

**SUBMITTAL TO THE BOARD OF SUPERVISORS
 COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



FROM: TLMA - Transportation Department

SUBMITTAL DATE:
 April 18, 2013

SUBJECT: Authorization for Payment to the Imperial Irrigation District (IID) for the undergrounding of existing aerial primary electric facilities, Fred Waring Drive, Port Maria Rd. to approximately 700 ft. westerly

RECOMMENDED MOTION: That the Board of Supervisors authorize the payment of \$156,389 to the Imperial Irrigation District as payment for IID costs for the undergrounding of existing aerial primary electric facilities.

BACKGROUND:

The Transportation Improvement Program provides for the widening of Fred Waring Drive, from Adams Street to Port Maria Road, in the La Quinta area. The southerly half of the road is

Juan C. Perez
 Director of Transportation and Land Management

JP:sd
 (Continued On Attached Page)

FINANCIAL DATA	Current F.Y. Total Cost:	\$ 156,389	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2012/2013

SOURCE OF FUNDS: Palm Desert Financing Authority (100%)	Positions To Be Deleted Per A-30	<input type="checkbox"/>
There are no General Funds used for this project.	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION:

APPROVE
 BY:
 Tina Grande

County Executive Office Signature

- Dep't Recomm.: Consent Policy
- Per Exec. Ofc.: Consent Policy

Prev. Agn. Ref. | District: 4/4 | Agenda Number:

3-29

The Honorable Board of Supervisors

RE: Authorization for Payment to the Imperial Irrigation District (IID) for the undergrounding of existing aerial primary electric facilities, Fred Waring Drive, Port Maria Rd. to approximately 700 ft. westerly

April 18, 2013

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within the City of La Quinta, and the work is being coordinated with the City. The project requires the relocation of 7 power poles that are owned by the Imperial Irrigation District, and which provide electricity to adjacent homes.

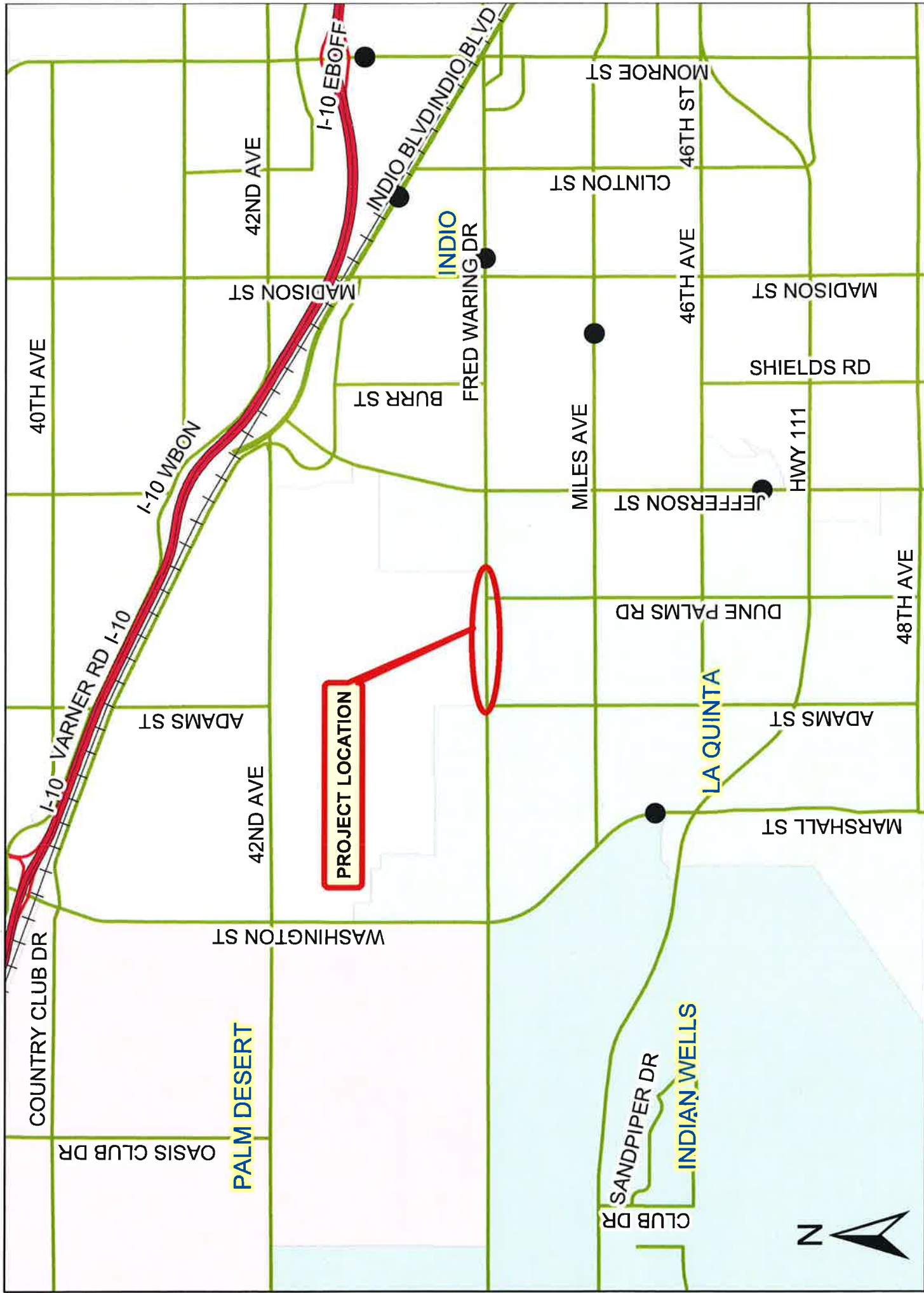
The undergrounding of the conductors, and removal of the poles, is a practical alternative to the relocation of the power poles for this project. This benefit is primarily due to the limited right-of-way available for the project. The undergrounding conversion will avoid the need to obtain right-of-way from each of the property owners. Additionally, relocation of the poles would place power poles closer to each of the homes, which would likely result in protests from the homeowners. The undergrounding conversion will result in aesthetic enhancement that will compliment the project and the neighborhood.

The project is specifically designed to avoid right-of-way acquisitions, especially the full acquisition of the homes and property on the north side of Fred Waring Drive, which is a project savings of \$10 to \$12 Million. Because the time-frame and the nature of the project only allow for very limited easement acquisitions, the undergrounding of the aerial electrical system is appropriate for this project.

The full cost of the undergrounding of the IID power system is the responsibility of the project. The submitted invoice provides for the work that will be performed by IID. Conduit installation and minor structures will be installed by the County's contractor during construction.

Project no. B5-0689

**FRED WARING DRIVE
VICINITY MAP**





CUSTOMER OPERATIONS
81-600 AVENUE 58
LA QUINTA, CA 92253

Date: April 05, 2013.

Customer Acct. # 3346720

COUNTY OF RIVERSIDE TRANSP DEPT
2950 WASHINGTON ST
RIVERSIDE CA 92504

CSP # 4014837

FRED WARING DR
BERMUDA DUNES CA 92203

Subject: OH TO UG EXISITING FACILITIES

IID Energy thanks you for giving us the opportunity to serve your electrical needs. To ensure your project is successfully processed, payment in full is required for the balance due. Please send payment to 81-600 AVENUE 58 - LA QUINTA, CA 92253.

Regulation Charges	Amount Quoted	Balance Due
Engineering Fee	\$ 5,000.00	
TOPS N' Barricades	\$ 5,000.00	\$ 5,000.00
Comm UG Actual (\$156389.05-\$1000Eng Fee)\$	151,389.05	\$ 151,389.05
Total Charges	\$ 161,389.05	\$ 156,389.05

Our Goal is to provide excellent customer service from design to construction. Please ensure requirements 1 & 2 are accomplished or contact Project Manager at 760-398-5841 if you have questions about your project.

Requirements


1. Project is paid in full
2. IID inspections are passed

Call your Project Manager once requirements 1 & 2 are accomplished. This allows us to efficiently plan and commit necessary resources to complete your project.

Important

1. Failure to acknowledge this quote by **10/02/2013** results in cancellation.
2. After Payment is made in full, actual construction date is subject to material availability (10-16 weeks).
3. Design changes caused by the customer may increase regulation charges.
4. Failure to fulfill payments and IID inspections will result in project delays.
5. Guarantee deposit is also required for **new commercial accounts**.

Sincerely,


Mr. Carlos Puente
Project Manager

Imperial Irrigation District
Coachella Valley
Power Division

COUNTY OF RIVERSIDE TRANSP. DEPT
FRED WARING/EAST OF ADAMS
BERMUDA DUNES, 92203

Service Notification: 4014837
Service Order: 60077999

Contact Name: STAN DEVY
Phone Number: (951)315-5502



Project Estimator: Mr. Jason Hernandez
Project Manager: Mr. Carlos Puente

III ELIGIBILITY FOR ENGINEERING DESIGN

The District's Distribution Engineering Section prioritizes the preparation of the job package preparation based on receipt of all required customer information and the expected start of developer construction.

Job preparation will not begin until job is placed on the engineering schedule. To be placed on the engineering schedule, the developer must complete and submit the following:

1. Completion of all related IID forms found in the Customer Information Packet located at the end of this document.
2. Payment of advance design fee.
3. Plans, drawings and load data.

IV JOB PACKAGE PREPARATION

The time required to prepare a job package for construction will vary depending upon the size of job, complexity of work, and right-of-way access, environmental or permit requirements.

The District will provide and mail a billing letter to the responsible party as shown in Customer Information Packet located at the end of this document.

V JOB PACKAGE RELEASE

The job will be released for construction scheduling when the conditions contained within the Customer Information Packet have been met and the District's job package has been approved.

VI CONSTRUCTION SCHEDULE

Based upon the estimated request date for electricity, the job package is released and placed on the District's construction schedule. Schedule may be obtained from Customer Service Project Manager.

The District's goal is to provide timely and economical electric service. In order to achieve this goal the developer should promptly provide the information requested and keep the Customer Service Project Manager informed of project status.

VII UNDERGROUND FACILITIES

When underground facilities are to be included, the District will provide a complete set of underground duct, vault, transformer pad and riser pole system installation drawings and associated specifications for each project or phase. It is the responsibility of the developer to provide and install, at developer's expense, the complete underground conduit and vault system, including any street lighting systems required by the city, county or other governing agency having jurisdiction. Lighting systems must be approved in advance of installation by the governing agency having jurisdiction. The District will provide point of service.

The District will provide an underground power inspection during the installation of conduit and vault systems with the exception of street light systems. Any request for inspections on a project must be scheduled with the District a minimum of 48 business hours in advance. Failure to schedule and/or obtain an inspection and approval for any portion of the lighting or underground power system may result in the total rejection of the system. Attachment A contains the Underground Distribution Standard Specifications, which include details and District products used.

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21 PLANS, DRAWINGS AND LOAD DATA

The District requires the developer to provide the following to the District's Customer Service Operations:

- 1. Approved street lighting plan.

Note In the District's Riverside County service area, the Developer shall submit lighting proposals first to the county of Riverside and then to the District's Customer Service Operations for service points.

- 2. Water sewer and drainage plans
- 3. Street improvement plans
- 4. Precise grading and landscaping plans
- 5. Plot plans with building shown
- 6. Parcel and overall project map with phasing
- 7. Graphic scales on all AutoCAD drawings
- 8. All parcel map property corners or tract map boundary corners shall be tied to section or 1/4 section corners
- 9. One hard copy of total connected electrical loads for each building style or floor plan
- 10. Items to be included into their own separate layers are as follows:

- Land Parcel Layer
- Right of Way Layer
- Centerline layer including Street Centerline Annotation
- Public Utility Easement Layer (P.U.E.)

Items 1 through 10 (above) shall be provided for proposed residential subdivisions, commercial projects and apartment projects. All land base or base map data must first be acquired from either the county of Imperial or the county of Riverside (as appropriate). The land base information will include NAD-83, zone 6 state plane coordinates; the appropriate existing parcel map, street, road and any other known right-of-way boundaries. Known surveyed benchmark locations and/or GPS data points should also be included, wherein they are available. Basically the proposed project should be designed inside the county area of the submittal and only in AutoCAD digital form. Acceptable media is an electronic file.

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Reference Tables:

Table 16.1 for 1/2" Steel Latching Valve with 1/2" Size – Section 3 Boring

Table 17.1 for 1/2" Index – Section 4 Underground Conduits

Table 2.1 for 1/2" Measured Rope diam. – Section 10 Pulling rope

Table 4.1 for 1/2" Radius Index (Horizontal) – Section 4 Underground Conduits

Table 4.2 for 1/2" Radius Index (Vertical) – Section 4 Underground Conduits

Table 6.1 for 1/2" Marker – Section 11 Stub outs

Table 7.1 for 1/2" Encasement – Section 2 Conduit encasement

Table 9.1 for 1/2" Slope Elevations – Section 13 Retaining Walls

Drawing Reference:

Drawing 1 Vault side view, Conduit reduction – Section 4 Underground Conduits

Drawing 2 Stub out detail – Section 11 Stub outs

Drawing 3 Retaining Wall, slope falling toward lift equipment – Section 12A Slope

Drawing 4 Retaining Wall, slope falling away from lift equipment – Section 12B Slope

Drawing 5 Typical Boring 2 – 5" Detail – Section 3 Boring

Drawing 6 Typical Boring 2 – 8" Detail – Section 3 Boring

Drawing 7 Typical Boring 4 – 6" Detail – Section 3 Boring

Drawing 8 Typical Boring 8 – 8" Detail – Section 3 Boring

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Excavations, trenching and backfills Continued.

- 5. Developer/contractor will be responsible for coordination of inspections where trench has IID utilities exposed. **(Refer to Joint Trench Indemnity Agreement IID-700E (6-07)) (Inspection schedules are subject to a minimum 48 hour advance notice and are by appointment only - La Quinta (760) 398-5828; Imperial (760) 482-3300).**
- 6. The developer shall be responsible for filling out and signing IID form 700E (6-07) Joint Trench Indemnity Agreement. Contact the appropriate IID Customer Service Project Manager. **(Refer to Joint Trench Indemnity Agreement IID-700E (6-07))**

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Conduit encasement, and concrete requirements Continued

- K. The layers between the adjoining utilities will be in compliance with GFE 1.8 and have a minimum of 12" separation. That separation may be reduced with 12" of concrete encasement. (Refer to 1H) (Refer to Standard 100.41)
- L. Conduit encasement criteria is as follows: (Table 1)

Feeder type	ENCASEMENT OR		Amperage
	Number of Run	Separation	
Backbone	2 or more	3"	600 Amp
Lateral	4 or more	6"	250 Amp

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Underground conduits, ducts, conduit fittings, and sealing compound continued:

2. The installation contractor shall measure all conduit runs to within 1/8" and provide the manufacturer's inspection schedule. **Inspection schedules are subject to a minimum 48 hour advance notice and are by appointment only** - La Quinta (760) 398-5828; Imperial (760) 482-3300).
3. The installation of the fire alarm system will be conducted by a single contractor or other entity to give the project continuity, reducing the possibility of deviations from the 2011 IFCB regulations.

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5. Transformer pads, junction pads, precast vaults, junction sleeves

- A. All conduit entering transformer pads shall be cut off 0" to 1" (inch) from above the top of the pad.
- B. All conduit entering secondary pull boxes or splice boxes shall be cut 1/2" to 3/4" (inches) above the pea gravel.
- C. Single phase transformer pads installed adjacent to roads shall have the primary conduits installed closest to the road, and secondary conduits installed away from the road. (Contact the appropriate IID Customer Service Project Manager.)
- D. Transformer pads, pull boxes, manholes, vaults, and switch pad installations shall be installed 3" above final grade (where not installed along sidewalks) and flush with final sidewalk for those types of installations. In areas with sloping contours greater than 1/4" to the foot, the top edge shall be set as shown below highest point of slope. (In no case shall there be more than 1/2" of slope in 1' (foot) of horizontal measurement.)
- E. Transformer Pad Inspection: when the contractor receives or installs a Transformer Pad that has a continuous crack across three sides (side, top, and inside window) this pad will be rejected by the IID inspector. When a crack is non-continuous and the crack exceeds 1/32" (.032) wide, the contractor may make appropriate repairs to the crack with a manufacturer approved epoxy equal to CIA-GEL 7000. The contractor will inform the IID inspector of any crack repair to be made before repairs are made.
- F. Contractor is responsible for permanent and waterproof markings on all interior vault knockouts, any and all conduits, conduit runs, and fit outs, with the conduit number corresponding to the number shown on the plans.
- G. Contractor shall seal or grout around seams, lid sections, and ducts entering vaults and pullboxes to prevent soil and water entering at joints or openings.
- H. Where the external diameter of the conduit is smaller than the diameter of the opening in the vault wall, the reduction in conduit diameter shall take place two feet (2') from the external wall of the vault. **Refer to Section 4D**
Refer to Drawing # 1
- I. Contractor/Developer shall keep all doors away from IID's transformer pads, primary vaults, secondary pull boxes, and other IID equipment to give IID personnel access during the duration of the project.

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6. Marking tape over conduit

- A. Contractor shall install 2" line "buried" (1" tape) red in color with black lettering: CAUTION BURIED ELECTRIC LINE BELOW (See Standard 100.5)
- B. Contractor will install a caution tape 1" above the power vents. (See Standard 100.5)

7. Secondary pullbox:

Secondary pullboxes must be as shown on the drawings.

Surface secondary pullbox utilize in all Imperial Ringwall (IR) utility vault construction. Reference Standard 181.4 - 181.11.

8. Copperweld ground rods 5/8" x 10':

- A. To comply with General Order 129, rule 215A, the contractor is required to provide and install a minimum of two (2) 5/8" x 10' copperweld ground rods shall be installed at each transformer pad and junction pad, and primary vault. (See Standards in 8C for detail)
- B. The developer will be responsible for driving any and all ground rods in the system that is a joint trench. This will be predetermined and completed before IID construction crews arrive on the job.
- C. French and pad grounding
 - Single phase 4-transformer reference Standard 190.2-190.21
 - Three phase transformer reference Standard 190.3-190.31
 - Single phase wicket reference Standard 190.4-190.41
 - Three phase wicket reference Standard 190.5-190.51

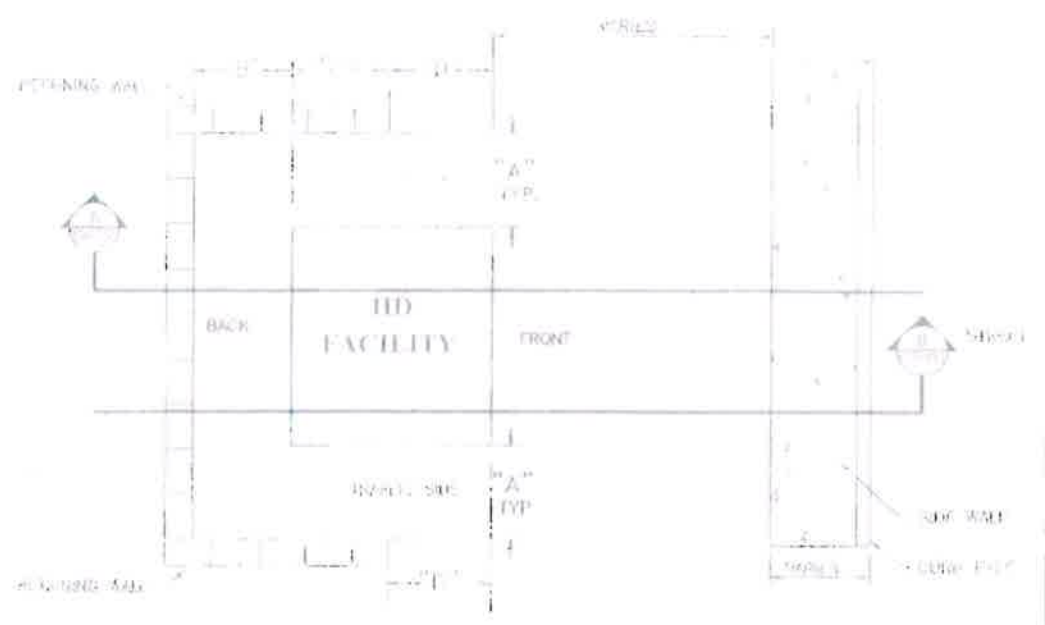
9. Guard posts:

- A. Guard posts shall be 4" diameter pipe schedule 40 black iron or mild steel painted high visibility yellow.

See Standard 181.6 for concrete fill/foundation requirements and typical location of posts around IID equipment.

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Retaining Walls Continued



SYMBOLS:

- CROSS SECTION
- RETAINING WALL

PLAN VIEW
N.T.S.

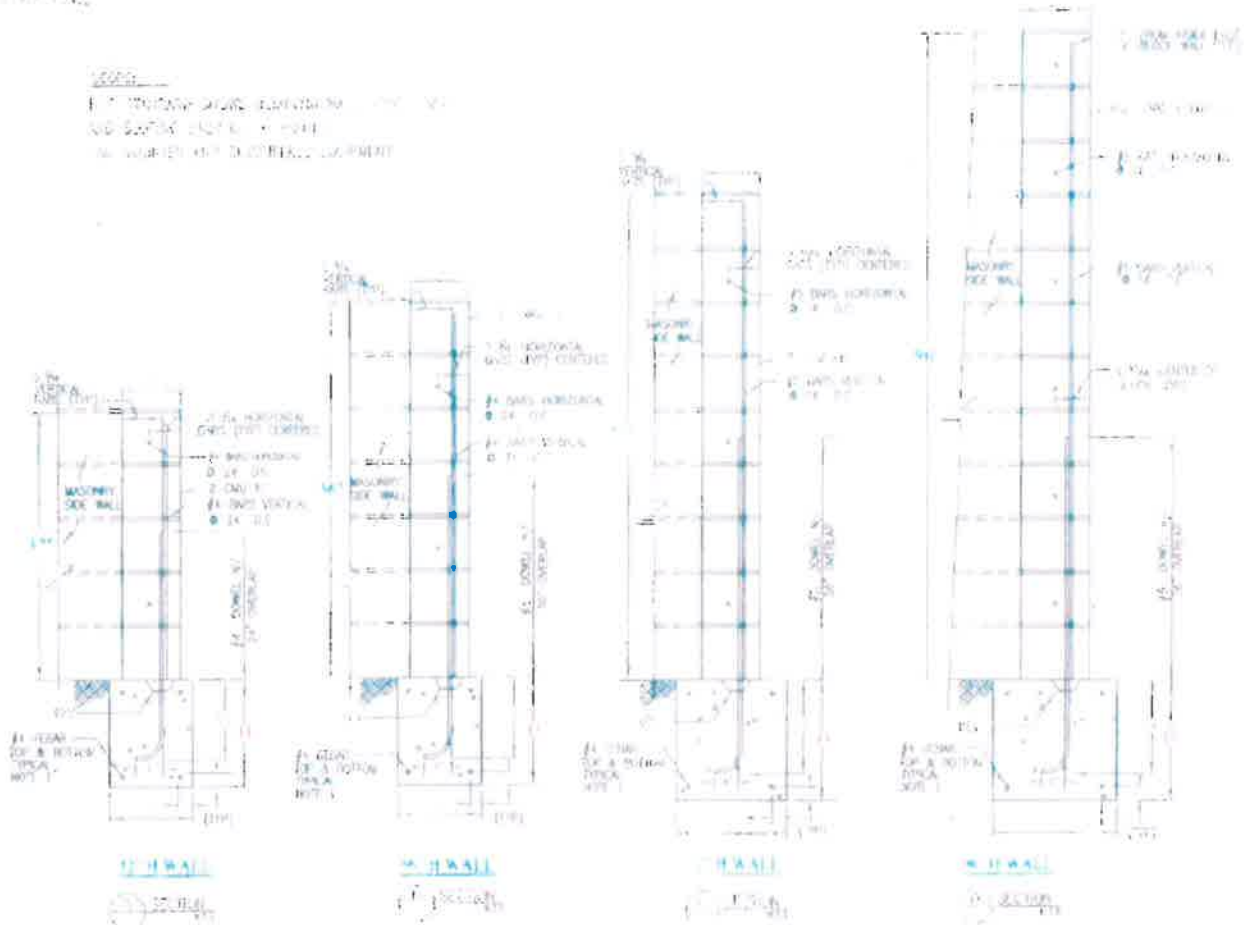
RETAINING WALLS (INCLUDING HD FACILITY) FOR & TANKS					
TYPE OF STRUCTURE	W	H	VOL	AREA	PERIMETER
2' X 6' PRIMARY SMALL PULLBOX	2'	6'	12'	12'	12'
2' X 6' PRIMARY MEDIUM PULLBOX	2'	6'	12'	12'	12'
6' X 8' PRIMARY VAULT WITHOUT CABINET	6'	8'	48'	48'	28'
6' X 8' PRIMARY VAULT WITH CABINET	6'	8'	48'	48'	28'
ALL TRANSFORMER PAD (SINGLE & THREE PHASE)	2'	8'	VARIES	VARIES	VARIES

Notes:

1. The chain line indicates the location of the retaining wall. It does not indicate the location of the equipment itself. (See retaining wall)
2. Retaining wall codes = 0 found at the bottom of HD-6 for service pads (See also SW)
3. Refer to Standard 190-19-06.1.55 On Retaining Wall and structure

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1. 1:1 SLOPE SHALL BE MAINTAINED
 2. 1:1 SLOPE SHALL BE MAINTAINED
 3. 1:1 SLOPE SHALL BE MAINTAINED



WALL NO.	WALL TYPE	FOUNDATION	REINFORCEMENT	WALL THICKNESS	WALL HEIGHT
W-1	CONCRETE BLOCK	CONCRETE ON 1:1 SLOPE	REINFORCED CONCRETE	1:1	1:1
W-2	CONCRETE BLOCK	CONCRETE ON 1:1 SLOPE	REINFORCED CONCRETE	1:1	1:1
W-3	CONCRETE BLOCK	CONCRETE ON 1:1 SLOPE	REINFORCED CONCRETE	1:1	1:1
W-4	CONCRETE BLOCK	CONCRETE ON 1:1 SLOPE	REINFORCED CONCRETE	1:1	1:1

- NOTES:
1. HORIZONTAL REINFORCEMENT SHALL BE PLACED SUBJECTED TO THE DESIGN OF RETAINING WALL.
 2. SLOPE TO BE MAINTAINED SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE WALL.
 3. CONSULTATION TO BE MAINTAINED TO BE MAINTAINED.

NO.	DESCRIPTION
1	REVISION
2	REVISION
3	REVISION
4	REVISION
5	REVISION
6	REVISION
7	REVISION
8	REVISION
9	REVISION
10	REVISION

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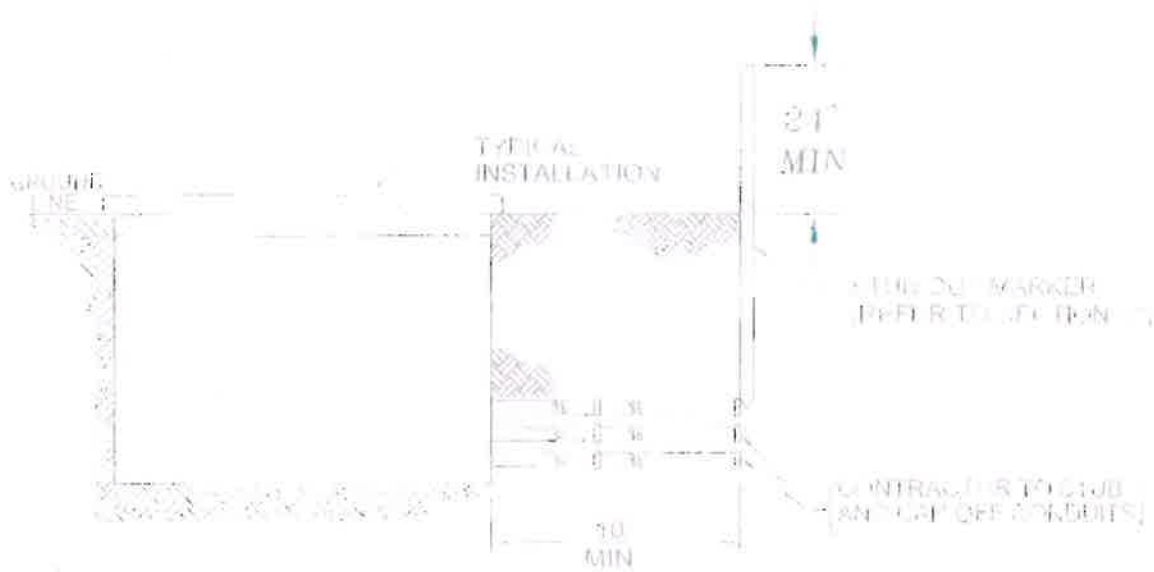
DEPARTMENT OF PUBLIC WORKS
 CITY OF LOS ANGELES

RETAINING WALL SECTION
 FOUNDATION AND CROSS SECTION ELEVATIONS
 AND CONTRACTORS' NOTES

T. KING APPROVED	TK	M. GAPPINGER CHAIRMAN/STANDARDS	11-04-09 DATE	REV. 0 E.P. No.	N.Y.S. SCALE
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Drawing 1 - Side view of conduit reduction. Refer to section 4D.



See notes for details, dimensions and materials.

NOTES:

1. ENCASUREMENT SHALL BE 10' FROM VAULT.
2. NO CONCRETE TO BE POURED WITHIN 10' OF ANY CONDUIT ENTRANCE GREATER THAN 1/2\"/>

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Drawing 2 - Stub out detail - Section 11 Stub out
 See N.T.B.

	ILLINOIS UNDERGROUND DISTRIBUTION STANDARDS CONDUIT REDUCTION & STUB OUT MARKER DETAILS			
	T. KING TK APPROVED	W. GAPPINGER WLG CHAIRMAN, STANDARDS	11-19-06 DATE	REV 05 REV. NO.

- UNDERGROUND (SINGLE PHASE)
 - UNDERGROUND (THREE PHASE)
 - SURFACE CABLE
- SECTION CABINET
- TRANSFORMER

UNDERGROUND DISTRIBUTION

- SECONDARY PHASE
- PHASE A/B/C
- GROUND

UNDERGROUND DISTRIBUTION

- SWITCH CABINET
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- SINGLE PHASE PRIMARY UNDERGROUND
- THREE PHASE PRIMARY UNDERGROUND
- THREE PHASE SECONDARY UNDERGROUND
- THREE PHASE PARALLEL UNDERGROUND
- GROUND

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- WIRE
- CABLE
- R-FRAME
- HIGH VOLTAGE
- STANDARD
- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- OVERHEAD CABLE

UNDERGROUND DISTRIBUTION

- BINDER
- FAULT INDICATOR
- REMOTE CURRENT SENSOR

UNDERGROUND DISTRIBUTION

- OPEN POINT
- CLOSED POINT AND JUNCTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- OPEN BREAK
- CLOSED
- OPEN
- CLOSED

UNDERGROUND DISTRIBUTION

- REGULATOR OPERATOR
- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- UNDERGROUND (SINGLE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- SINGLE PHASE PRIMARY OVERHEAD
- THREE PHASE PRIMARY OVERHEAD
- THREE PHASE SECONDARY OVERHEAD
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION

- THREE PHASE SECONDARY UNDERGROUND
- THREE PHASE SECONDARY UNDERGROUND
- UNDERGROUND (THREE PHASE)
- UNDERGROUND (THREE PHASE)

UNDERGROUND DISTRIBUTION STANDARDS

IID ELECTRIC SYMBOL LEGEND

N.T.B.	REV #	DATE	BY
SCALE	BY	DATE	BY

MYB

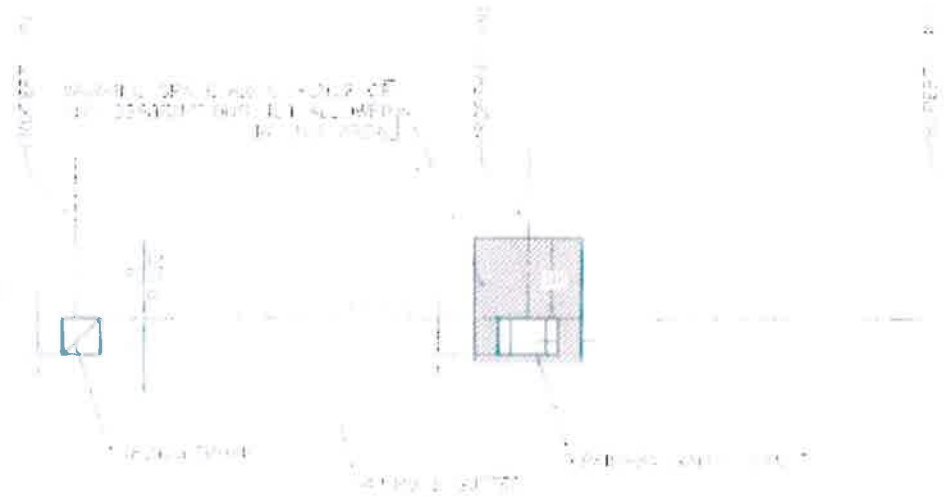
APPROVED

NOTIFICATION

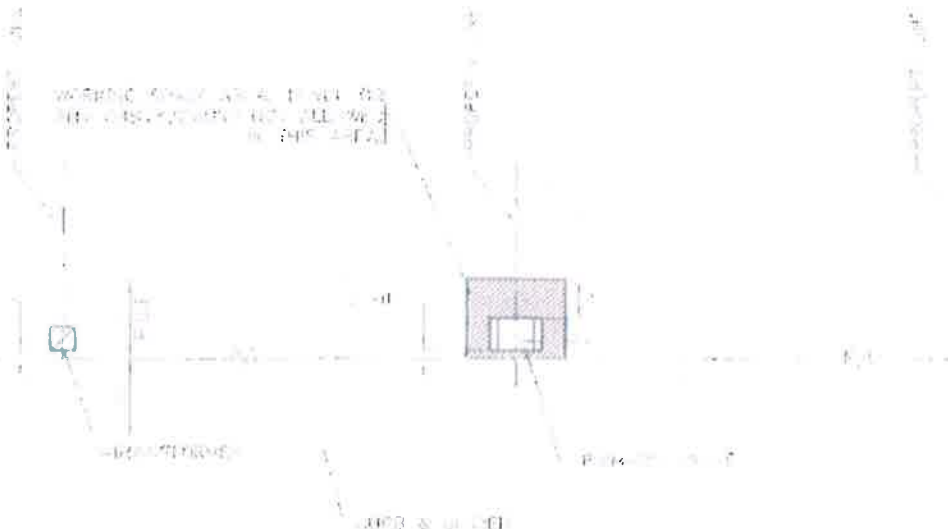
SERVICE ORDER #

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CURB GUTTER SIDEWALK PARKWAY



CURB GUTTER PARKWAY SIDEWALK

NOTES:

- 1. Any PUE installations of IID facilities within the public street right-of-way shall be done by the contractor in accordance with the jurisdiction agency, i.e. City, County, etc.
 - 2. Any PUE installations of IID facilities within a designated Public Utility District (PUD) shall be made in accordance with PUE, as shown on the PUE (2000) map.
 - 3. All PUE adjacent to public street right-of-way.
 - 4. Any PUE installations of IID facilities within private property shall be done as requested - after satisfactory authorization from vested owner of PUE property.
1. See also section 103.000 - Curb Gutter for clarification of working space. See also 103.000(3)(b) 103.000(3)(c)

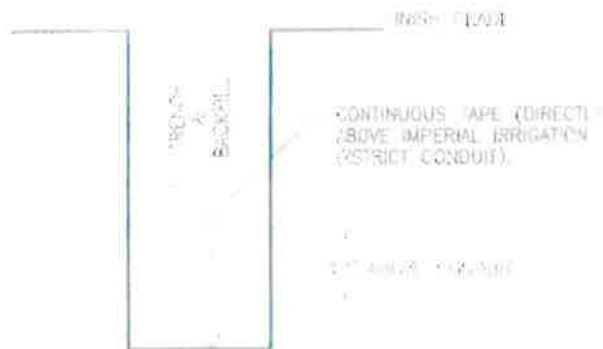
IID UNDERGROUND DISTRIBUTION STANDARDS					
IID FACILITY INSTALLATION					
REV. 05	01 19 09	M. GAPPINGER	TK	T. KING	
SCALE	REV. NO.	DATE	CHAIRMAN/STANDARDS	APPROVED	

CSP NOTIFICATION # _____

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100.5




TYPICAL TRENCH DETAIL
W/ LINE GUARD III TAPE 12\"/>

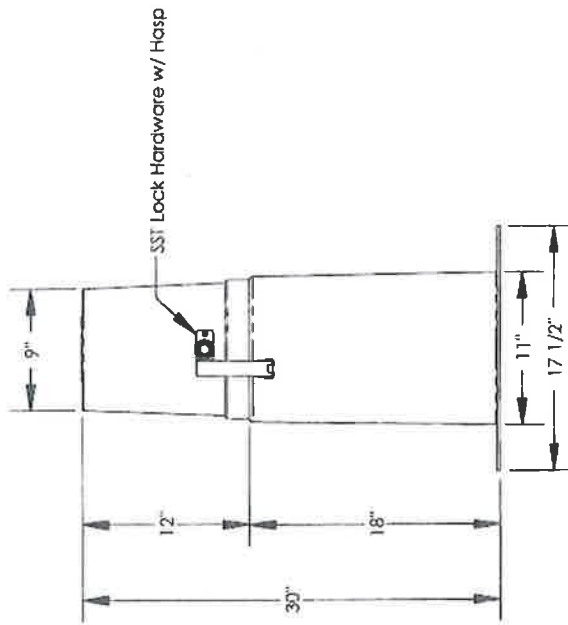
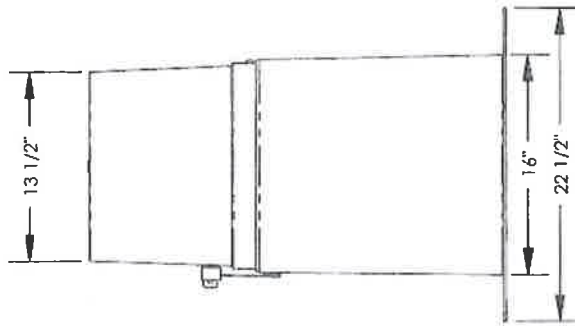
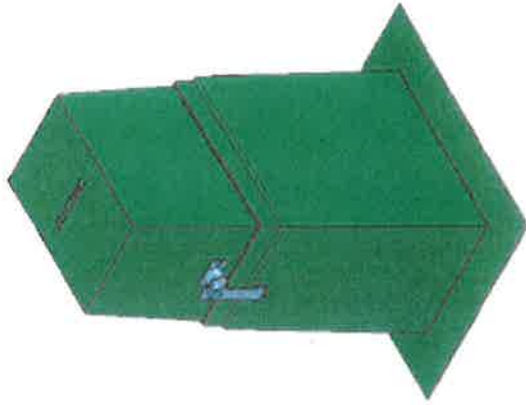
NOTE:

1. INSTALL LINE GUARD III TAPE (RED), MINIMUM 2\"/>
2. TAPE INSTALLED 12\"/>

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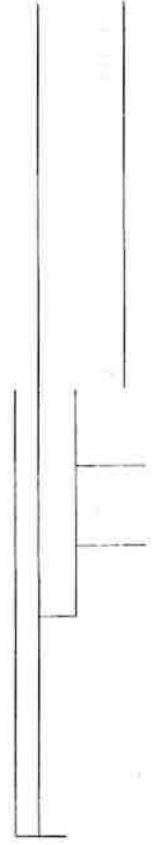
	IID UNDERGROUND DISTRIBUTION STANDARDS				
	LINE GUARD III TAPE				
T. ZONG APPROVED	TK	V. DAPPERGER CHIEF ENGINEER/STANDARDS	12-07-09 DATE	REV 04 REV. NO.	UM-1-7 SCALE

REVISIONS		
REV	DESCRIPTION	DATE
REL-01		2/1/2006
		APPROVED



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Novan Fiberglass Inc.




CONSTRUCTION NOTES:

- (A)
- (B)
- (C) LOCATE GROUND RODS SO THEY DO NOT TOUCH CONDUITS.

NOTES:

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IEC UNDERGROUND DISTRIBUTION STANDARDS TRENCH GROUND WIRE FOR SINGLE PHASE TRANSFORMERS PAD 50KVA TO 167KVA (BY CUSTOMER)						
N.T.S.	REV 04	12-19-06	M. GAPPINGER MG	T. KING TK		
SCALE	ISS. NO.	DATE	CHAIRMAN/STANDARDS	APPROVED:		

CONSTRUCTION NOTES

CONTRACTOR SHALL PROVIDE FOR EXCAVATION UNDER THE TOP SURFACE OF THE EXISTING CONCRETE DRIVEWAY TO BE REMOVED.

CONTRACTOR SHALL PROVIDE & INSTALL 3/8" DIA. GALV. GALVANIZED STEEL PIPE 10 FEET DIA. BELOW THE EXISTING DRIVEWAY SURFACE.

CONTRACTOR TO PROVIDE THE 10' DIA. GALVANIZED STEEL PIPE FOR ALL OF SECTION WITH THE EXISTING CONCRETE.

1. SEE THE DETAILS OF EXCAVATION AT THE EXISTING DRIVEWAY TO BE REMOVED.
2. PROVIDE THE 10' DIA. GALVANIZED STEEL PIPE.
3. ALL EXISTING CONCRETE TO BE REMOVED TO THE POINTS.
4. BOARD POSTS AS REQUIRED TO BE NEEDED WORK OF INSPECTOR.
5. ANYTHING TO BE LEFT IN PLACE SHALL BE REMOVED BY THE CONTRACTOR.
6. ALL EXCAVATIONS SHALL BE TO THE POINTS.

MANUFACTURER	10-12-10	CONTRACTOR
CONTRACTOR	10-12-10	10-12-10
ELECTRICAL	10-12-10	10-12-10

CSP NOTIFICATION # _____
 SERVICE ORDER # _____
 SHEET 37 OF 46

IID UNDERGROUND DISTRIBUTION STANDARDS SUBSTRUCTURES THREE PHASE SECTOR SLEEVE PAD INSTALLATION				
N.T.S.	REV 06	07-06-09	K. GAPPINGER  CHAIRMAN/STANDARDS	
SCALE	REV. NO.	DATE		

CONSTRUCTION NOTES:

- (A) 200mm PVC Conduit - 100mm internal diameter
- (B) 400mm dia. concrete sleeve
- (C) LOCATE GROUND RODS SO THEY DO NOT TOUCH CONDUITS (SEE DETAIL ON OTHER SHEET)

Qty of MPE 000

ITEM	QTY	DESCRIPTION	UNIT PRICE	TOTAL
1	1	SECTOR SLEEVE SEE STANDARD 1/10		
2	1	CADWELL DMC 2000 / 400mm 40/150mm CONNECTOR	4000.350	
3	20	WIRE 7/0.2mm 2.0 STRAND, GFI DRAWN BARI	4000.200	
4	2	ROUND BIL 12.5mm 2.0 COPPERWELD	4000.350	


NOTES:

THE SUPPLIER SHALL BE RESPONSIBLE FOR VERIFYING AND OBTAINING ALL NECESSARY PERMITS. THE SUPPLIER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR THE WORK TO BE CARRIED OUT.

CSP NOTIFICATION # _____

SERVICE ORDER # _____

SHEET 39 OF 40

I.D. UNDERGROUND DISTRIBUTION STANDARDS THREE PHASE SECTOR SLEEVE GROUNDING DETAIL (BY CUSTOMER)				
N.T.S.	REV 05	07-08-00	W. GAPPINGER <i>WVG</i>	
SCALE	REV. NO.	DATE	CHAIRMAN/STANDARDS	APPROVED