER CITY STANDARD DETAIL 2430.
- PROVIDE 10' CURB BLOCKOUT FOR DRAINAGE.
- CONSTRUCT 12" DRAINAGE OPENING IN MEDIAN.
- CONSTRUCT PLANTER - TYPE 1. SEE DETAIL D/C-4.
- CONSTRUCT PLANTER - TYPE 2. SEE DETAIL E/C-4.
- NEW LANDSCAPING. SEE LANDSCAPE PLAN.
- EXISTING LANDSCAPING TO REMAIN.

PROJECT INFORMATION:

PROPERTY ADDRESS:
7515 LOMAS BLVD NE, ALBUQUERQUE, NEW MEXICO

LEGAL DESCRIPTION:
TRACT G, LA MESA DEL NORTE ADDITION

PROJECT SURVEY:
BOUNDARY AND TOPOGRAPHIC SURVEY BY
CARTESIAN SURVEYS, INC., MAY 1, 2015

PROJECT BENCHMARK:
ACS MONUMENT "26-K19"
ELEVATION = 5329.456 FEET MSLD (NAVD 1988)

PLANS, SPECIFICATIONS, AND OTHER DOCUMENTS PREPARED BY THE ARCHITECT AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERETO.

HOLIDAY BOWL BUILDING ADDITION

7515 LOMAS BOULEVARD N.E., ALBUQUERQUE, N.M., 87110

David Vesica, Architect
1012 Marquez Place, #310B
Santa Fe, New Mexico, 87505
david@davidvesica.com
tel. 512.294.1665

Structural Engineer
RME ABQ Structural Engineers
2325 San Pedro Dr. NE, Suite 2F
Albuquerque, NM 87107
Tel. 505-889-3004

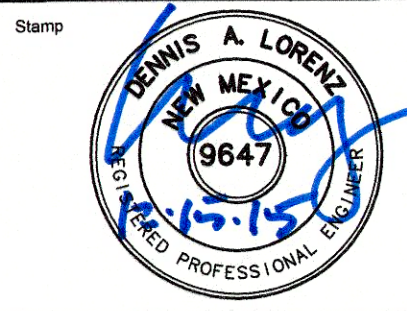
Electrical Engineer
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Tel. 505-8886266

Civil Engineer
Dennis Lorenz
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Tel. 505-888-6088

Mechanical Engineer
Walker Consulting Engineers
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Albuquerque, NM 87112
Tel. 505-856-1783

General Contractor
Snyder Construction
6501 Palomas Avenue NE
Albuquerque, NM 87109
505-923-3181

Owner
Eve and Gary Skidmore
7515 Lomas Blvd. NE
Albuquerque, N.M. 87110

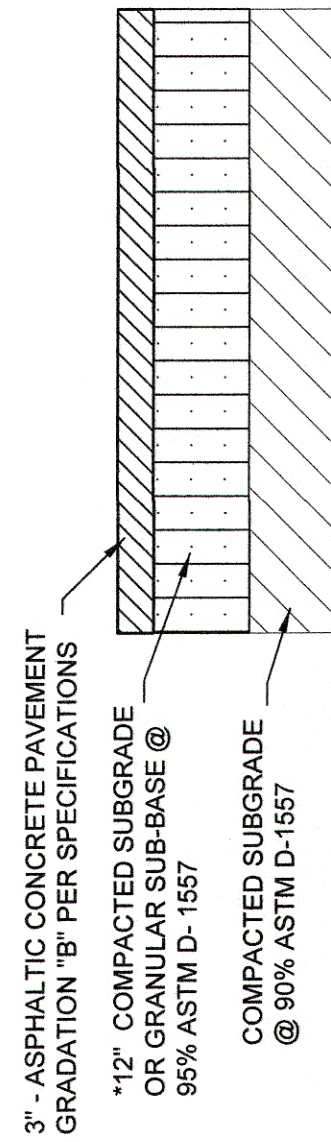


#	Issue	Date

HOLIDAY BOWL ADDITION

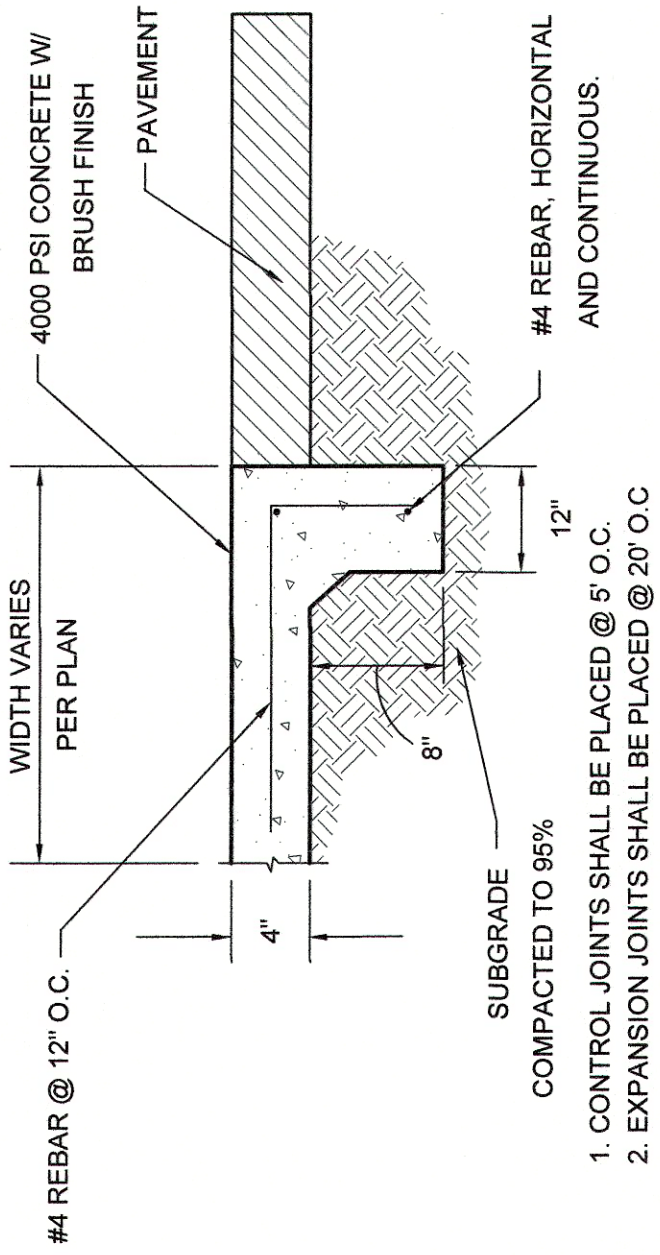
GRADING & DRAINAGE PLAN
SCALE: 1" = 30'

C-1



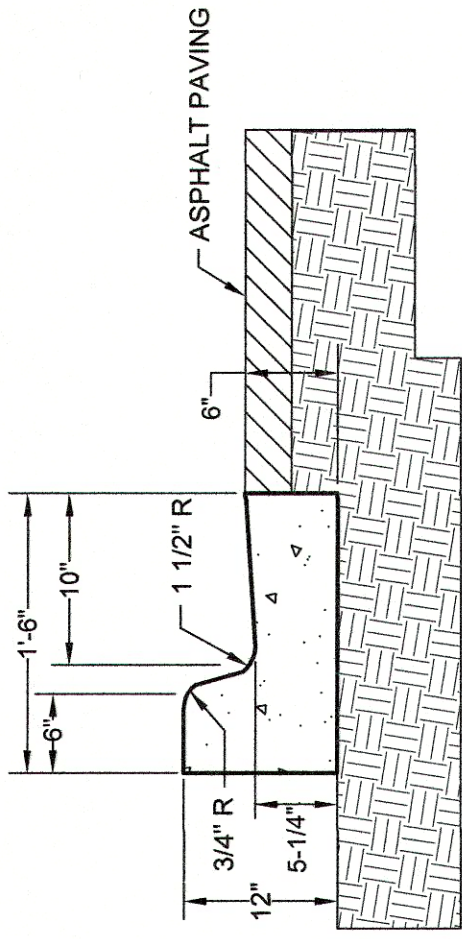
ASPHALT PAVEMENT SECTION
AUTOPICKUP TRUCK

A
NTS
C-3



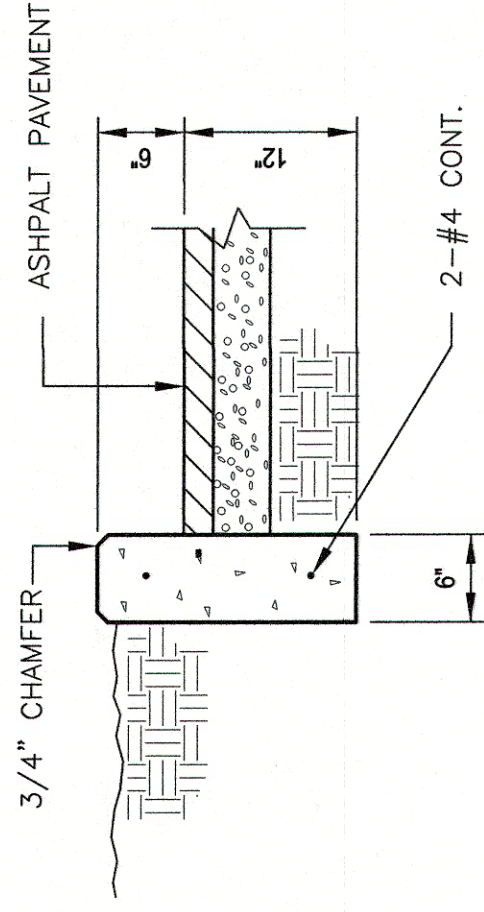
TURN DOWN SIDEWALK AT ACCESSIBLE ZONES

B
NTS
C-3



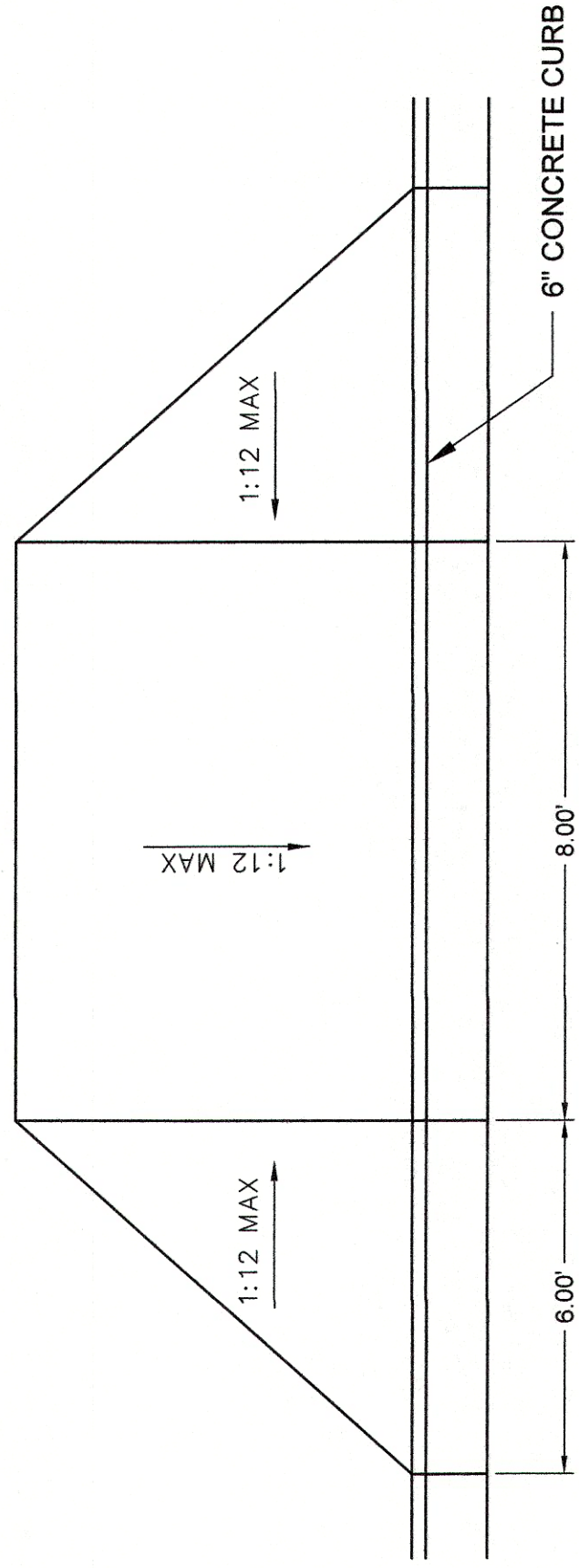
CONCRETE CURB AND GUTTER

C
NTS
C-3



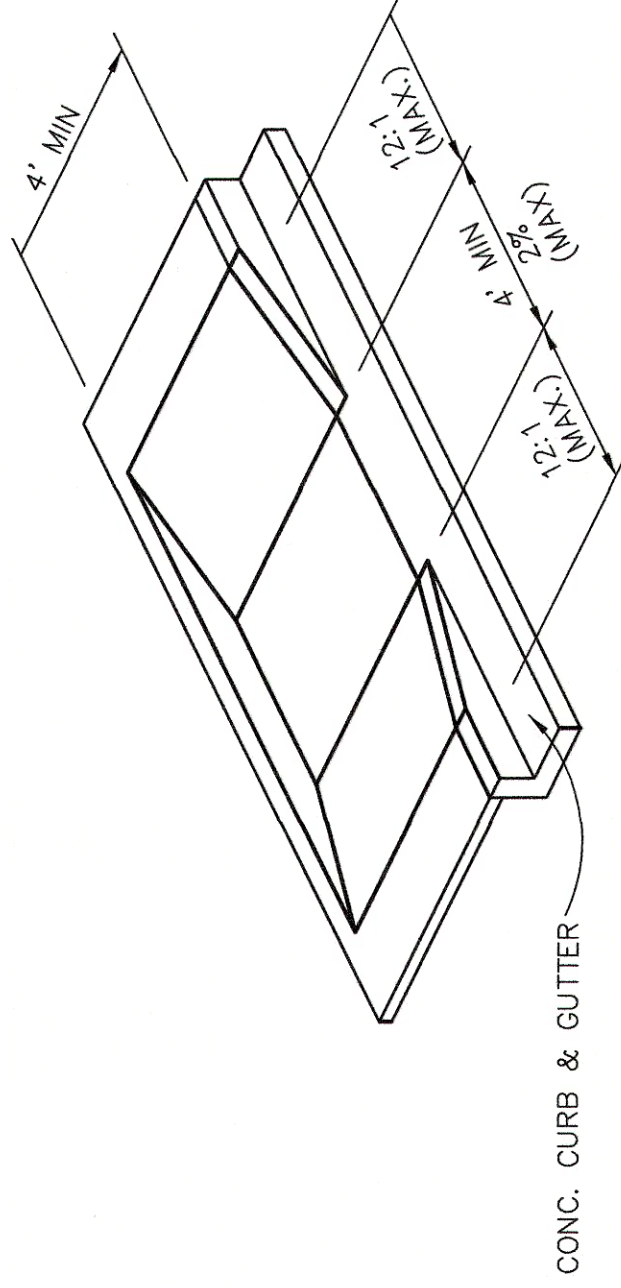
HEADER CURB DETAIL

D
NTS
C-3



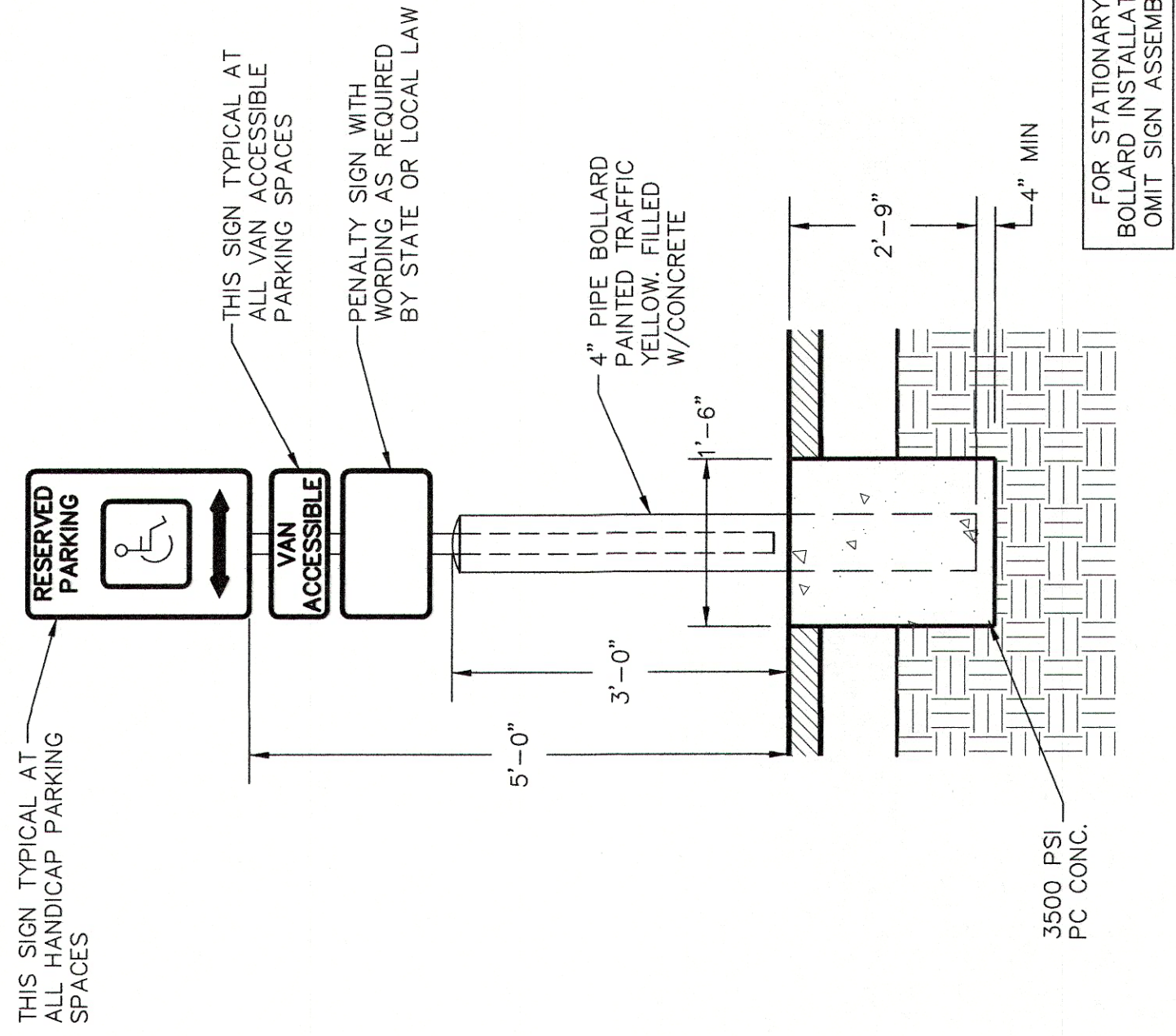
HANDICAP RAMP DETAIL - TYPE I

E
NTS
C-3



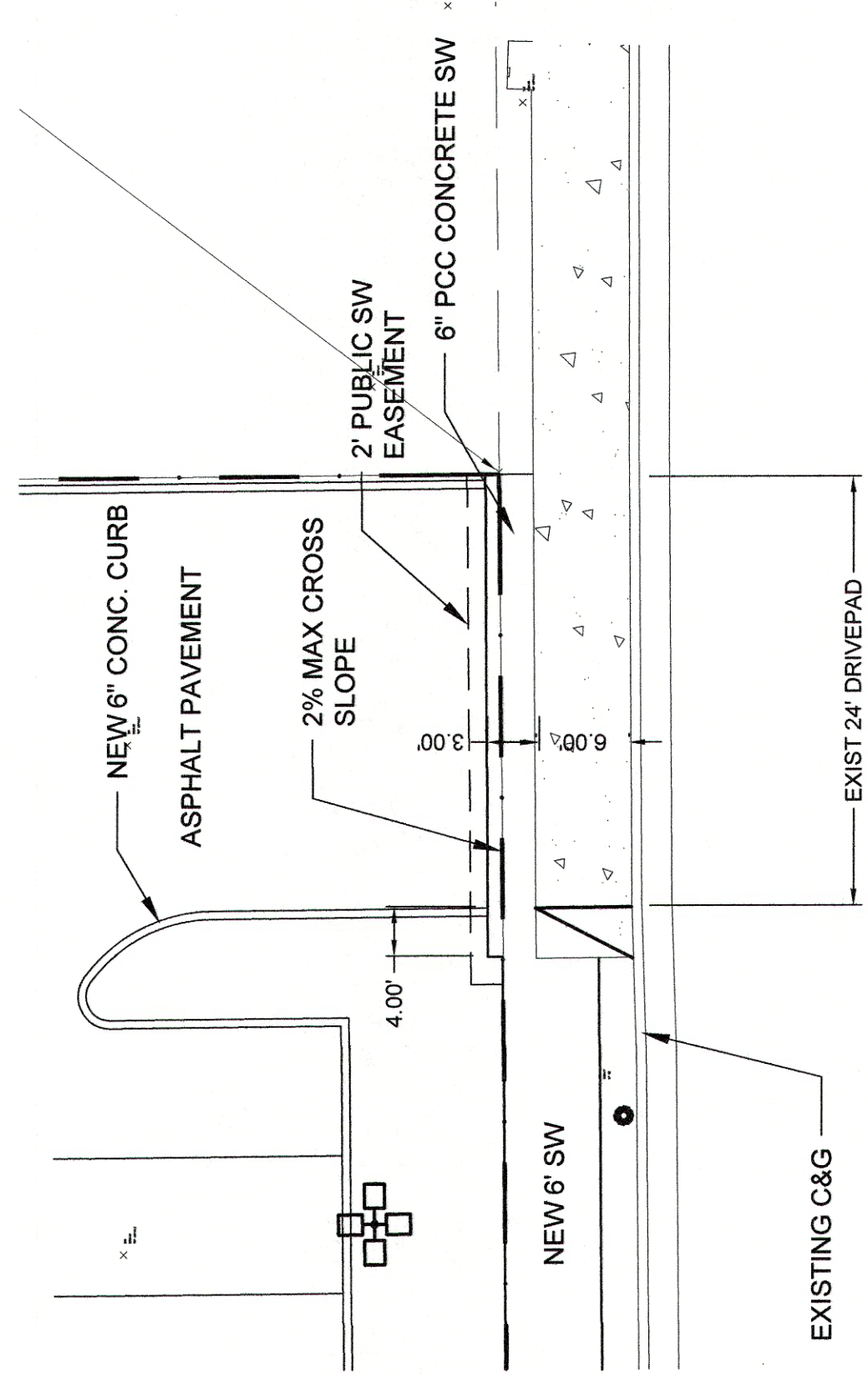
HANDICAP RAMP DETAIL - TYPE II

F
NTS
C-3



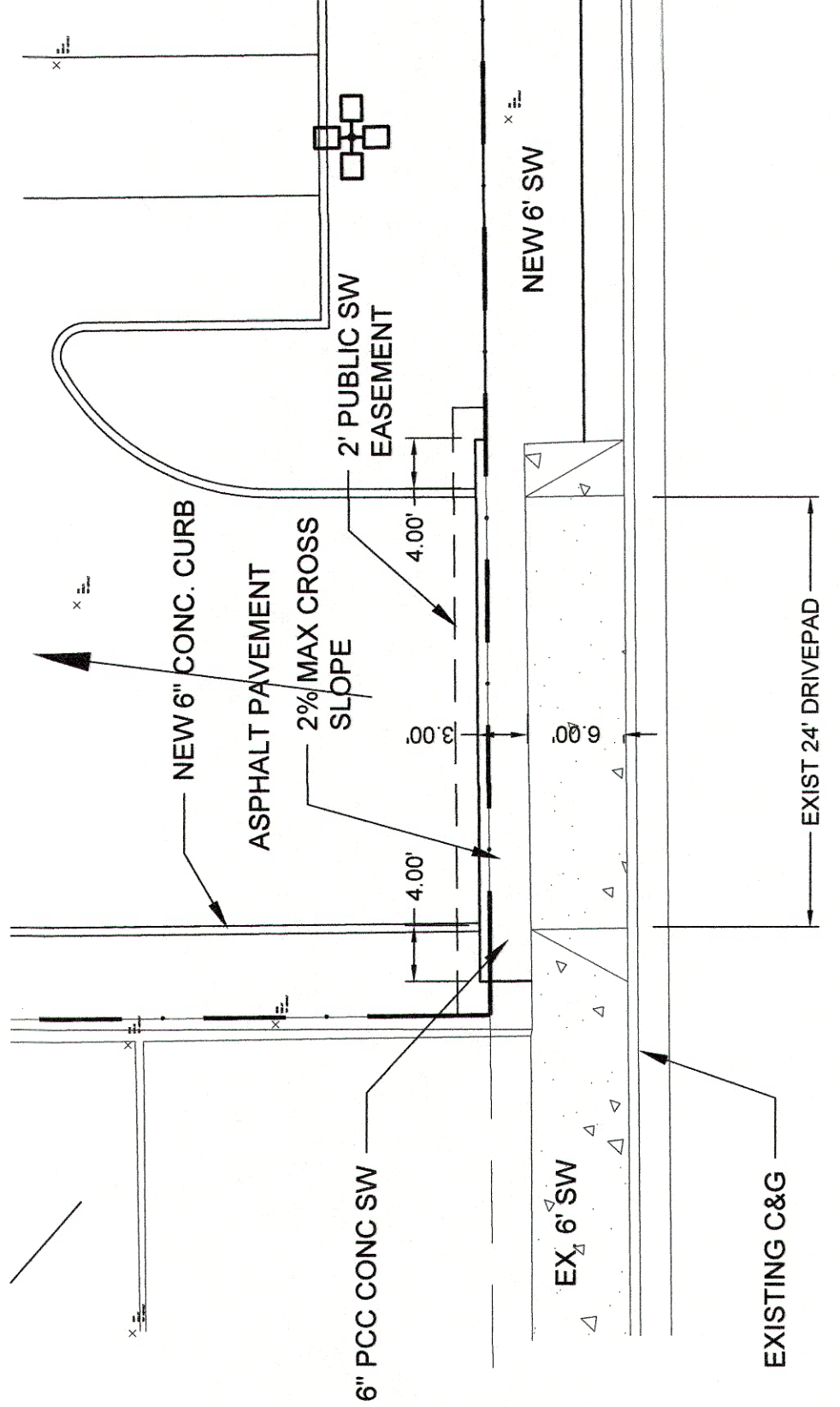
HC SIGN ASSEMBLY / BOLLARD DETAIL

G
NTS
C-3



LOMAS BLVD NE
EAST DRIVEPAD ADA PLAN

H
NTS
C-3



LOMAS BLVD NE
WEST DRIVEPAD ADA PLAN

J
NTS
C-3

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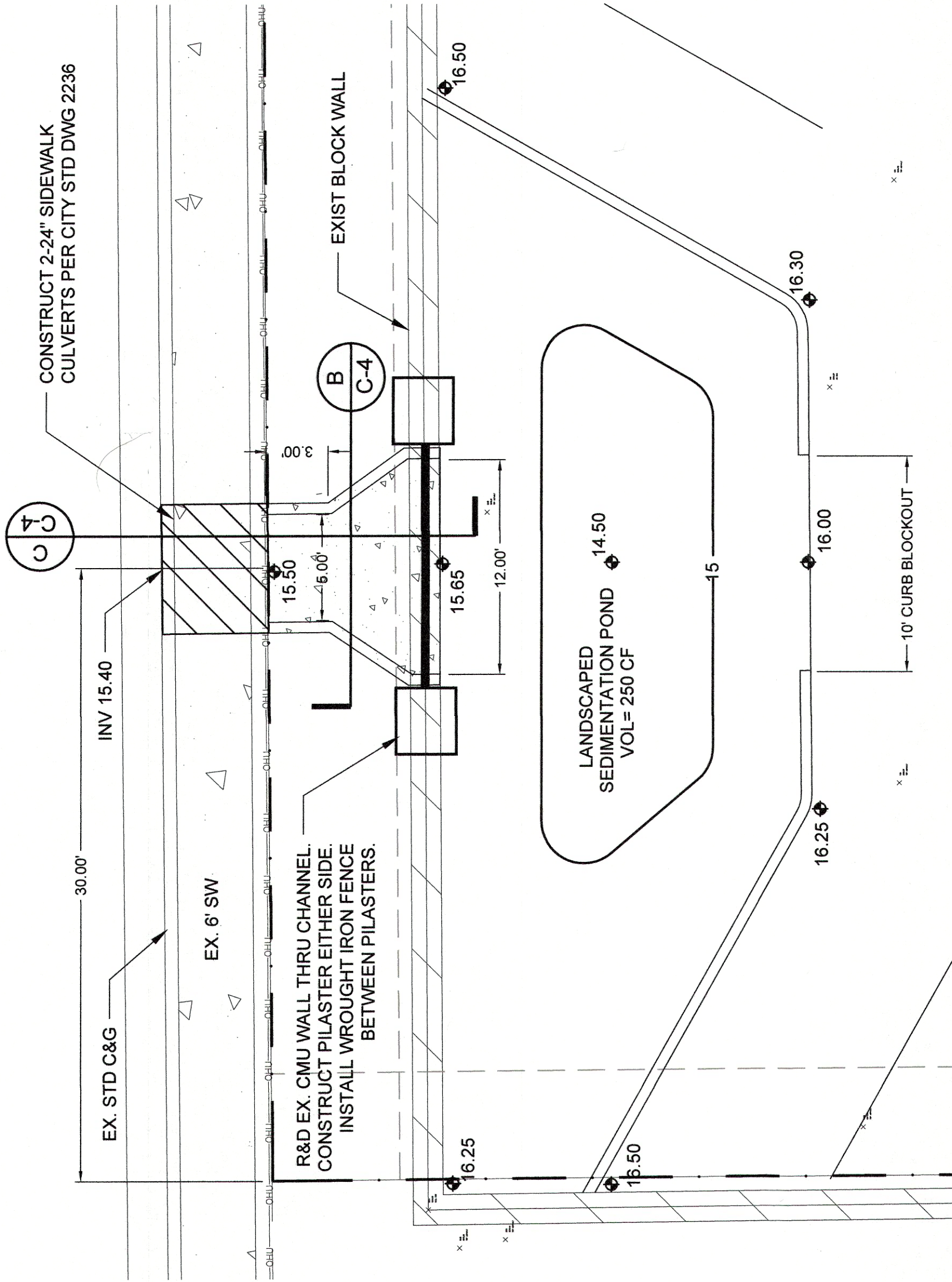
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#	Date

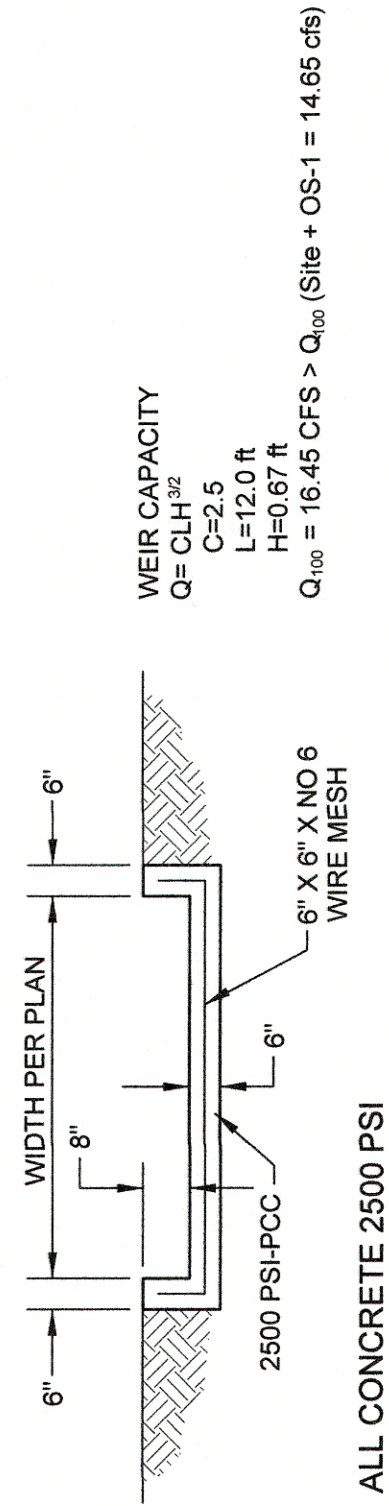
HOLIDAY BOWL ADDITION
SITE DETAILS
C-3

MARBLE AVE NE



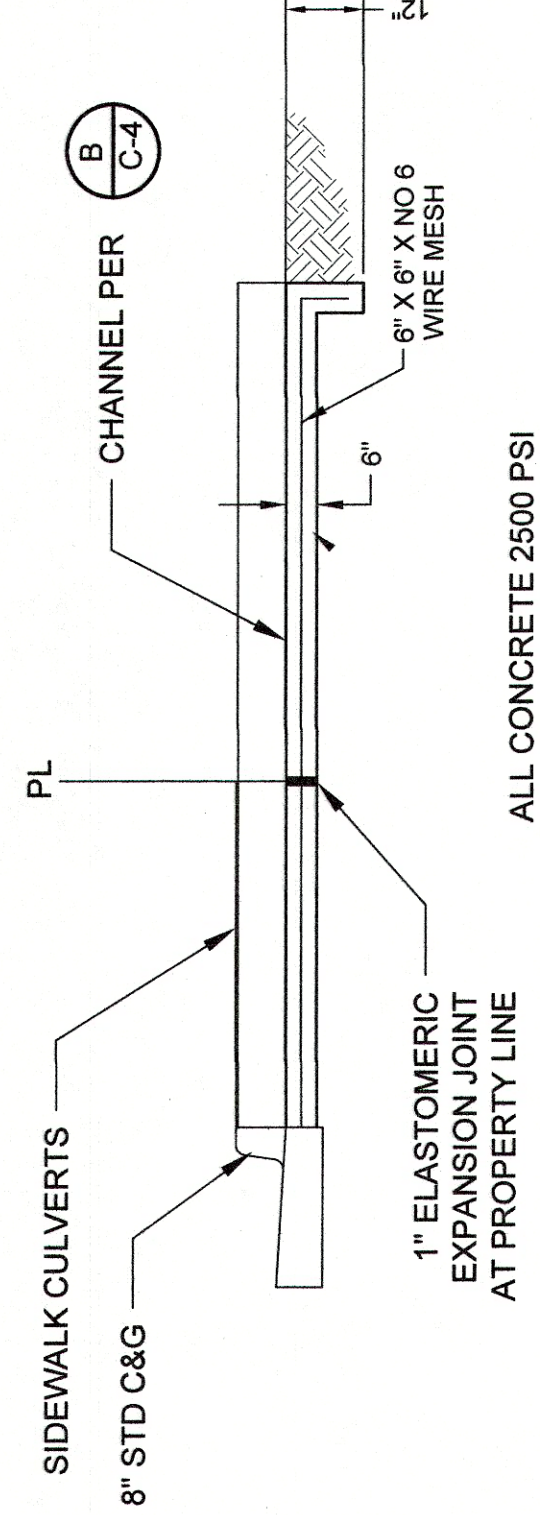
DRAINAGE CHANNEL PLAN

A C-4



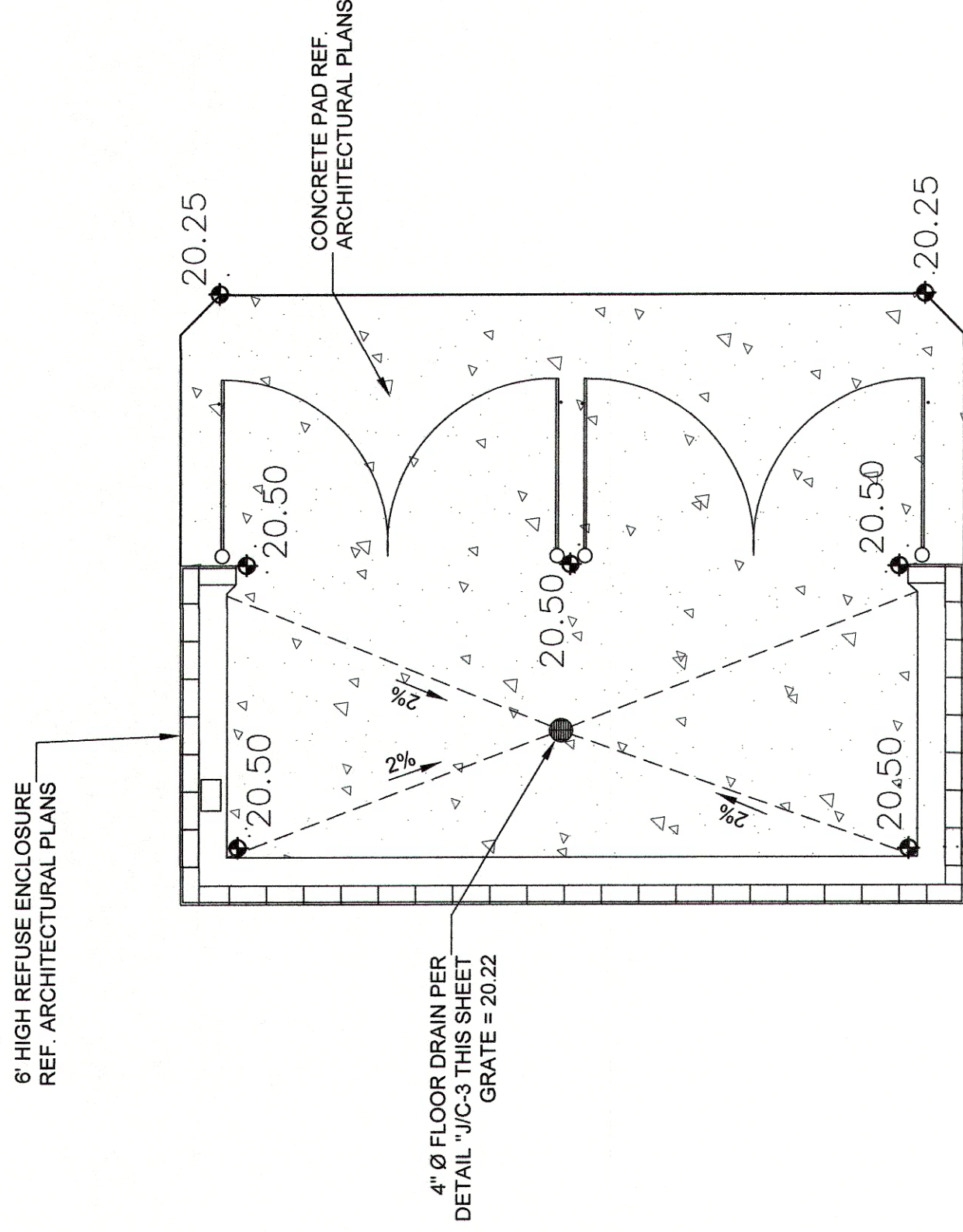
CONCRETE DRAINAGE CHANNEL DETAIL

B C-4



CONCRETE DRAINAGE CHANNEL SECTION

B C-4

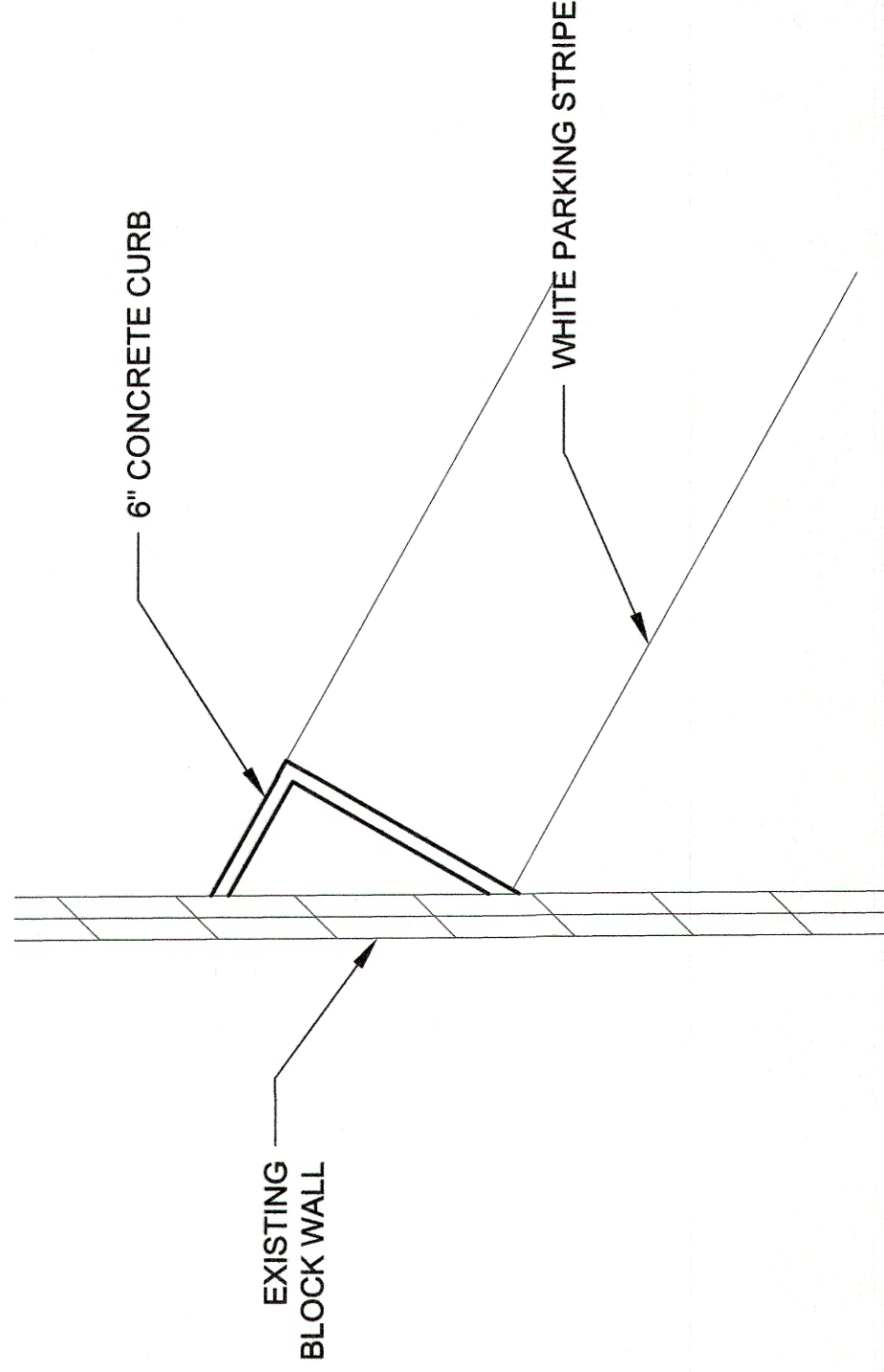


REFUSE ENCLOSURE SLAB PLAN

E C-4

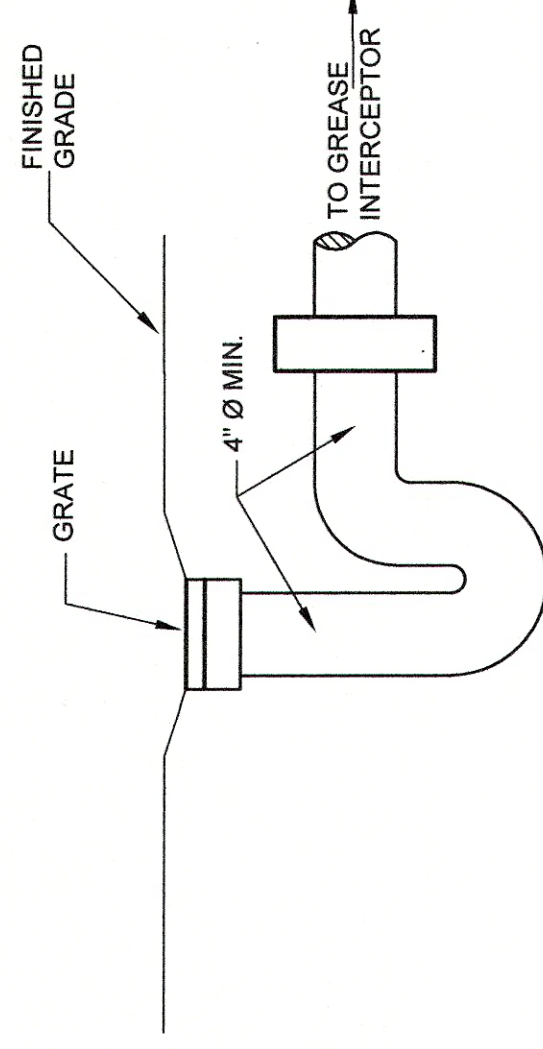
LANDSCAPE PLANTER DETAIL TYPE 1

C C-4



LANDSCAPE PLANTER DETAIL TYPE 2

D C-4



4" SANITARY SEWER DRAIN
FOR REFUSE ENCLOSURE

F C-4

PLANS, SPECIFICATIONS, AND OTHER DOCUMENTS
PREPARED BY THE ARCHITECT AS INSTRUMENTS OF
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505-923-3161

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Albuquerque, N.M. 87110



#	Date

HOLIDAY BOWL ADDITION
SITE DETAILS
C-4