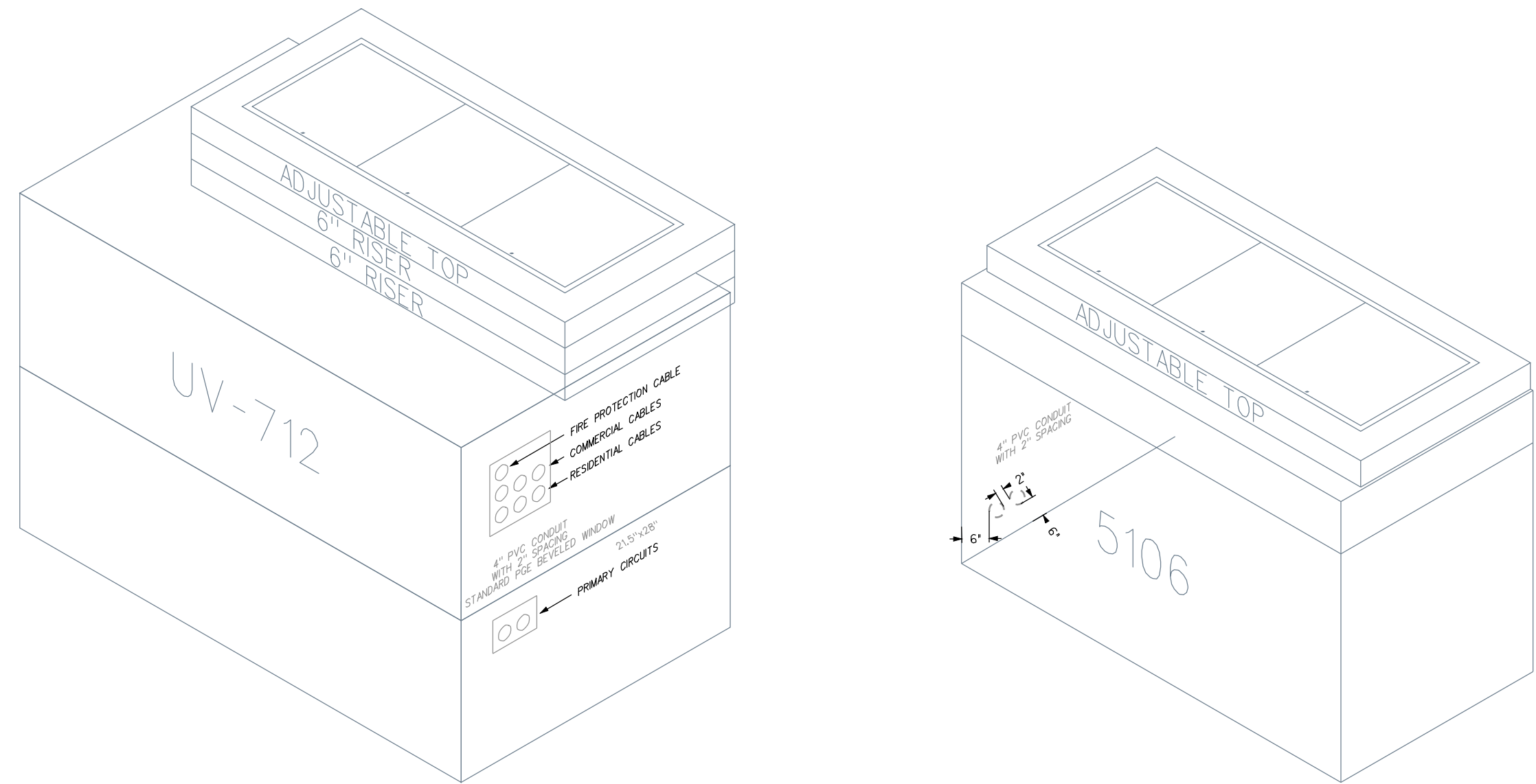


DETAIL
V-5048

PERMIT MAP
DATE: 5/18/10 | 1/4 SECTION: 3228
DESCRIPTION: TRENCH



AS-BUILT VERIFICATION & NESC VIOLATIONS CORRECTED This document accurately represents FIELD construction.

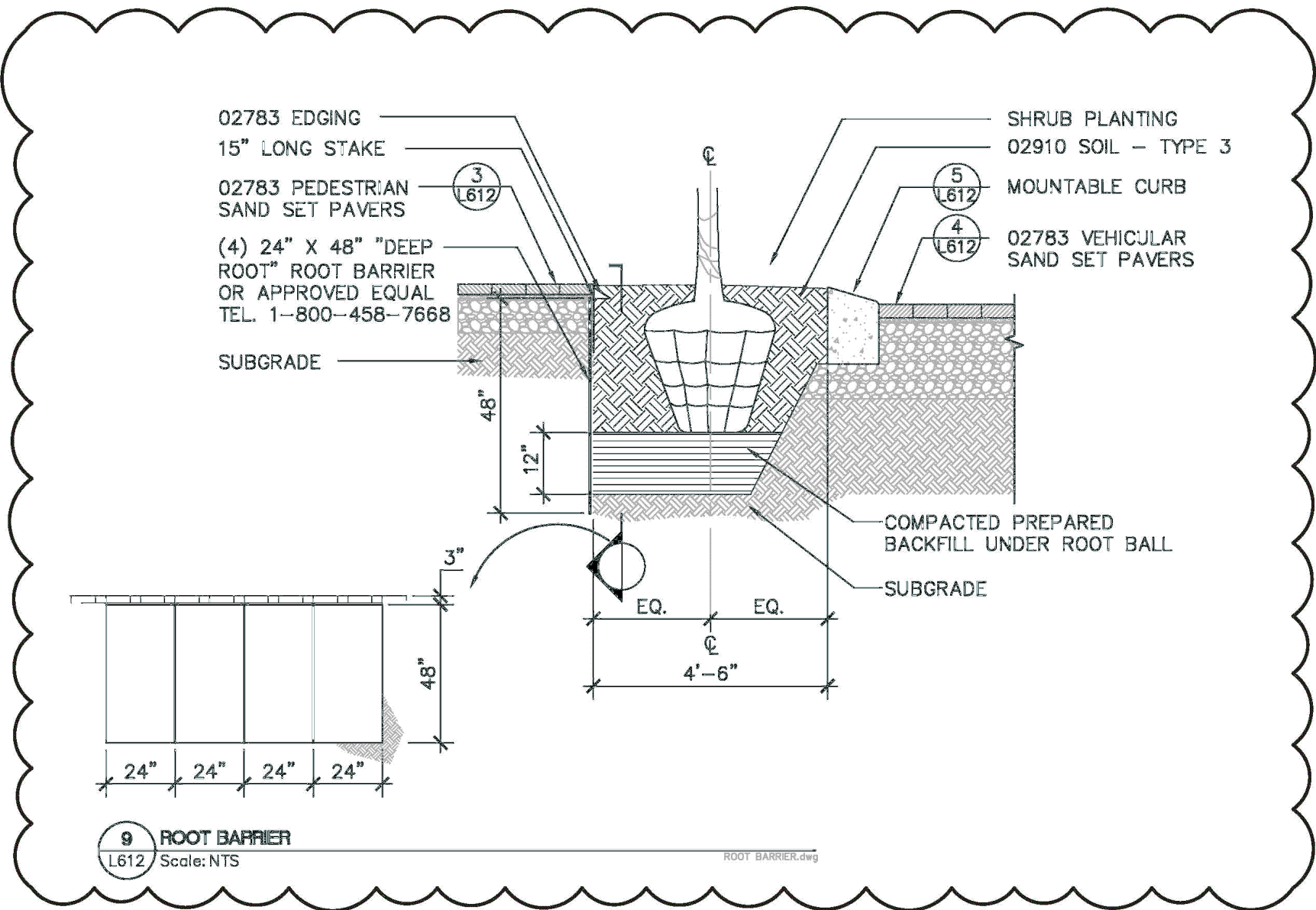
Foreman: _____ Date: _____
 SDC Engineer: _____ Date: _____
 Designer: _____ Date: _____

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	TITLE	INNOVATIVE HOUSING	JOB NO.	610128	
	LOCATION	SW COLLEGE BETWEEN 4TH & 5TH AVE	SIZE	18x24	
	CIRCUIT	URBAN-BARBUR 13KV	SCALE	1"=40'	
	DESCRIPTION	VAULT & CONDUIT INSTALL / PERMIT			
DATE	05/17/10	SECTIONS	DII-04D	WORK WITH	SHEET
DESIGN BY	ED GORMAN	PHONE (503) 425-1611	DRAWN BY	JEM/S. COX	1 OF 2
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PORTLAND LINE CREW CENTER
1510 SE WATER AVE.
PORTLAND, OR 97214

CAD FILE: \MAP\NETWORKS\GIBBS\BELL6022.dwg
May 31, 2006 - 12:49PM



9 ROOT BARRIER
L612 Scale: NTS



GIBBS ARCHITECTS
180 NW Couch Street, Suite 200
Portland, Oregon 97209
Tel: 503.227.3000
Fax: 503.227.3001
www.gibbsarchitects.com

Thomas Lockman Architects
203 SW Oak Street, Suite 1100
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South Waterfront Block 34
Atwater Place
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Portland, Oregon 97209

Linework Architecture
210 SW Washington St., Suite 830
Portland, Oregon 97204
Tel: 503.223.0380
F: 503.223.8076

PROJECT NUMBER
20034034

REVISION DATE
06/01/06

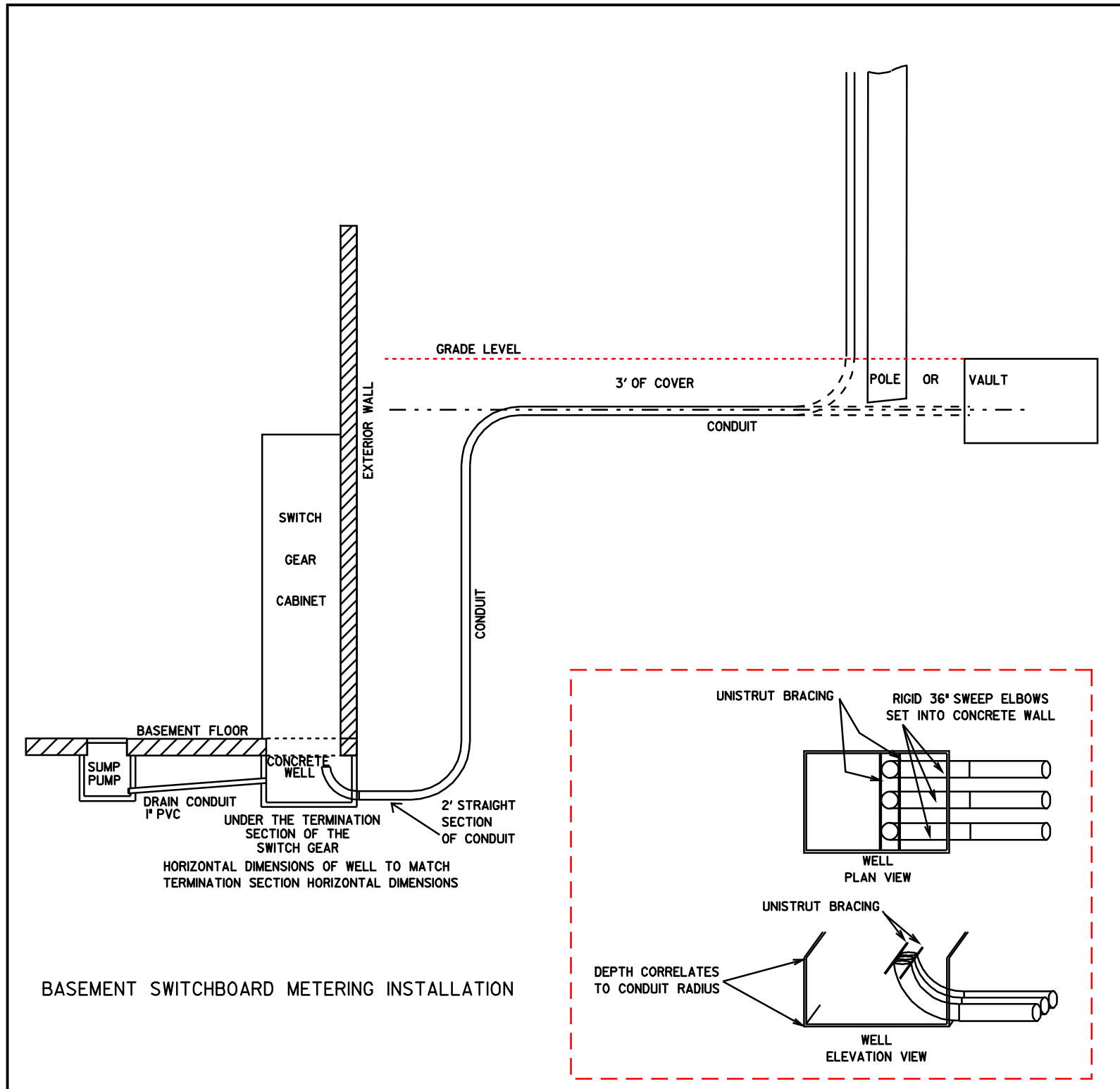
ORIGINAL NUMBER
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ORIGINAL TITLE
LANDSCAPE DETAILS

SCALE
AS NOTED

RL 009
30 ASI

*** GIBBS ARCHITECTS ***



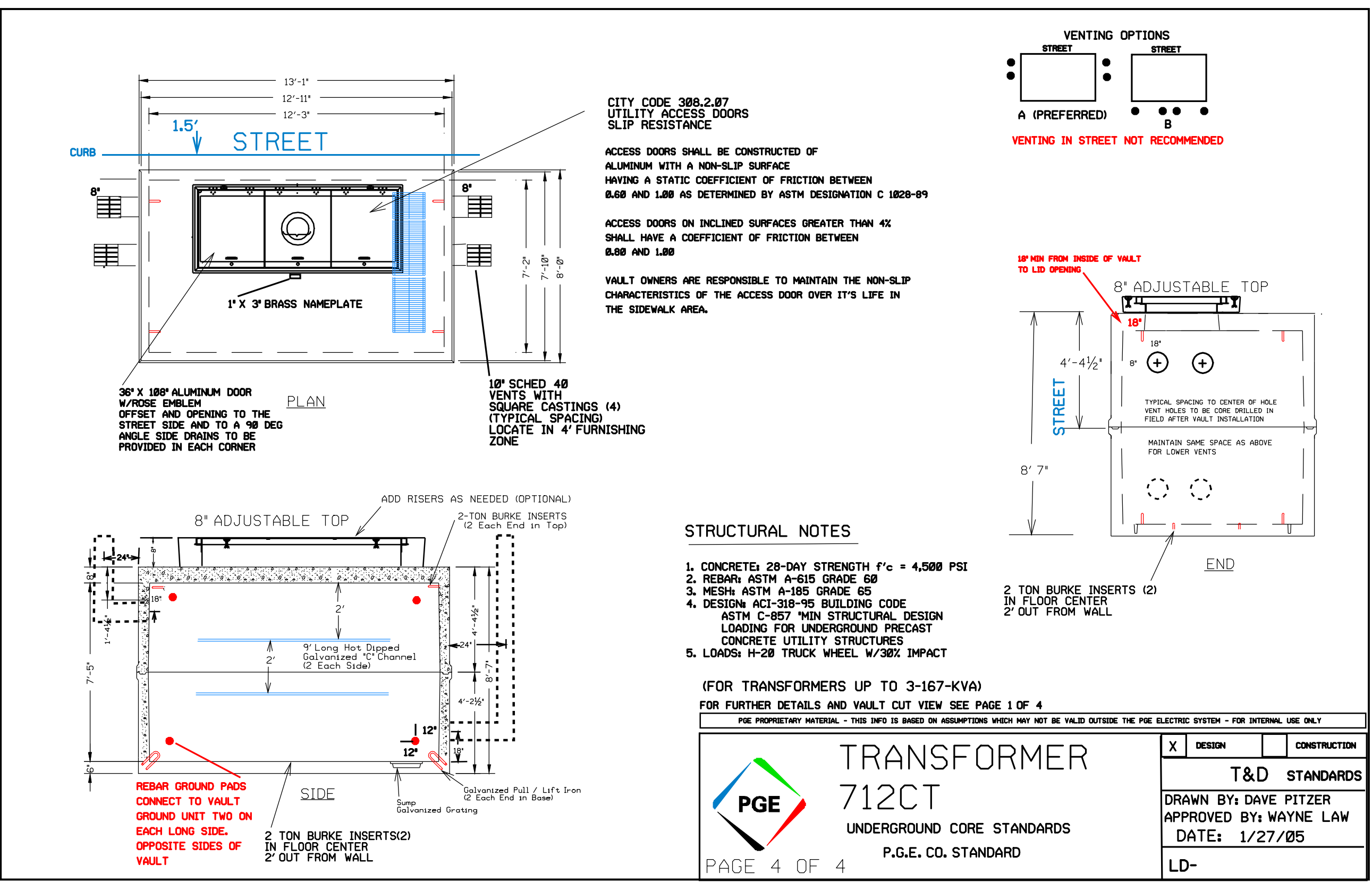
BASEMENT SWITCHBOARD METERING INSTALLATION

NOTE:
MINIMUM OF 36" BETWEEN TOP OF FLOOR GRADE AND THE TOP OF THE TOP CONDUIT IN THE DUCT BANK ENTERING THE WELL.
ALL BASEMENT SERVICES REQUIRE A SWITCHBOARD INSTALLATION.
CT CABINETS ARE NOT ALLOWED.

CONDUIT RADIUS NOTE:
3" CONDUIT- 36" RADIUS
4" CONDUIT- 36" RADIUS
5" CONDUIT- 60" RADIUS
6" CONDUIT- 60" RADIUS



DESCRIPTION BASEMENT SWITCHBOARD METER INSTALLATION	SHEET 1 OF
1/dgn/central/grid/bsmi.dgn	DRAWN BY LLS
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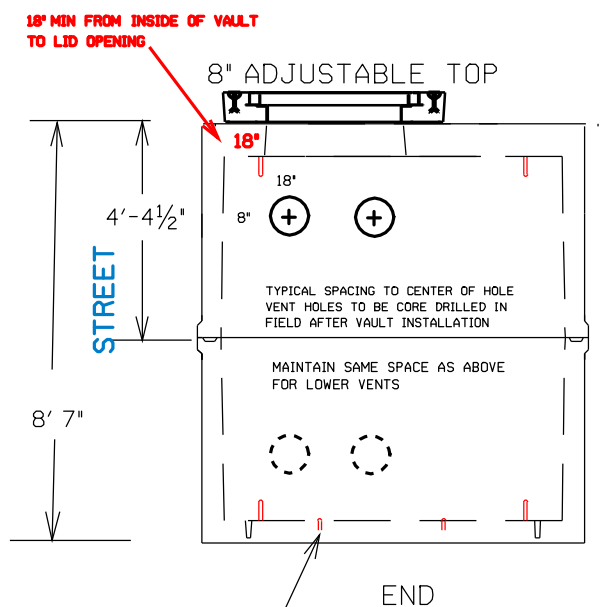
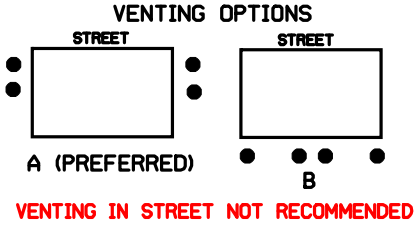


CITY CODE 308.2.07
UTILITY ACCESS DOORS
SLIP RESISTANCE

ACCESS DOORS SHALL BE CONSTRUCTED OF ALUMINUM WITH A NON-SLIP SURFACE HAVING A STATIC COEFFICIENT OF FRICTION BETWEEN 0.80 AND 1.00 AS DETERMINED BY ASTM DESIGNATION C 1028-09

ACCESS DOORS ON INCLINED SURFACES GREATER THAN 4% SHALL HAVE A COEFFICIENT OF FRICTION BETWEEN 0.80 AND 1.00

VAULT OWNERS ARE RESPONSIBLE TO MAINTAIN THE NON-SLIP CHARACTERISTICS OF THE ACCESS DOOR OVER ITS LIFE IN THE SIDEWALK AREA.



- STRUCTURAL NOTES**
1. CONCRETE: 28-DAY STRENGTH $f'_c = 4,500$ PSI
 2. REBAR: ASTM A-615 GRADE 60
 3. MESH: ASTM A-185 GRADE 65
 4. DESIGN: ACI-318-95 BUILDING CODE
ASTM C-857 MIN STRUCTURAL DESIGN
LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES
 5. LOADS: H-20 TRUCK WHEEL W/30% IMPACT

(FOR TRANSFORMERS UP TO 3-167-KVA)
FOR FURTHER DETAILS AND VAULT CUT VIEW SEE PAGE 1 OF 4

PGE PROPRIETARY MATERIAL - THIS INFO IS BASED ON ASSUMPTIONS WHICH MAY NOT BE VALID OUTSIDE THE PGE ELECTRIC SYSTEM - FOR INTERNAL USE ONLY

	DESIGN	CONSTRUCTION
	T&D STANDARDS	
	DRAWN BY: DAVE PITZER	
	APPROVED BY: WAYNE LAW	
DATE: 1/27/05		LD-

TRANSFORMER 712CT
UNDERGROUND CORE STANDARDS
P.G.E. CO. STANDARD

PAGE 4 OF 4

*SEE ADDENDUM:
VAULT WINDOW DETAIL &
LATERAL TAPS 5106CSW*

AS-BUILT VERIFICATION & NESC VIOLATIONS CORRECTED This document accurately represents FIELD construction.

Foreman: _____ Date: _____
SDC Engineer: _____ Date: _____
Designer: _____ Date: _____

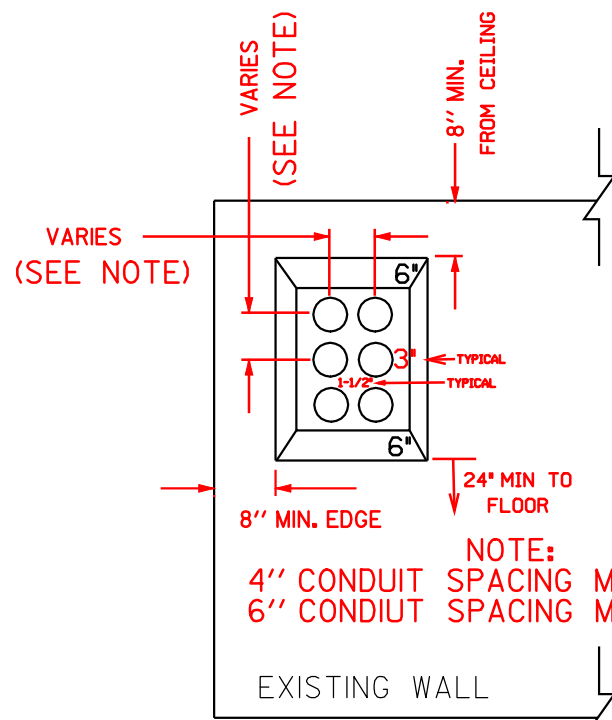
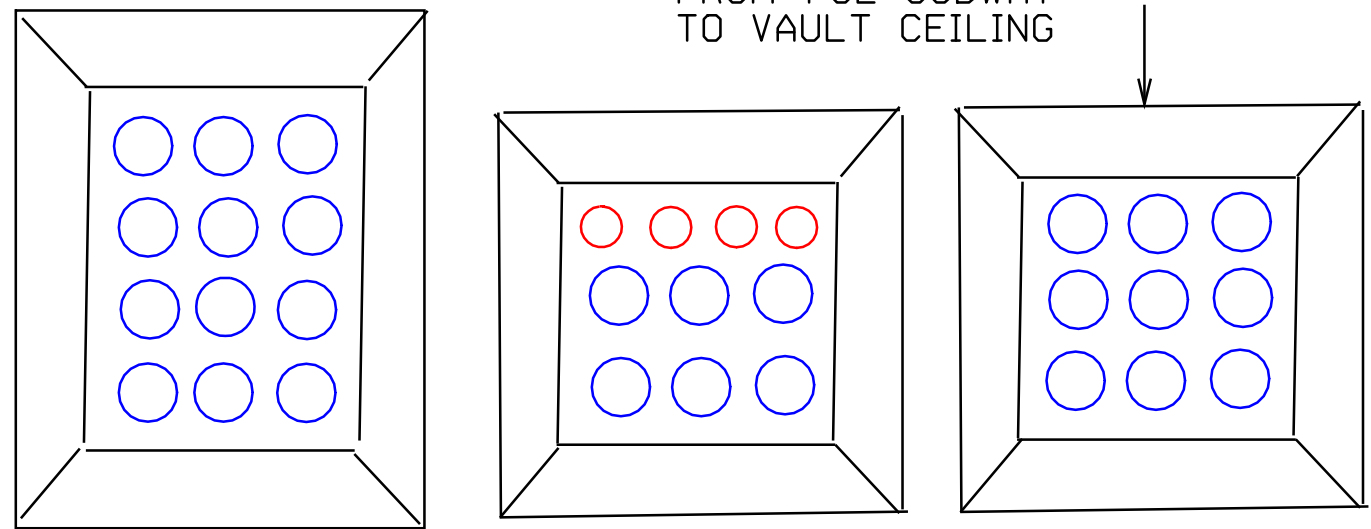
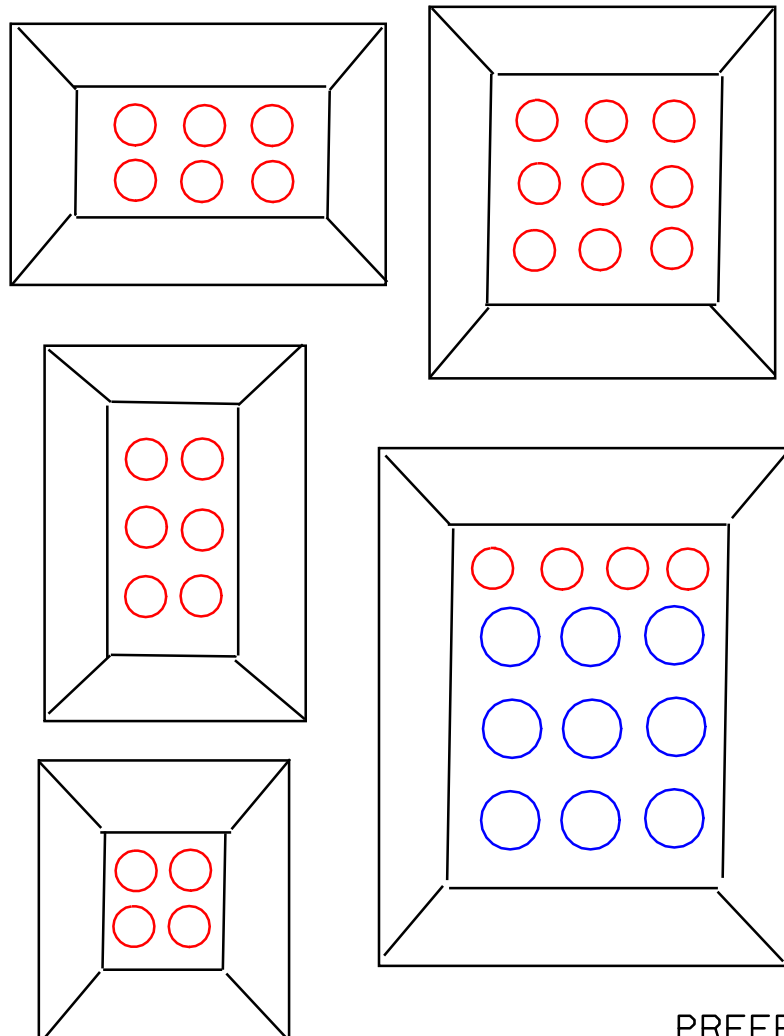
www.PortlandGeneral.com www.PortlandGeneral.biz www.EarthAdvantage.com

	TITLE INNOVATIVE HOUSING	JOB NO. 610128
	LOCATION SW COLLEGE BETWEEN 4TH & 5TH AVE	SIZE 18x24
	CIRCUIT URBAN-BARBUR 13KV	SCALE 1"=40'
	DESCRIPTION VAULT & CONDUIT INSTALL / PERMIT	
DATE 05/17/10	SECTION(S) D11-04D	WORK WITH
DESIGN BY ED GORMAN	PHONE (503) 425-1611	DRAWN BY JEM
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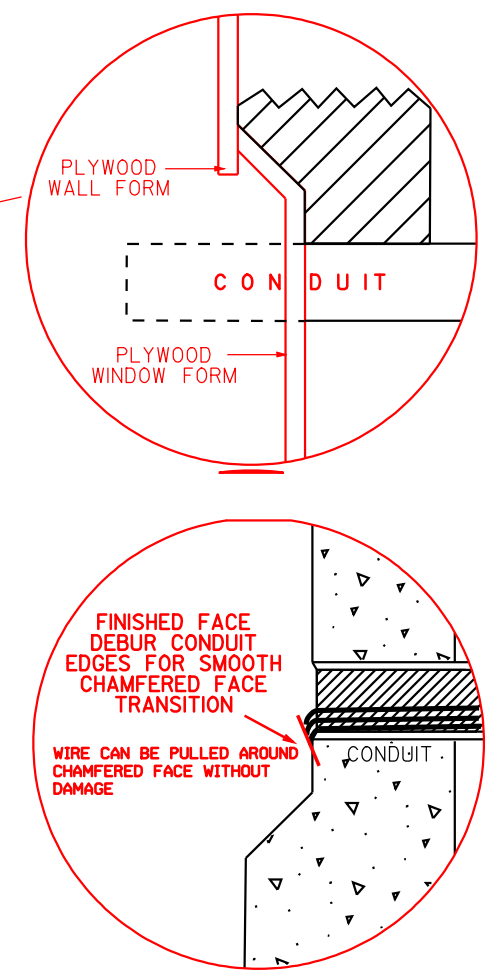
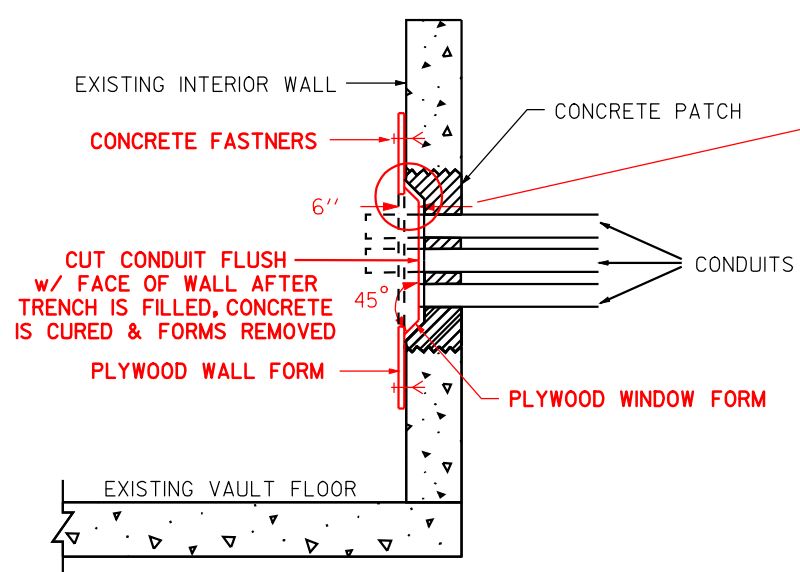
TYPICAL VAULT WINDOW CONFIGURATIONS

○ 6" CONDUIT
○ 4" CONDUIT

NOTE: 1' MIN SPACING BETWEEN WINDOWS



NOTE:
 4" CONDUIT SPACING MIN. 7" O.C.
 6" CONDUIT SPACING MIN. 9" O.C.
 DISTANCE MAY BE REDUCED FROM PREFERRED 2' TO 8" FOR SERVICE RUNS CHECK WITH PGE DESIGNER



NOTES

1. MAINTAIN MIRRORED WINDOW CONFIGURATION ON BOTH ENDS OF SUBWAY SYSTEM
2. ON SERVICE RUNS BUILD SEPARATE WINDOWS FOR EACH SERVICE
3. MIN. 3/4" PLYWOOD SHALL BE USED FOR FORMS.
4. FORMS SHALL BE CONSTRUCTED TO WITHSTAND CONCRETE PSI PATCHWORK.
5. VAULT WINDOW DESIGN SHALL BE APPROVED BY PGE PRIOR TO INSTALLATION.
6. CONDUIT IN R/W SHALL BE ENCASED IN CDF

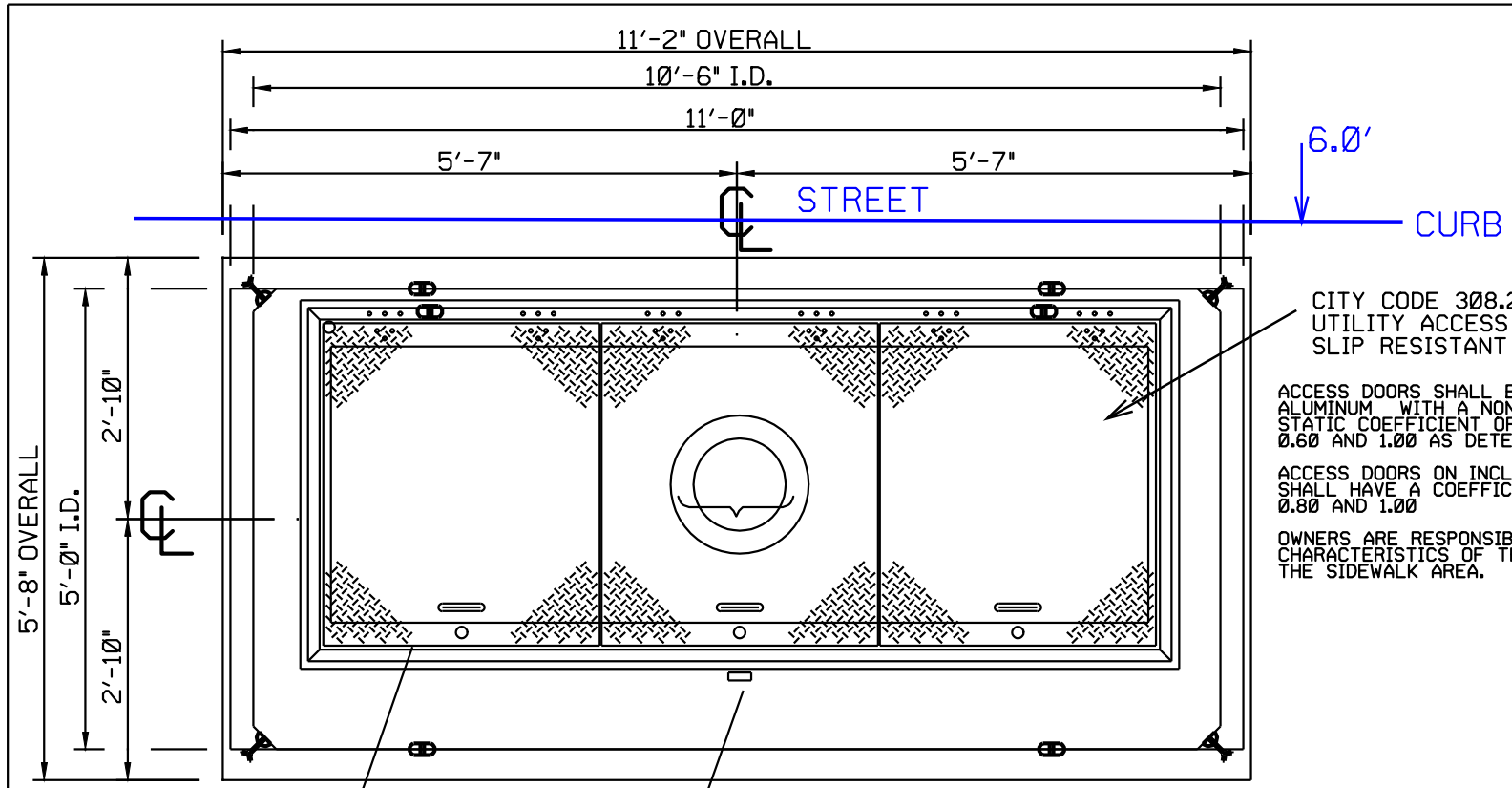
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VAULT WINDOW DETAIL
 UNDERGROUND CORE STANDARDS

P.G.E. CO. STANDARD

X	DESIGN	CONSTRUCTION
T & D		STANDARDS
DRAWN BY: PITZER/BEATTY		
APPROVED BY: WAYNE LAW		
DATE 2/2/05		
LD-		



CITY CODE 308.2.07
UTILITY ACCESS DOORS
SLIP RESISTANT

ACCESS DOORS SHALL BE CONSTRUCTED OF ALUMINUM WITH A NON-SLIP SURFACE HAVING A STATIC COEFFICIENT OF FRICTION BETWEEN 0.60 AND 1.00 AS DETERMINED BY ASTM DESIGNATION C 1028-89

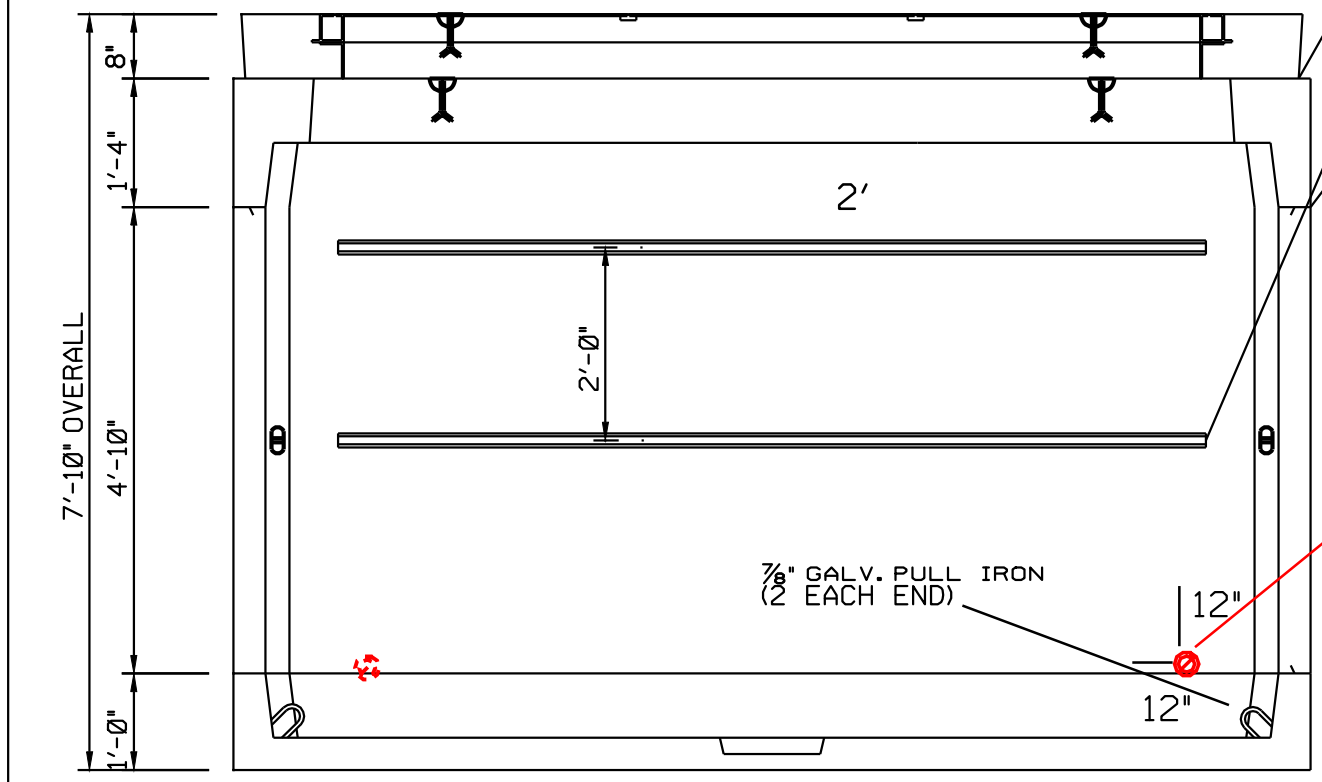
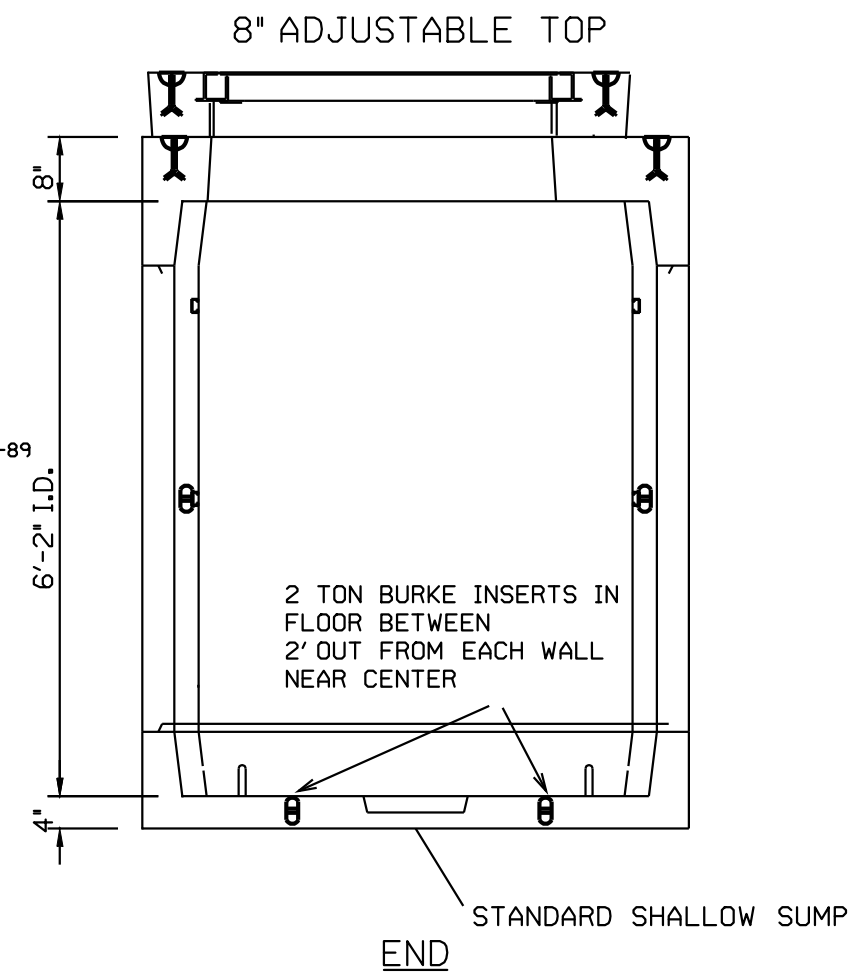
ACCESS DOORS ON INCLINED SURFACES GREATER THAN 4% SHALL HAVE A COEFFICIENT OF FRICTION BETWEEN 0.80 AND 1.00

OWNERS ARE RESPONSIBLE TO MAINTAIN THE NON-SLIP CHARACTERISTICS OF THE ACCESS DOOR OVER IT'S LIFE IN THE SIDEWALK AREA.

36" X 108" ALUMINUM DOOR
W/ROSE EMBLEM
OFFSET AND OPENING TO THE
STREET SIDE AND TO A 90 DEG
ANGLE SIDE DRAINS TO BE
PROVIDED IN EACH CORNER

1"x3" BRASS
NAME PLATE

PLAN



REBAR GROUND PAD
CONNECT VAULT GROUND UNIT
ONE ON EACH LONG SIDE

FOR FURTHER DETAILS AND VAULT CUT VIEW SEE SHEET 1 OF 4

STRUCTURAL NOTES

1. CONCRETE: 28-DAY STRENGTH $f'_c = 4,500$ PSI
2. REBAR: ASTM A-615 GRADE 60
3. MESH: ASTM A-185 GRADE 65
4. DESIGN: ACI-318-95 BUILDING CODE
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LATERAL TAPS
5106CSW
UNDERGROUND CORE STANDARDS

P.G.E. CO. STANDARD

X	DESIGN	CONSTRUCTION
T&D STANDARDS		
DRAWN BY: DAVE PITZER		
APPROVED BY: WAYNE LAW		
DATE: 1/15/05		
LD-		