



Ubicación

Distrito :Punchana
Provincia : Maynas
Departamento : Loreto**"REPARACIÓN DE LOSA DE CONCRETO E INSTALACIÓN DE RACK DE TUBERÍA EN PLANTA IQUITOS"**

Presupuesto

S/1,236,406.48

Propietario

PETRO PERU S.A.

Plazo de ejecución

150 días calendario

Fecha

Abr-19

SUSTENTO DE METRADOS

| Item | Partida | Unidad | N° de veces | Ancho | Alto | Largo | Corrugado | Corrugado | Corrugado | Liso | Liso | 3.973 | Area | Parcial | Total |
|----------|-----------------------------------------------------------------------------------------|--------|-------------|-------|------|--------|-----------|-----------|-----------|-------|------|-------|--------|---------|---------|
| | | | | | | | 3/8" | 1/2" | 5/8" | 3/4" | 1" | | | | |
| 01 | OBRAS PROVISIONALES | | | | | | 0.557 | 0.996 | 1.552 | 2.235 | | | | | |
| 01.01 | Cartel de servicio - Gigantografía (2.70 x 3.60 m) c/ Bastidor de madera según Diseños | Und | 1 | | | | | | | | | | | 1 | 1 |
| 01.02 | Movilización y desmovilización de maquinaria y equipos | Vje | 2 | | | | | | | | | | | 2 | 2 |
| 01.03 | Transporte de materiales y herramientas | ton | 10 | | | | | | | | | | | 2.02 | 20.2 |
| 01.04 | Almacén pre fabricado para obra | und | 1 | | | | | | | | | | | 1 | 1 |
| 02 | SALUD Y SEGURIDAD EN EL TRABAJO | | | | | | | | | | | | | | |
| 02.01 | Elaboración, implementación y administración de plan de seguridad y salud en el trabajo | glb | 1 | | | | | | | | | | | 1 | 1 |
| 02.02 | Equipos de protección personal | glb | 1 | | | | | | | | | | | 1 | 1 |
| 02.03 | Equipos de protección colectiva | glb | 1 | | | | | | | | | | | 1 | 1 |
| 02.04 | Recursos para respuesta ante emergencia | glb | 1 | | | | | | | | | | | 1 | 1 |
| 03 | OBRAS PRELIMINARES | | | | | | | | | | | | | | |
| 03.01 | Limpieza manual de terreno | m2 | | | | | | | | | | | | 1850.31 | 1850.31 |
| | Area 1 | | 1 | | | | | | | | | | 287.09 | | |
| | Area 2 | | 1 | | | | | | | | | | 196.37 | | |
| | Area 3 | | 1 | | | | | | | | | | 401.66 | | |
| | Area 4 | | 1 | | | | | | | | | | 282.61 | | |
| | Area 5 | | 1 | | | | | | | | | | 468.41 | | |
| | Area 6 | | 1 | | | | | | | | | | 128.77 | | |
| | Canal | | 1 | | | | | | | | | | 85.40 | | |
| 03.02 | Trazo, nivel y replanteo c/ teodolito | m2 | | | | | | | | | | | | 1850.31 | 1850.31 |
| | Area 1 | | 1 | | | | | | | | | | 287.09 | | |
| | Area 2 | | 1 | | | | | | | | | | 196.37 | | |
| | Area 3 | | 1 | | | | | | | | | | 401.66 | | |
| | Area 4 | | 1 | | | | | | | | | | 282.61 | | |
| | Area 5 | | 1 | | | | | | | | | | 468.41 | | |
| | Area 6 | | 1 | | | | | | | | | | 128.77 | | |
| | Canal | | 1 | | | | | | | | | | 85.40 | | |
| 03.03 | Demolicion manual de caseta de control | m3 | | | | | | | | | | | | | 5.25 |
| | Caseta de control | | 1 | 4.18 | 0.3 | 4.18 | | | | | | | | 5.25 | 5.25 |
| 03.04 | Demolicion manual de pavimento | m3 | | | | | | | | | | | | | 555.09 |
| | Area 1 | | | | 0.3 | | | | | | | | 287.09 | 86.13 | |
| | Area 2 | | | | 0.3 | | | | | | | | 196.37 | 58.91 | |
| | Area 3 | | | | 0.3 | | | | | | | | 401.66 | 120.50 | |
| | Area 4 | | | | 0.3 | | | | | | | | 282.61 | 84.78 | |
| | Area 5 | | | | 0.3 | | | | | | | | 468.41 | 140.52 | |
| | Area 6 | | | | 0.3 | | | | | | | | 128.77 | 38.63 | |
| | Canal | | | | 0.3 | | | | | | | | 85.40 | 25.62 | |
| 03.05 | Bombeo para la eliminacion de aguas filtrantes y pluviales | dia | | | | | | | | | | | | | 10 |
| | Bombeo por dia | | 10 | | | | | | | | | | | 10 | |
| 03.06 | Señalización y mantenimiento vial durante ejecución de obra | dia | | | | | | | | | | | | | 154 |
| | Señalización en obra | | 154 | | | | | | | | | | | 154 | |
| 03.06 | Eliminación de material de demoliciones | m3 | | | | | | | | | | | | | 560.34 |
| | Volumen de demolicion de pavimento | | 1 | | | | | | | | | | | 555.09 | |
| | Volumen de demolicion de caseta | | 1 | | | | | | | | | | | 5.25 | |
| 04 | MOVIMIENTO DE TIERRAS | | | | | | | | | | | | | | |
| 04.01 | Sobre excavacion debajo de la sub rasante | m3 | | | | | | | | | | | | | 1295.22 |
| | Area 1 | | | | 0.7 | | | | | | | | 287.09 | 200.96 | |
| | Area 2 | | | | 0.7 | | | | | | | | 196.37 | 137.46 | |
| | Area 3 | | | | 0.7 | | | | | | | | 401.66 | 281.16 | |
| | Area 4 | | | | 0.7 | | | | | | | | 282.61 | 197.83 | |
| | Area 5 | | | | 0.7 | | | | | | | | 468.41 | 327.89 | |
| | Area 6 | | | | 0.7 | | | | | | | | 128.77 | 90.14 | |
| | Canal | | | | 0.7 | | | | | | | | 85.40 | 59.78 | |
| 04.02 | Geotextil | m2 | | | | | | | | | | | | | 1850.31 |
| | Area 1 | | 1 | | | | | | | | | | 287.09 | 287.09 | |
| | Area 2 | | 1 | | | | | | | | | | 196.37 | 196.37 | |
| | Area 3 | | 1 | | | | | | | | | | 401.66 | 401.66 | |
| | Area 4 | | 1 | | | | | | | | | | 282.61 | 282.61 | |
| | Area 5 | | 1 | | | | | | | | | | 468.41 | 468.41 | |
| | Area 6 | | 1 | | | | | | | | | | 128.77 | 128.77 | |
| | Canal | | 1 | | | | | | | | | | 85.40 | 85.40 | |
| 04.03 | Relleno de sobre excavacion debajo de la sub rasante, con material de prestamo | m3 | | | | | | | | | | | | | 925.16 |
| | Area 1 | | 0.5 | | | | | | | | | | 287.09 | 143.54 | |
| | Area 2 | | 0.5 | | | | | | | | | | 196.37 | 98.18 | |
| | Area 3 | | 0.5 | | | | | | | | | | 401.66 | 200.83 | |
| | Area 4 | | 0.5 | | | | | | | | | | 282.61 | 141.31 | |
| | Area 5 | | 0.5 | | | | | | | | | | 468.41 | 234.21 | |
| | Area 6 | | 0.5 | | | | | | | | | | 128.77 | 64.39 | |
| | Canal | | 0.5 | | | | | | | | | | 85.40 | 42.70 | |
| 04.04 | Conformacion a nivel de sub rasante | m2 | | | | | | | | | | | | | 1850.31 |
| | Area 1 | | 1 | | | | | | | | | | 287.09 | 287.09 | |
| | Area 2 | | 1 | | | | | | | | | | 196.37 | 196.37 | |
| | Area 3 | | 1 | | | | | | | | | | 401.66 | 401.66 | |
| | Area 4 | | 1 | | | | | | | | | | 282.61 | 282.61 | |
| | Area 5 | | 1 | | | | | | | | | | 468.41 | 468.41 | |
| | Area 6 | | 1 | | | | | | | | | | 128.77 | 128.77 | |
| | Canal | | 1 | | | | | | | | | | 85.40 | 85.40 | |
| 04.05 | Entibado para proteccion de excavacion | m2 | | | | | | | | | | | | | 87.805 |
| | Perimetro del area intervenida | | 1 | | 0.5 | 175.61 | | | | | | | | 87.805 | |
| 04.06 | Eliminacion de material excedente a una distancia= 3Km+30% esponjamiento convolquete | m3 | | | | | | | | | | | | | 1683.78 |
| | Volumen de excavacion de sobre excavacion | | | | | | | | | | | | | | |
| | Area 1 | | 1.3 | | 0.7 | | | | | | | | 287.09 | 261.25 | |
| | Area 2 | | 1.3 | | 0.7 | | | | | | | | 196.37 | 178.69 | |
| | Area 3 | | 1.3 | | 0.7 | | | | | | | | 401.66 | 365.51 | |
| | Area 4 | | 1.3 | | 0.7 | | | | | | | | 282.61 | 257.18 | |
| | Area 5 | | 1.3 | | 0.7 | | | | | | | | 468.41 | 426.26 | |
| | Area 6 | | 1.3 | | 0.7 | | | | | | | | 128.77 | 117.18 | |
| | Canal | | 1.3 | | 0.7 | | | | | | | | 85.40 | 77.71 | |
| 05 | OBRAS DE CONCRETO SIMPLE | | | | | | | | | | | | | | |
| 05.01 | Solado mezcla 1:8 (C:A) en canal de tuberías, e= 0.10 m | m2 | | | | | | | | | | | | | 85.4 |
| | area de canal | | 1 | | | | | | | | | | | 85.4 | |
| 05.02 | Solado de Mortero C-A - 1:8 en losa de pavimento e=0.10 m | m2 | | | | | | | | | | | | | 1764.91 |
| | Area total menos area de canal | | | | | | | | | | | | | | |
| | Area 1 | | 1 | | 1 | | | | | | | | 287.09 | 287.09 | |
| | Area 2 | | 1 | | 1 | | | | | | | | 196.37 | 196.37 | |
| | Area 3 | | 1 | | 1 | | | | | | | | 401.66 | 401.66 | |
| | Area 4 | | 1 | | 1 | | | | | | | | 282.61 | 282.61 | |
| | Area 5 | | 1 | | 1 | | | | | | | | 468.41 | 468.41 | |
| | Area 6 | | 1 | | 1 | | | | | | | | 128.77 | 128.77 | |
| 05.03 | Mortero f _c =175 kg/cm ² en piso de canal | m3 | | | | | | | | | | | | | 16.06 |
| | Area total del canal menos area de canal a una altura de 0.2 | | | | 0.2 | | | | | | | | 80.31 | 16.06 | |
| 06 | OBRAS DE CONCRETO ARMADO | | | | | | | | | | | | | | |
| 06.01 | Zapatas | | | | | | | | | | | | | | |
| 06.01.01 | Mortero f _c =210 kg/cm ² en zapatas Z-1 | m3 | | | | | | | | | | | | | 2.016 |
| | Zapata Z-1 | | 14 | 0.6 | 0.4 | 0.6 | | | | | | | | 2.016 | |
| 06.01.02 | Acero corrugado 1/2" f _y = 4200 kg/cm ² grado 60 | Kg | | | | | | | | | | | | | 61.35 |
| | Zapatas Z-1 | | 14 | | | 4 | | | | | | | | 61.3536 | |
| 06.02 | Columnas | | | | | | | | | | | | | | |
| 06.02.01 | Mortero f _c =210 kg/cm ² en columnas de 0.20 x 0.20 | m3 | | | | | | | | | | | | | 0.252 |
| | Columnas de 0.20 x 0.20 m | | 14 | 0.2 | 0.45 | 0.2 | | | | | | | | 0.252 | |
| 06.02.02 | Acero corrugado 1/2" f _y = 4200 kg/cm ² grado 60 | Kg | | | | | | | | | | | | | 61.35 |
| | Columnas de 0.20 x 0.20 m | | 14 | | | 4 | | | | | | | | 61.3536 | |
| 06.02.03 | Acero corrugado 3/8" f _y = 4200 kg/cm ² grado 60 | kg | | | | | | | | | | | | | 39.63 |
| | Columnas de 0.20 x 0.20 m | | 14 | | | 4.62 | | | | | | | | 39.629 | |
| 06.02.04 | Encofrado y desencofrado de columnas | m2 | | | | | | | | | | | | | 2.52 |
| | Columnas de 0.20 x 0.20 m | | 28 | 0.2 | 0.45 | | | | | | | | | 2.52 | |
| 06.03 | Vigas perimetrales y centricas | | | | | | | | | | | | | | |
| 06.03.01 | Mortero f _c =210 kg/cm ² | m3 | | | | | | | | | | | | | 9.80 |
| | Vigas perimetrales y centricas | | 4 | 0.2 | 0.45 | 25.43 | | | | | | | | 9.1548 | |
| | Vigas transversales | | 2 | 0.2 | 0.45 | 3.58 | | | | | | | | 0.64 | |
| 06.03.02 | Acero corrugado 1/2" f _y = 4200 kg/cm ² grado 60 | Kg | | | | | | | | | | | | | 954.31 |

| | | | | | | | | |
|-----------|----------------------------------------------------------------------------------------|-----|------|-----|--------|--------|----------|----------|
| | Vigas perimetrales y centricas | | 4 | | 203.44 | | 891.56 | |
| | Vigas transversales | | 2 | | 28.64 | | 62.76 | |
| 06.03.03 | Acero corrugado 3/8" fy= 4200 kg/cm2 grado 60 | Kg | | | | | | 439.36 |
| | Vigas perimetrales y centricas | | 4 | | 170 | | 416.636 | |
| | Vigas transversales | | 2 | | 20.4 | | 22.7256 | |
| 06.03.04 | Encofrado y desencofrado de vigas | m2 | | | | | | 108.88 |
| | Vigas perimetrales y centricas | | 8 | 0.5 | 25.43 | | 101.72 | |
| | Vigas transversales | | 4 | 0.5 | 3.58 | | 7.16 | |
| 07 | OBRAS DE PAVIMENTO | | | | | | | |
| 07.01 | Geomalla triaxial | m2 | | | | | | 1764.91 |
| | Area 1 | | | 1 | | 287.09 | 287.09 | |
| | Area 2 | | | 1 | | 196.37 | 196.37 | |
| | Area 3 | | | 1 | | 401.66 | 401.66 | |
| | Area 4 | | | 1 | | 282.61 | 282.61 | |
| | Area 5 | | | 1 | | 468.41 | 468.41 | |
| | Area 6 | | | 1 | | 128.77 | 128.77 | |
| 07.02 | Sub Base con material A-2-4 E=0.20 m | m3 | | | | | | 352.98 |
| | Area 1 | | | 0.2 | | 287.09 | 57.42 | |
| | Area 2 | | | 0.2 | | 196.37 | 39.27 | |
| | Area 3 | | | 0.2 | | 401.66 | 80.33 | |
| | Area 4 | | | 0.2 | | 282.61 | 56.52 | |
| | Area 5 | | | 0.2 | | 468.41 | 93.68 | |
| | Area 6 | | | 0.2 | | 128.77 | 25.75 | |
| 07.03 | Losa de rodadura mortero fc=210 kg/cm2 | m3 | | | | | | 370.06 |
| | Area 1 | | | 0.2 | | 287.09 | 57.42 | |
| | Area 2 | | | 0.2 | | 196.37 | 39.27 | |
| | Area 3 | | | 0.2 | | 401.66 | 80.33 | |
| | Area 4 | | | 0.2 | | 282.61 | 56.52 | |
| | Area 5 | | | 0.2 | | 468.41 | 93.68 | |
| | Area 6 | | | 0.2 | | 128.77 | 25.75 | |
| | Canal | | | 0.2 | | 85.40 | 17.08 | |
| 07.04 | Encofrado y desencofrado de pavimento | m2 | | | | | | 243.71 |
| | Perimetro | | 1 | 0.2 | 175.61 | 35.122 | | |
| | En juntas de conctraccion | | 1 | 0.2 | 315.65 | 63.13 | | |
| | En juntas de articulacion | | 1 | 0.2 | 566.45 | 113.29 | | |
| | En juntas de dilatacion | | 1 | 0.2 | 160.82 | 32.164 | | |
| 07.05 | Curado de losa de rodadura | m2 | | | | | | 1764.91 |
| | Area 1 | | | 1 | | 287.09 | 287.09 | |
| | Area 2 | | | 1 | | 196.37 | 196.37 | |
| | Area 3 | | | 1 | | 401.66 | 401.66 | |
| | Area 4 | | | 1 | | 282.61 | 282.61 | |
| | Area 5 | | | 1 | | 468.41 | 468.41 | |
| | Area 6 | | | 1 | | 128.77 | 128.77 | |
| 07.06 | Aserrado de juntas de contraccion e=1/2" | m | | | | | | 315.65 |
| | En juntas de conctraccion | | 1 | | 315.65 | | 315.65 | |
| 07.07 | Relleno de juntas transversales de dilatacion de 1/2" x 2" | m | | | | | | 160.82 |
| | En juntas de dilatacion | | 1 | | 160.82 | | 160.82 | |
| 07.08 | Relleno de juntas transversales de contraccion de 1/2" x 2" | m | | | | | | 315.65 |
| | En juntas de conctraccion | | 1 | | 315.65 | | 315.65 | |
| 07.09 | Relleno en juntas de aislamiento de 1/2" x 2" | m | | | | | | 175.61 |
| | Perimetro | | 1 | | 175.61 | | 175.61 | |
| 07.10 | Relleno en juntas de longitudinal de articulacion aislamiento de 1/2" x 2" | m | | | | | | 566.45 |
| | En juntas de articulacion | | 1 | | 566.45 | | 566.45 | |
| 07.11 | Pasadores de fierro corrugado de 5/8" en juntas de articulacion | kg | | | | | | 811.70 |
| | | | 1046 | | 0.5 | | 811.696 | |
| 07.12 | Pasadores de fierro liso de 3/4" en juntas de contraccion | Kg | | | | | | 743.14 |
| | | | 665 | | 0.5 | | 743.1375 | |
| 07.13 | Pasadores de fierro liso de 1" en juntas de dilatacion | kg | | | | | | 705.2075 |
| | | | 355 | | 0.5 | | 705.2075 | |
| 07.14 | Espiga de fijacion c/tuberia PVC SP 1 1/4" en juntas de dilatacion | und | | | | | | 355 |
| | | | 355 | | | | 355 | |
| 07.15 | Soportes de pasador de juntas transversales de conctraccion | und | | | | | | 1330 |
| | | | 1330 | | | | 1330 | |
| 08 | REVOQUES Y ENLUCIDOS | | | | | | | |
| 08.01 | Tarrajeo impermeabilizado mezcla 1:5 (C:A), eninteriores de canal de tuberias e=1.5 cm | m2 | | | | | | 111.4 |
| | Columnas de 0.20 x 0.20 m | | 28 | 0.2 | 0.45 | | 2.52 | |
| | Vigas perimetrales y centricas | | 8 | | 0.5 | 25.43 | 101.72 | |
| | Vigas transversales | | 4 | | 0.5 | 3.58 | 7.16 | |
| 09 | SUMINISTRO E INSTALACION DE ESTRUCTURA METALICA | | | | | | | |
| 09.01 | Armado y montaje de durmiente metalico para tuberia de cruce | glb | | | | | | 1 |
| | | | 1 | | | | 1 | |
| 09.02 | Montaje de tuberia de 4" | glb | | | | | | 1 |
| | | | 1 | | | | 1 | |
| 09.03 | Montaje de regilla grating | glb | | | | | | 1 |
| | | | 1 | | | | 1 | |
| 10 | PINTURA | | | | | | | |
| 10.01 | Señalizacion en pavimento con pintura trafico | m2 | | | | | | 380 |
| | | | 1 | | | | 380 | |
| 11 | OBRAS COMPLEMENTARIAS | | | | | | | |
| 11.01 | Limpieza final de obra | m2 | | | | | | 1850.31 |
| | Area 1 | | 1 | | | 287.09 | | |
| | Area 2 | | 1 | | | 196.37 | | |
| | Area 3 | | 1 | | | 401.66 | | |
| | Area 4 | | 1 | | | 282.61 | | |
| | Area 5 | | 1 | | | 468.41 | | |
| | Area 6 | | 1 | | | 128.77 | | |
| | Canal | | 1 | | | 85.40 | | |
| 12 | MEDIDAS DE MITIGACION AMBIENTAL | | | | | | | |
| 12.01 | Programa de medidas preventivas, correctivas y mitigacion en la construccion | und | | | | | | 1 |
| | | | 1 | | | | 1 | |
| 12.02 | Programa de manejo de residuos en la construccion | und | | | | | | 1 |
| | | | 1 | | | | 1 | |
| 12.03 | Programa de seguimiento y control ambiental en la etapa de la construccion | und | | | | | | 1 |
| | | | 1 | | | | 1 | |
| 12.04 | Programa de contingencia en la etapa de construccion | und | | | | | | 1 |
| | | | 1 | | | | 1 | |



Stanier Irigoin Vásquez

 GERENTE GENERAL