

**NOTES:**

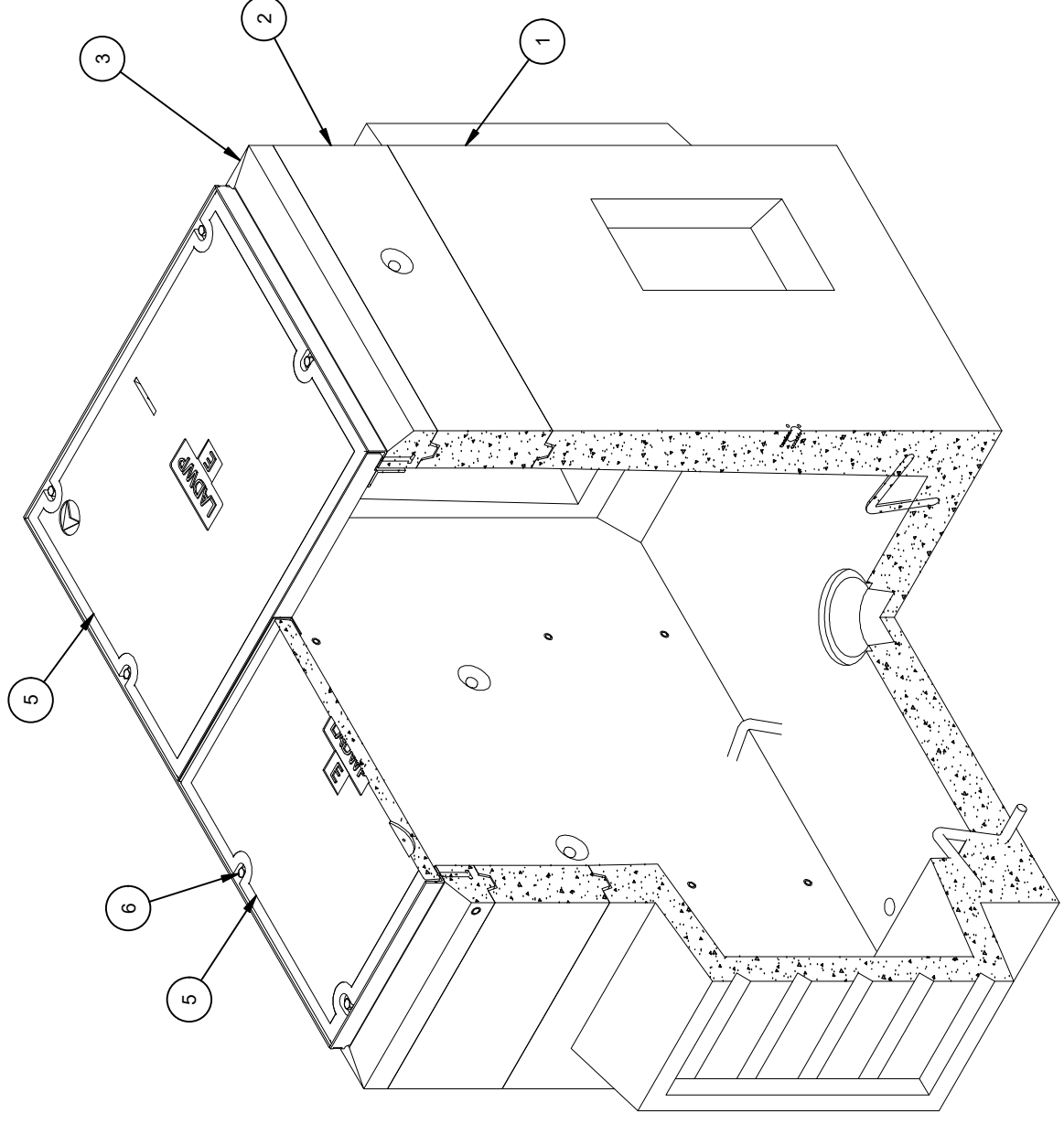
- STANDARDS. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, WITH 2022 CALTRANS AMENDMENTS, CITY OF LOS ANGELES BUREAU OF ENGINEERING STANDARD PLAN S-601, LATEST, MANUAL PART H, LADWP P 178, ASTM C-857. STRUCTURAL CALCS FOR BOX: #33541.
- MATERIAL. CONCRETE, F<sub>c</sub>=5,500 PSI. MIX TO INCLUDE FLY ASH AND DCI. REINFORCEMENT PER ASTM A-706, F<sub>y</sub>=60,000.
- LOADS. VERTICAL LIVE LOAD: AASHTO HL-93. LIVE LOAD SURCHARGE: PER LA BOE PART H, FIGURE H 374.2A. MINIMUM 80 PSF (TO BOTTOM OF VAULT) OR LADWP P 178 (104 PSF). SOIL LATERAL LOADS: 40 PCF (DRY), 81 PCF (SATURATED), SATURATED SOIL CONDITIONS 3'-0" BELOW GRADE. SOIL BEARING CAPACITY = 1,500 PSF. DESIGN SOIL DENSITY IS 120 PCF.
- LOADS NOT INCLUDED. DESIGN DOES NOT INCLUDE COOPER E-80 RAILROAD LOADS OR LATERAL OR SURCHARGE LOADS THAT ARE PRODUCED BY FOOTING OR FOUNDATIONS ADJACENT TO THE STRUCTURE. THIS SUBSTRUCTURE SHALL BE KEPT AT LEAST IN A 1:1 RATIO AWAY FROM ALL FOOTINGS AND FOUNDATIONS, UNLESS THE ENGINEER OF RECORD APPROVES IN WRITING.
- INSTALLATION. VAULT TO BE PLACED ON A MIN. 6" BASE OF CRUSHER RUN FOR EASE OF INSTALLATION AND EVEN LOAD DISTRIBUTION. BASE MATERIAL IN ACCORDANCE WITH SECTION 200-2 OF THE SSPWC (GREEN BOOK).
- INSTALLATION LIMITS. TOP OF VAULT SHALL BE AT GRADE.
- EACH CONCRETE SECTION SHALL BE MARKED ON THE INSIDE & OUTSIDE WITH "JENSEN PRECAST", THE DESIGNATION "DWP/FA-CN", AND THE DATE OF THE POUR.
- EACH CONCRETE SECTION SHALL HAVE CAST-IN ON THE INSIDE "JENSEN", THE YEAR, AND THE DESIGNATION "FA-CN".
- EACH PIECE TO BE STENCILIED WITH ITS PART NO.
- MINIMUM EXCAVATION SIZE: 4'-9" X 8'-4" X DEPTH REQD.
- VAULT SHALL HAVE FABRICATION AND SITE INSPECTION BY LA CITY INSPECTOR IN ACCORDANCE WITH SECTION 2-11 & 4-1.3 OF THE LATEST LA BOE "BROWN BOOK"
- ADDITIONAL SUBMITTAL, PERMIT AND CONSTRUCTION PLAN REVIEW WILL BE REQUIRED FOR EACH PROJECT LOCATION. SUBMIT TO CITY ENGINEERS FOR APPROVAL PRIOR TO START OF ANY CONSTRUCTION.
- ALL INSTALLATIONS SHALL COMPLY WITH ALL OTHER LOCAL GOVERNING CODES AND REGULATION INCLUDING CALIFORNIA PUBLIC UTILITIES COMMISSION REGULATIONS.

**LIFTING NOTES**

FIELD INSTALLATION: PLANT DEMOLDING: MINIMUM HANDLING CONCRETE STRENGTH F <sub>c</sub> = 5500 PSI RIGGING EQUALIZER REQUIRED TO EQUALIZE LOAD TO 4 LIFTING POINTS WITH A SLING ANGLE BETWEEN 60° AND 90°	
BURY DEPTH:	0.0' - 0.0' to Top
WATER LEVEL:	3.0'
DESIGN SPEC:	AASHTO LRFD/ACI 318, ASTM C857
AGENCY:	LADWP
APPROX. WEIGHT:	6790.48 Lbs
LOADING SPEC:	AASHTO HL-93
AGENCY SPEC:	E-459 RPM

**BILL OF MATERIALS**

ITEM	UNIT QTY	QTY	PART NUMBER	DESCRIPTION	MASS (lb)
1	1	1	100012324	Vault 3660x42 Rect. Bottom Section Knockout Ducted, Sump LADWP E-459	5138
2	1	1	100012177	Riser 3660x12 Rect. Riser	971
3	1	1	100012197	Top Riser 3660x6 Cast-In Frame LADWP E-459	386
4	1	1	100006367	STL BEAM 3660-T BAR GALV RPM	13
5	1	2	100007052	COVER 3660 POLYMER LADWP HALF	140
6	1	8	100007123	PENTA BOLT 1/2-13 UNC 2-1/2 7/8HEAD 304SS	
7	1	2	100004043	BOLT HEX 1/2-13 UNC 1.5 316SS	
8	1.000 ul	1.000 ul	100005749	SEALANT JOINT BUTYL RUBBER ASTM C-990 AND M198 CS-102 1IN EQUIV X14.5FT PER BOX 118FT	



**ISO VIEW**

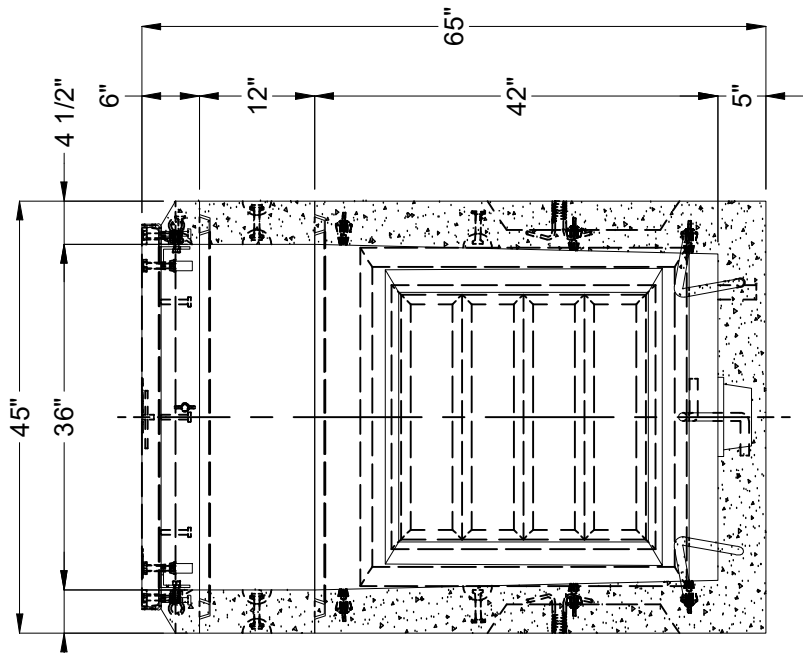
**REVISION HISTORY**

REV	DESCRIPTION	DATE	APPROVED
C	UPDATED B.O.M.	1/9/2024	

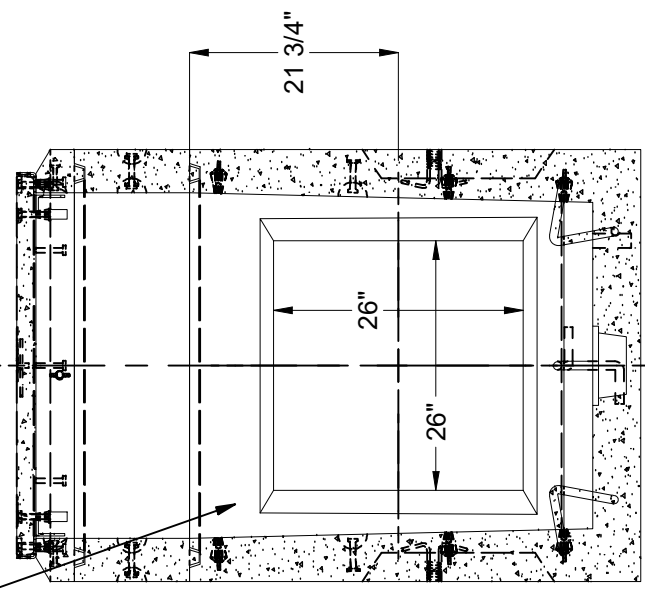
DESCRIPTION:	Vault Layout 3660x60 Knockout Sump 36"x60" LADWP E-459 RPM
REV:	C-1
PART NUMBER:	100010359
CREATED:	6/4/2019
LAYOUT REVIEW	
DRAWN BY:	D. Mejia
MODIFIED:	1/9/2024
SHEET:	15
1 OF 3	

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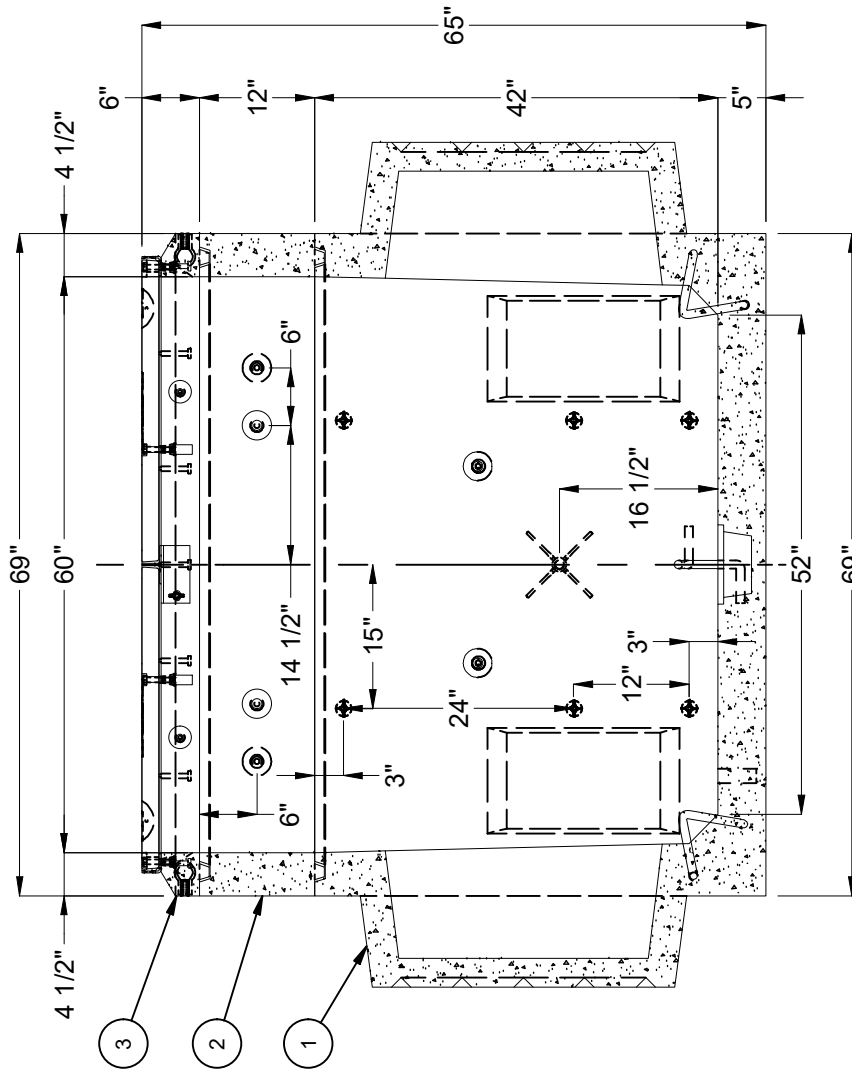
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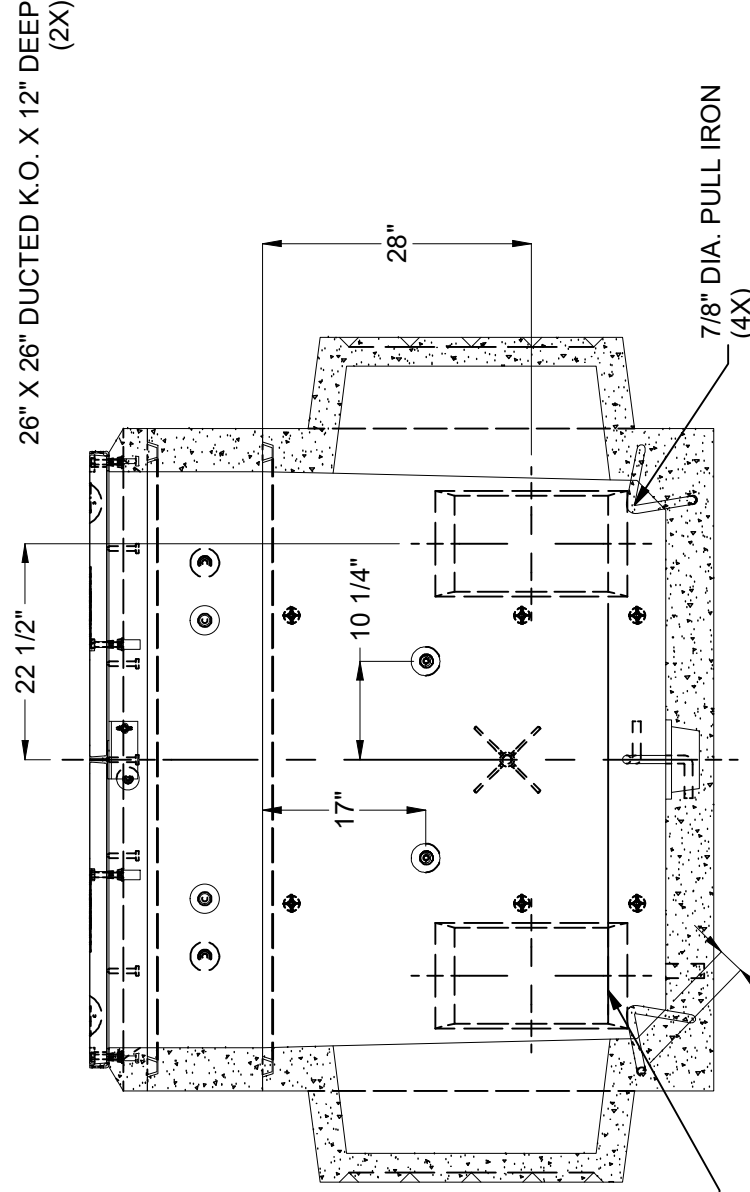
SECTION B-B



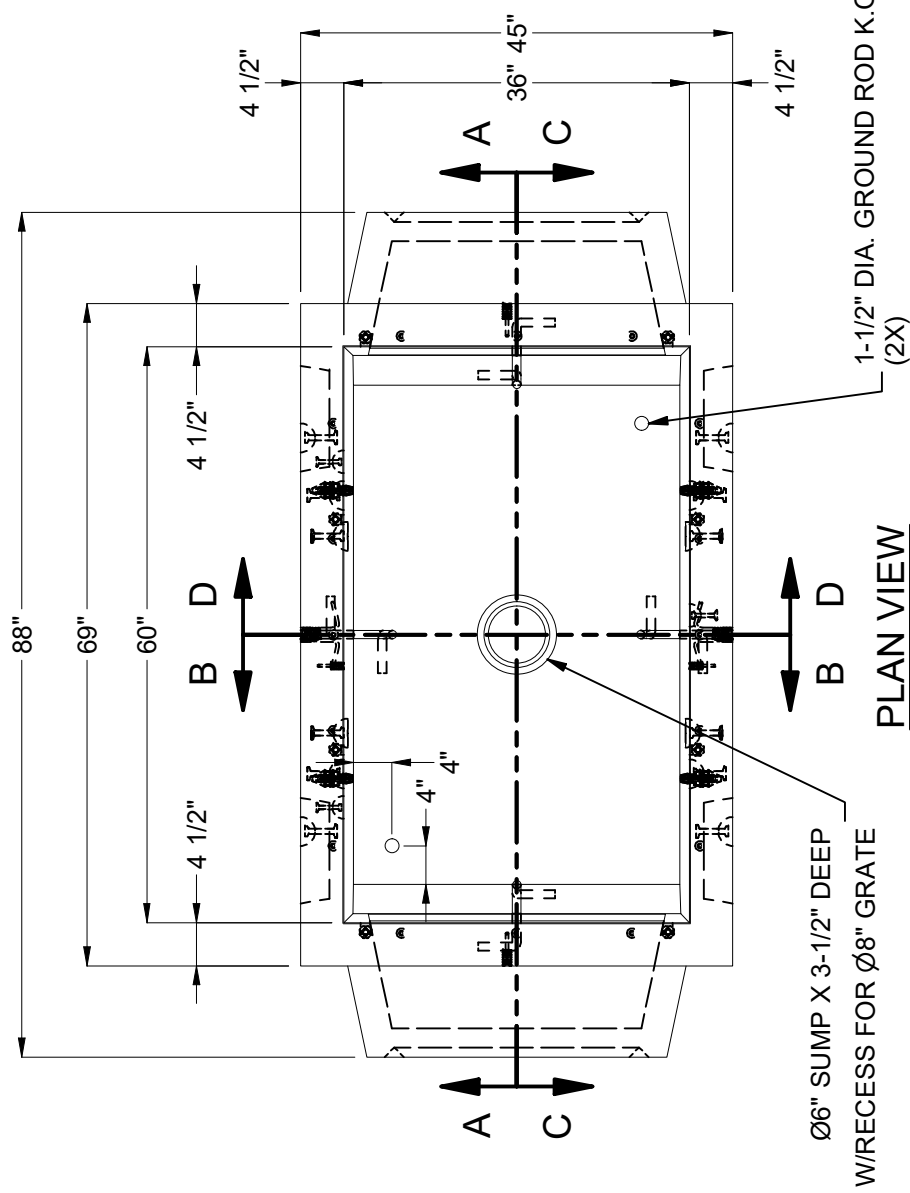
SECTION D-D



SECTION A-A



SECTION C-C



PLAN VIEW

26" X 26" DUCTED K.O. X 12" DEEP (2X)

10" X 16" K.O. X 3" DEEP  
DRAFT: T/B = 2", S1/S2 = 1/2" (4X)

2 3/4" MIN. CLR.

- 3
- 2
- 1

Ø6" SUMP X 3-1/2" DEEP WIRESS FOR Ø8" GRATE

1-1/2" DIA. GROUND ROD K.O. (2X)

BURY DEPTH:	0.0' - 0.0' to Top	DESIGN SPEC:	AASHTO LRFD/ACI 318, ASTM C857	DESIGN SPEC:	AASHTO HL-93	REV:	C-1
WATER LEVEL:	3.0'	APPROX. WEIGHT:	6790.48 Lbs	LOADING SPEC:	LADWP	DESCRIPTION:	Vault Layout 3660x60 Knockout Sump 36"x60"C LADWP E-459 RPM
DESIGN SPEC:	AASHTO LRFD/ACI 318, ASTM C857	AGENCY SPEC:	E-459 RPM	AGENCY SPEC:	LADWP	LAYOUT DRAWING	
AGENCY:	LADWP	AGENCY SPEC:	E-459 RPM	PART NUMBER:	1000103559	DRAWN BY:	D. Mejia
				CREATED:	6/4/2019	MODIFIED:	1/9/2024
							SHEET: 16
							2 OF 3

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