

007192

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquemas | Ø A" | Nº Vices | Nº Piezas | Long (m) | PESO NOMINAL | | | | Total Kg | |
|----------------|-------------------------------------------------|----------------|------|----------|-----------|----------|--------------|-------|-------|-------|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | |
| 02.03.08.01 | VIGAS FC-20 KGC/M2 | | | | | | 0.222 | 0.56 | 0.984 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KGC/M2 - VIGAS | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 42 | 2.00 | | 84.00 | | | | 47.04 |
| | aB- aC | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aB- aC | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aC- aD | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aD- aE | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aE- aF | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aF- aG | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aG- aH | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aH- aI | .30m | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø38":1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | .70m [.30m] | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | IV-8x1.25x.7) | | | | | | | | | | | |
| | 4Ø3/4" | .45m [8.07m] | 3/4" | 1 | 2 | 8.87 | | | | 17.94 | | 40.10 |
| | aD | .45m [7.98m] | 3/4" | 1 | 2 | 8.88 | | | | 17.76 | | 39.69 |
| | 1Ø5/8" | .45m [2.06m] | 5/8" | 1 | 1 | 2.51 | | | 2.51 | | | 3.90 |
| | aD- aE | 5.95m | 5/8" | 1 | 1 | 5.95 | | | 5.95 | | | 9.23 |
| | 1Ø5/8" | 2.18m | 3/4" | 1 | 1 | 2.63 | | | | 2.63 | | 5.88 |
| | aE | 2.18m | 5/8" | 1 | 1 | 2.63 | | | | 2.63 | | 4.08 |
| | 1Ø5/8" | 7.85m | 3/8" | 1 | 2 | 7.89 | | 15.78 | | | | 8.84 |
| | aI- aJ | .25m | | | | | | | | | | |



CONFIRMAR

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

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CONFIDENTIAL

007191

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" Kgf/ml | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (mts) | | | | | Parcial Kg | Total Kg | |
|----------------|-------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|------|------|------------|----------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 3/8" | 3/4" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1' @ 0.05 6@ 10, 6@ 15 @extrem, resto @ 25 | | 3/8" | 1 | 42 | 1.90 | | | | | | | | 44.78 |
| | 1V-Ø4 (30x.70) Ø3/8" x 4" | | 3/4" | 1 | 3 | 18.57 | | | | | | | | 124.51 |
| | ØC | | | | | | | | | | | | | |
| | ØC-AD 103/4" | | 3/4" | 1 | 3 | 18.47 | | | | | | | | 123.84 |
| | ØC-AD 403/4" | | 3/4" | 1 | 4 | 5.48 | | | | | | | | 48.99 |
| | ØC-AD 103/4" | | 3/4" | 1 | 1 | 5.70 | | | | | | | | 12.74 |
| | ØD 303/4" | | 3/4" | 1 | 3 | 5.55 | | | | | | | | 37.21 |
| | ØD 165/8" | | 5/8" | 1 | 1 | 5.55 | | | | | | | | 8.61 |
| | montaje | | | | | | | | | | | | | |
| | 2Ø3/8" | | 3/8" | 1 | 2 | 17.57 | | | | | | | | 19.68 |
| | ØB-ØC | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1' @ 0.05 6@ 10, resto @ 15 | | 3/8" | 1 | 14 | 2.00 | | | | | | | | 15.68 |
| | ØC-ØD | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1' @ 0.05 6@ 10, 6@ 15 @extrem, resto @ 25 | | 3/8" | 1 | 40 | 2.00 | | | | | | | | 44.80 |
| | ØD-ØE | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1' @ 0.05 6@ 10, 1@ 15, resto @ 25 | | 3/8" | 1 | 40 | 2.00 | | | | | | | | 44.80 |
| | 1V-10Ø3/8" x 70 Ø3/4" | | 3/4" | 1 | 3 | 16.49 | | | | | | | | 110.57 |
| | ØG 3Ø1" | | 3/4" | 1 | 3 | 16.37 | | | | | | | | 109.76 |
| | ØG 16Ø3/4" | | 1" | 1 | 3 | 3.33 | | | | | | | | 39.69 |
| | ØG-ØH | | 3/4" | 1 | 1 | 3.33 | | | | | | | | 7.44 |



CONFORME

ARQ. DAVID RECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

007190

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Paredes ACERO (Mts) | | | | Paredal Kg | Total Kg |
|---------------------------------------------------|---------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/C/M2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS | | | | | | | | | | | |
| 301" | | 5.65m | 1" | 1 | 3 | 5.65 | 1/4" | 3/8" | 1/2" | 3/4" | 16.95 | 67.34 |
| aC- aH 103/4" | | 5.65m | 3/4" | 1 | 1 | 5.65 | | | | 5.65 | 12.63 | |
| aH 201" | | 5.25m | 1" | 1 | 2 | 5.25 | | | | 10.50 | 41.72 | |
| aH 103/4" | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | 11.73 | |
| aH- aI 103/4" | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | 11.73 | |
| aI 103/4" | | 2.83m | 3/4" | 1 | 1 | 2.83 | | | | 2.83 | 6.33 | |
| aI 105/8" | | 2.83m | 5/8" | 1 | 1 | 2.83 | | | | 2.83 | 4.39 | |
| montaje | | | | | | | | | | | | |
| 203/8" | | 15.42m | 3/8" | 1 | 2 | 15.42 | | | | 30.84 | 17.27 | |
| aC- aH ESTRIBOS | | .30m | 3/8" | 1 | 40 | 2.00 | | | | 80.00 | 44.80 | |
| 03/8":1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | .70m | | | | | | | | | | |
| aH- aI ESTRIBOS | | .30m | 3/8" | 1 | 40 | 2.00 | | | | 80.00 | 44.80 | |
| 03/8":1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | .70m | | | | | | | | | | |
| 1V-3a(25x.70) | | | | | | | | | | | | |
| 503/4" | | 8.07m | 3/4" | 1 | 2 | 8.97 | | | | 17.94 | 40.10 | |
| aC- aH 201" | | 7.98m | 3/4" | 1 | 3 | 8.88 | | | | 26.64 | 59.54 | |
| montaje | | 5.95m | 1" | 1 | 2 | 5.95 | | | | 11.90 | 47.28 | |
| 203/8" | | 7.89m | 3/8" | 1 | 2 | 7.89 | | | | 15.78 | 8.84 | |
| aC- aH ESTRIBOS | | .25m | 3/8" | 1 | 42 | 1.90 | | | | 79.80 | 44.69 | |
| 03/8":1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | .70m | | | | | | | | | | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA WAMANI
 Ingeniera Civil
 C.I.P. 18882

CONSORCIO CONSULTOR SAUL GARRIDO

C.P. C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21546425

CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

DAVID HECTOR TORRES PUENTE
 CAP 5776
 JEFE DE SUPERVISION

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|----------------|----------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|------|------|-------|------------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | Parcial Kg | |
| 02.03.00 | VIGAS | | | | | | | | | | | |
| 02.03.06.01 | ACERO DE REFUERZO FY = 4200 TIGCM2 - VIGAS | | | | | | | | | | | |
| 02.03.06.01.03 | 1V-11,(30x70) | | 3/4" | 1 | 3 | 61.97 | | | | | 185.91 | 415.51 |
| 603/4" | | | 3/4" | 1 | 3 | 61.87 | | | | | 185.61 | 414.84 |
| aA 103/4" | | | 3/4" | 1 | 1 | 3.37 | | | | | 3.37 | 7.53 |
| aA 105/8" | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 5/8" | 1 | 1 | 3.37 | | | 3.37 | | 3.37 | 5.23 |
| aA-aB 105/8" | | | 5/8" | 1 | 1 | 6.09 | | | | 6.09 | | 9.45 |
| aB 203/4" | | | 3/4" | 1 | 2 | 5.65 | | | | 11.30 | | 25.26 |
| aB-aC 105/8" | | | 5/8" | 1 | 1 | 5.30 | | | | 5.30 | | 8.37 |
| aC 303/4" | MARIA M. ENDARA BARRAL Ingeniero Civil C.I.P. 78887 | | 3/4" | 1 | 3 | 5.45 | | | | 16.35 | | 36.54 |
| aC 105/8" | | | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | | 8.46 |
| aC-aD 103/4" | | | 3/4" | 1 | 1 | 5.49 | | | | 5.49 | | 12.27 |
| aD 303/4" | CONSORCIO CONSULTOR SAUL GARRIDO | | 3/4" | 1 | 3 | 5.35 | | | | 16.05 | | 35.87 |
| 105/8" | | | 5/8" | 1 | 1 | 5.35 | | | | 5.35 | | 8.30 |
| aD-aE 105/8" | C. MARIA LUISA CARBAO MUÑOZ REPRESENTANTE COMÚN DNI N° 2346023 | | 3/4" | 1 | 1 | 5.44 | | | | 5.44 | | 12.16 |
| aE 203/4" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| aE 105/8" | | | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 |
| aE-aF 103/4" | | | 3/4" | 1 | 1 | | | | | 5.45 | | 10.63 |

007189



CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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007188

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.272 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Kgs) | | | | | Total Kg | |
|----------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|--------|-------|------|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| aE- aF | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | | 5.65 | 8.77 |
| aF | | 5.25m | 3/4" | 1 | 4 | 5.25 | | | 5.25 | 21.00 | | 26.25 | 46.94 |
| aF | EDWARDS CERON TORRES JEFE DE PROYECTO C.I.F. N° 61778 | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 5.25 | 8.15 |
| aF- aG | | 5.65m | 3/4" | 1 | 1 | 5.65 | | | 5.65 | | | 5.65 | 12.63 |
| aF- aG | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | | 5.65 | 8.77 |
| aG | | 5.25m | 3/4" | 1 | 4 | 5.25 | | | 5.25 | 21.00 | | 26.25 | 46.94 |
| aG | MARIA M. ENDARA MAMANI Ingeniero Civil C.A.P. 78887 | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 5.25 | 8.15 |
| aG- aH | | 5.65m | 3/4" | 1 | 3 | 5.65 | | | 5.65 | 16.95 | | 22.60 | 37.86 |
| aH | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 5.25 | 15.75 | | 21.00 | 35.20 |
| aH- aI | | 5.65m | 3/4" | 1 | 1 | 5.65 | | | 5.65 | 5.85 | | 11.50 | 13.07 |
| aI | CONSORCIO CONSULTOR SAUL GARRIDO | 5.65m | 3/4" | 1 | 3 | 5.65 | | | 5.65 | 16.95 | | 22.60 | 37.86 |
| aI- aJ | | 4.5m | 3/4" | 1 | 3 | 3.28 | | | 3.28 | 9.84 | | 13.12 | 21.99 |
| aJ | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 21446425 | 2.83m | 3/8" | 1 | 2 | 60.92 | | | 121.84 | | | 121.84 | 66.23 |
| montaje | | 60.92m | 3/8" | 1 | 2 | 60.92 | | | 121.84 | | | 121.84 | 66.23 |
| aE- aC | | .30m | 3/8" | 1 | 42 | 2.00 | | | 84.00 | | | 84.00 | 47.04 |
| ESTRIBOS | | .30m | 3/8" | 1 | 42 | 2.00 | | | 84.00 | | | 84.00 | 47.04 |
| aE- aC | | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 80.00 | 44.80 |
| ESTRIBOS | | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 80.00 | 44.80 |
| aE- aD | | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 80.00 | 44.80 |
| ESTRIBOS | | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 80.00 | 44.80 |



RICARDO VICTOR SIU DELGADO
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 Reg. CIP N° 41815

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISION

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PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Kilo) | | | | | Total Kg | |
|----------------------|--------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|----------------------|--------|------|------|------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | | |
| 02.03.03 | VIGAS | | | | | | | | | | | | |
| 02.03.03.01 | VIGAS FC=200 KGCM2 | | | | | | | | | | | | |
| 02.03.03.01.03 | ACERO DE REFUERZO FY = 4200 KGCM2 - VIGAS Ø36"1" @.05, 6Ø. 10, 6Ø. 15 @extremo, resto @.25 | | 36" | 1 | 1 | 6.00 | | | | | | | |
| aD- aE | ESTRIBOS Ø36"1" @.05, 6Ø. 10, 6Ø. 15 @extremo, resto @.25 | | 36" | 1 | 40 | 2.00 | 80.00 | | | | | 44.80 | |
| aE- aF | ESTRIBOS Ø36"1" @.05, 6Ø. 10, 6Ø. 15 @extremo, resto @.25 | | 36" | 1 | 40 | 2.00 | 80.00 | | | | | 44.80 | |
| aF- aG | ESTRIBOS Ø36"1" @.05, 6Ø. 10, 6Ø. 15 @extremo, resto @.25 | | 36" | 1 | 40 | 2.00 | 80.00 | | | | | 44.80 | |
| aG- aH | ESTRIBOS Ø36"1" @.05, 6Ø. 10, 6Ø. 15 @extremo, resto @.25 | | 36" | 1 | 40 | 2.00 | 80.00 | | | | | 44.80 | |
| aH- aI | ESTRIBOS Ø36"1" @.05, 6Ø. 10, 6Ø. 15 @extremo, resto @.25 | | 36" | 1 | 40 | 2.00 | 80.00 | | | | | 44.80 | |
| 1V-12(30x.70) 6Ø3/4" | | | 34" | 1 | 3 | 62.77 | | 188.31 | | | | 420.87 | |
| aA- aB 1Ø3/4" | | | 34" | 1 | 3 | 62.69 | | 188.07 | | | | 420.34 | |
| aA- aB 1Ø5/8" | | | 34" | 1 | 1 | 2.30 | | 2.30 | | | | 5.14 | |
| aB 3Ø3/4" | | | 58" | 1 | 1 | 2.30 | | 2.30 | | | 2.30 | 3.57 | |
| aB 1Ø5/8" | | | 34" | 1 | 3 | 4.65 | | 13.95 | | | | 31.18 | |
| aB- aC 1Ø3/4" | | | 58" | 1 | 1 | 4.65 | | 4.65 | | | 4.65 | 7.22 | |
| aB- aC 1Ø5/8" | | | 34" | 1 | 1 | 5.50 | | 5.50 | | | 5.50 | 12.29 | |
| aB- aC 1Ø5/8" | | | 58" | 1 | 1 | 5.50 | | 5.50 | | | 5.50 | 8.54 | |
| aC- aD 1Ø5/8" | | | 34" | 1 | 3 | 5.45 | | 16.35 | | | | 36.54 | |



MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA-EUSA CARGAÑO MUÑOZ
 REPRESENTANTE COMÚN
 DNI Nº 215466423

CONFORME

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

1990

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PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/m | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Especimen | Ø A" | N° Vices | N° Pizas | Long (m) | Paredel ACERO (mts) | | | | Total Kg | |
|----------------|----------------------------------------------------------------------------|-----------|------|----------|----------|----------|---------------------|-------|--------|------|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08.01 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 8D 303/4" | | 5.49m | 3/4" | 1 | 1 | 5.49 | | | | | | 5.49 |
| 8D-8E 103/4" | | 5.35m | 3/4" | 1 | 3 | 5.35 | | 16.05 | | | | 35.87 |
| 8E 303/4" | | 5.44m | 3/4" | 1 | 1 | 5.44 | | 5.44 | | | | 12.16 |
| 8E-8F 103/4" | EDWARD CERON TORRES JEFFER PROYECTO C.I.P. N° 61778 | 5.35m | 3/4" | 1 | 3 | 5.35 | | 16.05 | | | | 35.87 |
| 8F 303/4" | | 5.44m | 3/4" | 1 | 1 | 5.44 | | 5.44 | | | | 12.16 |
| 8F-8G 103/4" | | 5.25m | 3/4" | 1 | 3 | 5.25 | | 15.75 | | | | 35.20 |
| 8G 303/4" | MARIA M. ENDARA MAMANI Ingeniero Civil C.P. 78882 | 5.44m | 3/4" | 1 | 1 | 5.44 | | 5.44 | | | | 12.16 |
| 8G-8H 103/4" | | 5.25m | 3/4" | 1 | 3 | 5.25 | | 15.75 | | | | 35.20 |
| 8H 303/4" | | 5.65m | 3/4" | 1 | 1 | 5.65 | | 5.65 | | | | 12.63 |
| 8H-8I 105/8" | CONSORCIO CONSULTOR SAUL GARRIDO | 5.25m | 3/4" | 1 | 3 | 5.25 | | 15.75 | | | | 35.20 |
| 8I 103/4" | C.P.C. MARIA LUISA CARRASO MUÑOZ REPRESENTANTE COMUN DNI N° 21344423 | 5.44m | 5/8" | 1 | 1 | 5.44 | | | 5.44 | | | 8.44 |
| montaje | | 6.61m | 3/4" | 1 | 1 | 7.06 | | | | 7.06 | | 15.78 |
| 26308 | | 61.73m | 3/8" | 1 | 2 | 61.73 | | | 123.46 | | | 69.14 |
| 8B-8C | ESTRIBOS | .30m | 3/8" | 1 | 27 | 2.00 | | | 54.00 | | | 30.24 |
| 8B-8C | ESTRIBOS | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 |
| 8C-8D | ESTRIBOS | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 |
| 8C-8D | ESTRIBOS | .30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 |



CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

DR. DAVID HECTOR TORRES PUENTE
 CAP 5776
 JEFE DE SUPERVISIÓN

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007184

PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*

| PESO NOMINAL | | | | |
|--------------|-------|------|-------|-------|
| Ø A" | 1/4" | 3/8" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | Nº Vices | Nº Plaza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg |
|------------------------------------------------------------------|-------------------------------------------|---------|------|----------|----------|----------|---------------------|------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.03.01 | VIGAS FCS-20 KGS/CM2 | | | | | | | | | | | |
| 02.03.03.01.03 | ACERO DE REFUERZO FY=4200 KGS/CM2 - VIGAS | | | | | | | | | | | |
| aC-1658" | | 4.45m | 5/8" | 1 | 1 | 4.45 | | | 4.45 | | 6.91 | |
| aD-1634" | | 4.45m | 3/4" | 1 | 1 | 5.45 | | | 5.45 | | 12.18 | |
| aD-1658" | | 5.45m | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | 8.46 | |
| aE-1634" | | 5.35m | 3/4" | 1 | 1 | 5.35 | | | 5.35 | | 11.96 | |
| aF-1634" | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | 11.73 | |
| aG-1634" | | 5.05m | 3/4" | 1 | 1 | 5.05 | | | 5.05 | | 11.29 | |
| aH-1634" | | 7.00m | 3/4" | 1 | 1 | 7.00 | | | 7.00 | | 15.65 | |
| montaje | | | | | | | | | | | | |
| 2ø38" | | 47.52m | 3/8" | 1 | 2 | 47.52 | | | 95.04 | | 53.07 | |
| aC-aD | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |
| ESTRIBOS Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 30m | | | | | | | | | | |
| aD-aE | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |
| ESTRIBOS Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 30m | | | | | | | | | | |
| aE-aF | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |
| ESTRIBOS Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 30m | | | | | | | | | | |
| aF-aG | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |
| ESTRIBOS Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 30m | | | | | | | | | | |
| aG-aH | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |
| ESTRIBOS Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 30m | | | | | | | | | | |
| aH-aI | | 30m | 3/8" | 1 | 18 | 2.00 | | | 36.00 | | 20.16 | |
| ESTRIBOS Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ .15, resto @ .25 | | 30m | | | | | | | | | | |
| aI-aJ | | 30m | 3/8" | 1 | 6 | 2.00 | | | 12.00 | | 6.77 | |
| ESTRIBOS | | 30m | | | | | | | | | | |



EDWARD GERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 D.H.N. N° 2184425

CONFORME

DAVID VICTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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007182

PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES

| PESO NOMINAL | | | | | |
|--------------|-------|------|------|------|-------|
| Ø ¾" | 1/4" | 3/8" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 1.52 | 2.25 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Paredal ACERO (mts) | | | | | Total Kg | | |
|----------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|------|-------|-------|------|----------|--|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | | |
| 02.03.00.01 | VIGAS | | | | | | | | | | | | | |
| 02.03.00.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | | | |
| 02.03.00.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | | |
| a6 | 1958* | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | | | 6.15 |
| a5 | 1934* | 5.75m | 3/4" | 1 | 1 | 5.75 | | | | 5.75 | | | | 12.85 |
| a5 | 1958* | 5.75m | 5/8" | 1 | 1 | 5.75 | | | | 5.75 | | | | 8.92 |
| a4 | 2934* | 3.33m | 3/4" | 1 | 2 | 3.78 | | | | 7.56 | | | | 16.90 |
| montaje | | 31.38m | | | | | | | | | | | | 35.16 |
| 2938* | | 30m | 3/8" | 1 | 2 | 31.39 | | | 62.78 | | | | | 42.56 |
| a9- a7 | ESTRIBOS | 30m | 3/8" | 1 | 38 | 2.00 | | | 76.00 | | | | | 44.80 |
| a7- a6 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | | | 44.80 |
| a6- a5 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | | | 51.52 |
| a5- a4 | ESTRIBOS | 30m | 3/8" | 1 | 46 | 2.00 | | | 92.00 | | | | | 66.92 |
| 1V-15a(30x.70) | | 9.53m | 3/4" | 1 | 3 | 9.98 | | | | 29.94 | | | | 67.45 |
| 6934* | | 9.61m | 3/4" | 1 | 3 | 10.06 | | | | 30.18 | | | | 53.04 |
| a11 | 391* | 4.45m | 1" | 1 | 3 | 4.45 | | | | | | 13.35 | | 12.63 |
| a11- a10 | 1934* | 5.65m | 3/4" | 1 | 1 | 5.65 | | | | 5.65 | | | | 26.38 |
| a10 | 291* | 2.87m | 1" | 1 | 2 | 3.32 | | | | | | 6.64 | | 10.05 |
| montaje | | 9.51m | 3/8" | 1 | 2 | 19.02 | | | | | | | | |

EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 21346423

CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815



097181

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" |
| | 0.222 | 0.56 | 0.994 | 1.552 |
| | | | | 2.235 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vees | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Total Kg | |
|-------------------------------------------|----------------------------------------------------------------------------|---------|------|---------|----------|----------|---------------------|--------|------|-------|----------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-288 KGICM2 ACERO DE REFUERZO FY = 4200 KGICM2 - VIGAS | | | | | | | | | | | |
| a11-a10 | ESTRIBOS Ø3/8" x 1 @ 05, 6 @ 10, 6 @ 15, resto @ 25 | | 3/8" | 1 | 40 | 2.00 | 80.00 | | | | | 44.80 |
| 1V-16(30x70) 6634* | JEFE DE PROYECTO EDWARD CERON TORRES C.I.P. N° 61778 | | 3/4" | 1 | 3 | 40.76 | | 122.28 | | | | 273.30 |
| 1V-16(30x90) EJE (a3-a2) | | | 3/4" | 1 | 3 | 40.69 | | 122.07 | | | | 272.83 |
| | | | 1" | 1 | 2 | 15.38 | | | | 30.76 | | 122.21 |
| | | | 1" | 1 | 2 | 11.65 | | | | 23.30 | | 92.57 |
| | | | 1" | 1 | 2 | 6.07 | | | | 12.14 | | 48.23 |
| a8 2634* | MARIA M. ENDARA MAMIAN Ingeniero Civil C.P. 78882 | | 3/4" | 1 | 2 | 3.33 | | 6.66 | | | | 14.89 |
| a8 10518* | | | 5/8" | 1 | 1 | 3.33 | | | 3.33 | | | 5.17 |
| a8-a7 10334* | | | 3/4" | 1 | 1 | 5.60 | | | | 5.60 | | 12.52 |
| a8-a7 10518* | | | 5/8" | 1 | 1 | 5.60 | | | 5.60 | | | 6.69 |
| a7 3034* | CONSORCIO CONSULTOR SAUL GARRIDO | | 3/4" | 1 | 3 | 5.25 | | 15.75 | | | | 35.20 |
| a7 10518* | C.P.C. MARIA LUISA CARRICO MUÑOZ REPRESENTANTE COMUN DNI N° 21546425 | | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| a7-a6 10334* | | | 3/4" | 1 | 1 | 5.54 | | | | 5.54 | | 12.38 |
| a6 201* | | | 1" | 1 | 2 | 5.25 | | | | 10.50 | | 41.72 |
| a6 10334* | | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 |



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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007180

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

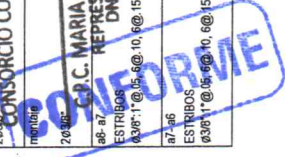
| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Piezas | Long (m) | PESO NOMINAL | | | | | Total Kg |
|--------------------|--------------------------------------------|---------|------|----------|-----------|----------|--------------|------|-------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01 | VIGAS F<200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a6- a5 1Ø1" | | 5.60m | 1" | 1 | 1 | 5.60 | | | | | 5.60 | 22.25 |
| a6- a5 1Ø3/4" | | 5.60m | 3/4" | 1 | 1 | 5.60 | | | | 5.60 | 12.52 | |
| a5 2Ø1" | | 5.25m | 1" | 1 | 2 | 5.25 | | | | 10.50 | 41.72 | |
| a5 1Ø3/4" | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | 11.73 | |
| a5- a4 3Ø1" | | 7.15m | 1" | 1 | 3 | 7.15 | | | | 21.45 | 85.22 | |
| a4 3Ø1" | | 6.65m | 1" | 1 | 3 | 6.65 | | | | 19.95 | 79.26 | |
| a3 3Ø1" | | 6.35m | 1" | 1 | 3 | 6.35 | | | | 19.05 | 75.69 | |
| a3- a2 2Ø1" | | 8.05m | 1" | 1 | 2 | 8.05 | | | | 16.10 | 63.97 | |
| a2 2Ø1" | | 8.57m | 1" | 1 | 2 | 8.57 | | | | 17.14 | 68.10 | |
| a2 1Ø3/4" | | 8.57m | 3/4" | 1 | 1 | 8.57 | | | | 8.57 | 19.15 | |
| montaje 2Ø3/8" | | 3Ø.9Øm | 3/8" | 1 | 2 | 38.99 | | | 77.98 | | 43.67 | |
| montaje 2Ø3/8" | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | 21.10 | | 11.82 | |
| montaje 2Ø3/8" | | 4.65m | 3/8" | 1 | 2 | 4.83 | | | 9.66 | | 5.41 | |
| a8- a7 ESTRIBOS | | 3Øm | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |
| a7- a6 ESTRIBOS | | 3Øm | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | 44.80 | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI Nº 21546425
 ESTRIBOS
 a3Ø1" @ 0.15 @ 10, Ø @ 0.15 @ extremo, resto @ 25



ARQ. DAVID HECTOR TORRES PUENTE
 CAP 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO #1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Piezas | Long (m) | Parcial ACERO (Mts) | | | Parcial Kg | Total Kg |
|----------------|-------------------------------------------------------------------------------|---------|------|----------|-----------|----------|---------------------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | | |
| 02.03.08 | VIGAS FC=20 KG/CM ² | | | | | | | | | | |
| 02.03.08.01 | ACERO DE REFUERZO FY = 4200 KG/CM ² - VIGAS | | | | | | | | | | |
| 02.03.08.01.03 | a6- a5 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 40 | 2.00 | | | | 44.80 | |
| | a5- a4 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 46 | 2.00 | | | | 51.52 | |
| | a4- a3 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 40 | 2.00 | | | | 44.80 | |
| | a3- a2 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 53 | 2.40 | | | | 71.23 | |
| | a2- a1 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 26 | 2.00 | | | | 29.12 | |
| | 1V-16h(25x70) 6Ø3/4" | | 3/4" | 1 | 2 | 5.72 | | 11.44 | | 25.57 | |
| | montaje 2Ø3/8" | | 3/4" | 1 | 4 | 5.68 | | 22.72 | | 50.78 | |
| | a12- a11 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 2 | 4.78 | | | 9.56 | 5.35 | |
| | 1V-16h(25x70) 4Ø3/4" | | 3/4" | 1 | 2 | 16.47 | | | | 73.62 | |
| | montaje 2Ø3/8" | | 3/4" | 1 | 2 | 16.37 | | | | 73.17 | |
| | a10- a9 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 43 | 1.90 | | | | 45.75 | |
| | a9- a8 ESTRIBOS Ø38" x 1' @ 0.5, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 38" | 1 | 42 | 1.90 | | | | 44.69 | |
| | 1V-16h(25x70) 4Ø3/4" | | 3/4" | 1 | 2 | 14.49 | | | | 64.77 | |



JEFE DE PROYECTO
 EDWARD CERON TORRES
 C.I.P. N° 61778

MARIA M. ENDARA MARIANI
 Ingeniera Civil
 C.I.P. 78887

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21546625

DR. DAVID HECYOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/m | PESO NOMINAL | | | |
|--------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" |
| | 0.222 | 0.56 | 0.994 | 1.552 |
| | | | 3/4" | 2.235 |
| | | | | 1" |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Venas | N° Plaza | Long (m) | Parcela ACERO (mts) | | | | Parcela Kg | Total Kg |
|----------------|-------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | montaje | | 3/4" | 1 | 2 | 14.40 | | | | | 28.80 | 64.37 |
| | 2x3/8" | | 3/8" | 1 | 2 | 13.53 | | 27.06 | | | | 15.15 |
| | a6-a5 1x3/4" | | 3/4" | 1 | 1 | 1.28 | | | | 1.28 | | 2.86 |
| | a6-a5 1x5/8" | | 5/8" | 1 | 1 | 1.28 | | | | | | 1.99 |
| | a6-a4 1x3/4" | | 3/4" | 1 | 1 | 11.92 | | | | | 11.92 | 26.64 |
| | a6-a4 1x5/8" | | 5/8" | 1 | 1 | 11.92 | | | | | | 18.50 |
| | a5 2x3/4" | | 3/4" | 1 | 2 | 2.90 | | | | | 5.80 | 12.96 |
| | a4 2x3/4" | | 3/4" | 1 | 2 | 2.35 | | | | | 4.70 | 10.50 |
| | a4 1x5/8" | | 5/8" | 1 | 1 | 2.35 | | | | 2.35 | | 3.65 |
| | a6-a5 ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 29 | 1.90 | | 55.10 | | | | 30.86 |
| | a5-a4 ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 59 | 1.90 | | 112.10 | | | | 62.78 |
| | IV-17(30x70) 6x3/4" | | 3/4" | 1 | 3 | 68.21 | | | | | 204.63 | 457.35 |
| | IV-17(30x90) 6x3/4" | | 3/4" | 1 | 3 | 68.14 | | | | | 204.42 | 456.88 |
| | IV-17(30x90) 6x3/4" | | 1" | 1 | 2 | 10.55 | | | | | 21.10 | 83.83 |
| | IV-17(30x70) 6x3/4" | | 1" | 1 | 3 | 11.65 | | | | | 34.95 | 138.86 |



CONFORME

EDWARD CHERIN TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARAMIAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA GARRIDO MUÑOZ
 REPRESENTANTE COMON
 D.M. N° 222-2008-000000

DR. DAVID TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | | 1" |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 5/8" | 3/4" | |
| 0.222 | 0.222 | 0.56 | 1.562 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Piezas | Long (m) | Parcela ACERO (mts) | | | | Total Kg |
|-------------------------------------------|-------------------------------------------------------------------------------------|---------|------|----------|-----------|----------|---------------------|------|------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.06 02.03.06.01 02.03.06.01.03 | VIGAS VIGAS FC-280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS 6034" | 8.62m | 3/4" | 1 | 3 | 9.07 | | | | | 60.81 |
| a11 3034" | | 8.66m | 3/4" | 1 | 3 | 9.11 | | | | | 61.08 |
| a11-a10 1034" | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | | 35.20 |
| a10 3034" | | 5.45m | 3/4" | 1 | 1 | 5.45 | | | | | 12.18 |
| a10 1058" | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | | 35.20 |
| a10-a9 1058" | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |
| a9 2034" | | 5.45m | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | 8.46 |
| a9-a8 1058" | | 5.45m | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | 8.46 |
| a8 2034" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 |
| a8-a7 1034" | | 5.45m | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | 8.46 |
| a7 3034" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 |
| a7-a6 1034" | | 5.60m | 3/4" | 1 | 1 | 5.60 | | | | 5.60 | 12.52 |
| a6 3034" | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | 35.20 |
| a6-a5 1034" | | 5.45m | 3/4" | 1 | 1 | 5.45 | | | | 5.45 | 12.18 |
| a5 1058" | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | 35.20 |
| a5-a4 2034" | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |

EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI Nº 21546625

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

CONFORME



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Total Kg |
|----------------|--------------------------------------------|---------|------|----------|----------|----------|--------------|------|--------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.00 | VIGAS | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.06.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | |
| 02.03.06.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a6- a5 | | 5.40m | 5/8" | 1 | 1 | 5.40 | | | 5.40 | | | 8.38 |
| 1058* | | 5.40m | 5/8" | 1 | 1 | 5.40 | | | 5.40 | | | 8.38 |
| a5 | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 15.75 | | | 35.20 |
| 3034* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 15.75 | | | 35.20 |
| a5 | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| 1058* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| a5- a4 | | 7.35m | 3/4" | 1 | 3 | 7.35 | | | 22.05 | | | 49.28 |
| 3034* | | 7.35m | 3/4" | 1 | 3 | 7.35 | | | 22.05 | | | 49.28 |
| a5- a4 | | 7.35m | 5/8" | 1 | 1 | 7.35 | | | 7.35 | | | 11.41 |
| 1058* | | 7.35m | 5/8" | 1 | 1 | 7.35 | | | 7.35 | | | 11.41 |
| a4 | | 5.25m | 1" | 1 | 3 | 5.25 | | | 15.75 | | | 62.57 |
| 301* | | 5.25m | 1" | 1 | 3 | 5.25 | | | 15.75 | | | 62.57 |
| a4 | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 |
| 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 |
| a4- a3 | | 5.50m | 3/4" | 1 | 1 | 5.50 | | | 5.50 | | | 12.29 |
| 1034* | | 5.50m | 3/4" | 1 | 1 | 5.50 | | | 5.50 | | | 12.29 |
| a3 | | 6.95m | 3/4" | 1 | 3 | 6.95 | | | 20.85 | | | 46.60 |
| 3034* | | 6.95m | 3/4" | 1 | 3 | 6.95 | | | 20.85 | | | 46.60 |
| a3- a2 | | 8.15m | 1" | 1 | 2 | 8.15 | | | 16.30 | | | 64.76 |
| 201* | | 8.15m | 1" | 1 | 2 | 8.15 | | | 16.30 | | | 64.76 |
| a2 | | 6.85m | 1" | 1 | 3 | 6.85 | | | 20.55 | | | 81.65 |
| 301* | | 6.85m | 1" | 1 | 3 | 6.85 | | | 20.55 | | | 81.65 |
| a2 | | 6.85m | 3/4" | 1 | 1 | 6.85 | | | 6.85 | | | 15.31 |
| 1034* | | 6.85m | 3/4" | 1 | 1 | 6.85 | | | 6.85 | | | 15.31 |
| a2- a1 | | 5.80m | 3/4" | 1 | 1 | 5.80 | | | 5.80 | | | 12.96 |
| 1034* | | 5.80m | 3/4" | 1 | 1 | 5.80 | | | 5.80 | | | 12.96 |
| a1 | | 2.98m | 3/4" | 1 | 2 | 2.98 | | | 5.96 | | | 13.32 |
| 2034* | | 2.98m | 3/4" | 1 | 2 | 2.98 | | | 5.96 | | | 13.32 |
| montaje | | 66.49m | 3/8" | 1 | 2 | 66.49 | | | 132.98 | | | 74.47 |
| 2030* | | 66.49m | 3/8" | 1 | 2 | 66.49 | | | 132.98 | | | 74.47 |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENBARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21546425

CONFORME

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|----------------|---------------------------------------------------------|---------|------|----------|----------|----------|--------------|------|-------|-------|------------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 3/4" | Parcial Kg | kg |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=300 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | montaje | | | | | | | | | | | |
| | 2x330" | 10.55m | 38" | 1 | 2 | 10.55 | 0.222 | 0.36 | 0.994 | 1.552 | 2.235 | 3.973 |
| | montaje | | | | | | | | | | | |
| | 2x330" | 7.38m | 38" | 1 | 2 | 7.38 | | | | | | 11.82 |
| | a12- a11 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 30 | 2.00 | | | | | | 33.60 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a11- a10 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a10- a9 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a9- a8 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a8- a7 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a7- a6 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a6- a5 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a5- a4 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 46 | 2.00 | | | | | | 51.52 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a4- a3 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | a3- a2 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 48 | 2.40 | | | | | | 64.51 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 90m | | | | | | | | | | |
| | a2- a1 | | | | | | | | | | | |
| | ESTRIBOS | 30m | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | Ø38" * 1 @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | 70m | | | | | | | | | | |
| | 1V-1R(30x70) | | | | | | | | | | | |
| | 6634" | 45m | 3/4" | 1 | 1 | 68.21 | | | | | | 152.45 |
| | | 67.76m | 3/4" | 1 | 1 | 68.21 | | | | | | 152.45 |



CONFORME

[Handwritten Signature]

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41

007175

11/25/11

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007174

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------|------|----------|----------|----------|---------------------|------|-------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.03 02.03.03.01 02.03.03.01.03 | VIGAS VIGAS FC=20 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | 45m 67.69m | | 1 | 1 | 66.19 | | | | | | | |
| | 1V-16(30x.90) (e3 -e2) 4e1" | 10.55m | 1" | 1 | 2 | 10.55 | | | | 21.10 | | 83.83 | |
| | EDUARDO CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 55m 10.55m | 1" | 1 | 2 | 11.65 | | | | 23.30 | | 92.57 | |
| | 6e3/4" | 8.02m | 3/4" | 1 | 3 | 8.47 | | | 25.41 | | | 56.79 | |
| | | 8.06m | 3/4" | 1 | 3 | 8.51 | | | 25.53 | | | 57.06 | |
| | a12 1e5/8" | 1.78m | 5/8" | 1 | 1 | 2.23 | | | 2.23 | | | 3.46 | |
| | a12- a11 1e5/8" | 2.75m | 5/8" | 1 | 1 | 2.75 | | | 2.75 | | | 4.27 | |
| | a11 3e3/4" | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 15.75 | | | 35.20 | |
| | MARIAM ENBARA MAMANI Ingeniero Civil C.I.P. 78882 | 5.55m | 3/4" | 1 | 1 | 5.55 | | | 5.55 | | | 12.40 | |
| | a11- a10 1e3/4" | 5.15m | 3/4" | 1 | 3 | 5.15 | | | 15.45 | | | 34.53 | |
| | a10 3e3/4" | 5.15m | 3/4" | 1 | 1 | 5.15 | | | 5.15 | | | 7.99 | |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI-N° 21346433 | 5.65m | 3/4" | 1 | 2 | 5.65 | | | 11.30 | | | 25.26 | |
| | a9 1e1" | 5.25m | 1" | 1 | 1 | 5.25 | | | 5.25 | | | 20.86 | |
| | a8 1e3/4" | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 | |
| | a9-a8 3e3/4" | 5.65m | 3/4" | 1 | 3 | 5.65 | | | 16.95 | | | 37.88 | |
| | a8 3e3/4" | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 15.75 | | | 35.20 | |



CONFORME

ARQ. DAVID HECTOR TORRES PUEENTE
CAP. 5776
JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. C.I.P. N° 41815

11/10/06

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007173

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Piezas | Long (m) | Parcela ACERO (Mts) | | | | | Total Kg |
|----------------|---------------------------------------------|---------|------|----------|-----------|----------|---------------------|------|-------|------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-20 KG/C/M2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FT = 4200 KG/C/M2 - VIGAS | | | | | | | | | | | |
| a8 | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| a8-a7 | | 5.50m | 3/4" | 1 | 1 | 5.50 | | | 5.50 | | | 12.29 |
| 1834' | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 15.75 | | | 36.20 |
| a7 | | 5.45m | 3/4" | 1 | 1 | 5.45 | | | 5.45 | | | 12.18 |
| a7-a6 | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 15.75 | | | 36.20 |
| 1834' | | 5.45m | 3/4" | 1 | 1 | 5.45 | | | 5.45 | | | 12.18 |
| a6 | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | 15.75 | | | 36.20 |
| a6-a5 | | 5.45m | 3/4" | 1 | 1 | 5.45 | | | 5.45 | | | 12.18 |
| 1834' | | 5.95m | 1" | 1 | 4 | 5.95 | | | 23.80 | | | 94.56 |
| a5 | | 5.95m | 3/4" | 1 | 1 | 5.95 | | | 5.95 | | | 13.30 |
| 1834' | | 7.05m | 1" | 1 | 1 | 7.05 | | | 7.05 | | | 28.01 |
| a5-a4 | | 5.75m | 1" | 1 | 3 | 5.75 | | | 17.25 | | | 66.53 |
| 1011' | | 5.75m | 3/4" | 1 | 1 | 5.75 | | | 5.75 | | | 12.85 |
| a4 | | 5.45m | 3/4" | 1 | 1 | 5.45 | | | 5.45 | | | 12.18 |
| 3011' | | 6.05m | 3/4" | 1 | 3 | 6.05 | | | 18.15 | | | 40.57 |
| a4 | | 6.05m | 5/8" | 1 | 1 | 6.05 | | | 6.05 | | | 9.39 |
| 1834' | | 8.15m | 1" | 1 | 4 | 8.15 | | | 32.60 | | | 129.52 |



EDWARD GERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENCASA MANA
 Ingeniera Civil
 C.I.P. 178882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARRASCO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 215-46425

CONFORME

ARQ. DAVID TORRES PUEENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|---------------------------|-------|------|-------|-------|-------|
| Ø A ^o Kg/ml | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.984 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A ^o | N ^o Veces | N ^o Pieza | Long (m) | Parcial ACERO (mts) | | | Parcial Kg | Total Kg |
|-------------------------------------------------|-----------------------------------------------------------------|---------|------------------|----------------------|----------------------|----------|---------------------|------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | | |
| 02.03.08.01 | VIGAS | | | | | | | | | | |
| 02.03.08.01.03 | VIGAS FC=280 KG/CM2 ACERO DE REFUERZO FY=4200 KG/CM2 - VIGAS | | | | | | | | | | |
| a3- a2 | | 8.15m | 3/4" | 1 | 1 | 8.15 | | | | 8.15 | 18.22 |
| 163/4" | | | | | | | | | | | |
| a2 | | 6.85m | 3/4" | 1 | 3 | 6.85 | | | | 20.55 | 45.93 |
| 165/8" | | | | | | | | | | | |
| a2 | | 6.85m | 5/8" | 1 | 1 | 6.85 | | 6.85 | | | 10.63 |
| a2- a1 | | | | | | | | | | | |
| 163/4" | | 5.50m | 3/4" | 1 | 1 | 5.50 | | | 5.50 | | 12.29 |
| a1 | | | | | | | | | | | |
| 263/4" | | 2.33m | 3/4" | 1 | 2 | 2.78 | | | 5.56 | | 12.43 |
| a1 | | | | | | | | | | | |
| 165/8" | | 2.33m | 5/8" | 1 | 1 | 2.78 | | 2.78 | | | 4.31 |
| montaje | | | | | | | | | | | |
| 263/8" | | 66.49m | 3/8" | 1 | 2 | 66.49 | 132.98 | | | | 74.47 |
| montaje | | | | | | | | | | | |
| 263/8" | | 10.55m | 3/8" | 1 | 2 | 10.55 | 21.10 | | | | 11.82 |
| montaje | | | | | | | | | | | |
| 263/8" | | 7.38m | 3/8" | 1 | 2 | 7.38 | 14.76 | | | | 8.27 |
| a12- a11 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 30 | 2.00 | 60.00 | | | | 33.60 |
| Ø38":1" @ 05, 6@ 10, 6@ 15 @extremo; resto @ 25 | | | | | | | | | | | |
| a11- a10 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | 80.00 | | | | 44.80 |
| Ø38":1" @ 05, 6@ 10, 6@ 15 @extremo; resto @ 25 | | | | | | | | | | | |
| a10- a9 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | 80.00 | | | | 44.80 |
| Ø38":1" @ 05, 6@ 10, 6@ 15 @extremo; resto @ 25 | | | | | | | | | | | |
| a8- a8 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | 80.00 | | | | 44.80 |
| Ø38":1" @ 05, 6@ 10, 6@ 15 @extremo; resto @ 25 | | | | | | | | | | | |
| a8- a7 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | 80.00 | | | | 44.80 |
| Ø38":1" @ 05, 6@ 10, 6@ 15 @extremo; resto @ 25 | | | | | | | | | | | |
| a7- a6 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | 80.00 | | | | 44.80 |
| Ø38":1" @ 05, 6@ 10, 6@ 15 @extremo; resto @ 25 | | | | | | | | | | | |



ARQ. DAVID VICTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

007172

272796



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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO - EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | Parcial Kg | Total Kg |
|----------------|----------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | | |
| 02.03.08.01 | VIGAS | | | | | | | | | | |
| 02.03.08.01.03 | VIGAS FC=20/KG/CHZ ACERO DE REFUERZO FY= 4200 KGM2 - VIGAS | | | | | | | | | | |
| | a6- a6 ESTRIBOS Ø38" * 1 @ .05 @ .10, 6 @ .15 @ extremi, resto | | 38" | 1 | 40 | 2.00 | 80.00 | | | 80.00 | 44.80 |
| | a5- a4 ESTRIBOS Ø38" * 1 @ .05 @ .10, 6 @ .15 @ extremi, resto | | 38" | 1 | 46 | 2.00 | 92.00 | | | 92.00 | 51.52 |
| | a4- a3 ESTRIBOS Ø38" * 1 @ .05 @ .10, 6 @ .15 @ extremi, resto | | 38" | 1 | 40 | 2.00 | 80.00 | | | 80.00 | 44.80 |
| | a3- a2 ESTRIBOS Ø38" * 1 @ .05 @ .10, 6 @ .15 @ extremi, resto | | 38" | 1 | 48 | 2.40 | 115.20 | | | 115.20 | 64.51 |
| | a2- a1 ESTRIBOS Ø38" * 1 @ .05 @ .10, 6 @ .15 @ extremi, resto | | 38" | 1 | 40 | 2.00 | 80.00 | | | 80.00 | 44.80 |
| | eje a6-aE y eje a10-a9 11-16el(25x70) 4034" | | 3/4" | 1 | 2 | 4.02 | | | 8.04 | | 17.97 |
| | montaje 2036" | | 3/4" | 1 | 2 | 4.02 | | | 8.04 | | 17.97 |
| | a3- a2 ESTRIBOS Ø38" * 1 @ .05 @ .10, 6 @ .15 @ extremi, resto | | 38" | 1 | 23 | 1.90 | 43.70 | | | 43.70 | 24.47 |
| | eje a6-aE y eje a9-a8 VE-7-1(25x.40) 4012" | | 1/2" | 1 | 2 | 4.89 | | 9.78 | | 9.78 | 9.72 |
| | a6- a8 ESTRIBOS Ø38" * 1 @ .05 @ .10 | | 38" | 1 | 41 | 1.30 | 53.30 | | | 53.30 | 29.85 |
| | 11-16el(25x70) 4034" | | 3/4" | 1 | 2 | 7.29 | | | 14.58 | | 32.59 |
| | montaje 2036" | | 3/4" | 1 | 2 | 7.17 | | | 14.34 | | 32.05 |
| | 11-16el(25x70) 4034" | | 38" | 1 | 2 | 6.27 | 12.54 | | | 12.54 | 7.02 |



CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

RICARDO VICTOR SIU DELGADO
 CAP. 5776
 INGENIERO CIVIL
 DNI N° 23344425

IFE DE SUPERVISION

1945

1945

1945

1945

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO. EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-I, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | PESO NOMINAL | | | | Parcial Kg | Total Kg | |
|----------------|---------------------------------------------------|---------|------|----------|----------|----------|--------------|-------|-------|-------|------------|----------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | | |
| 02.03.08 | VIGAS | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | 0.222 | 0.56 | 0.984 | 1.552 | 2.235 | 3.973 | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - V | | | | | | | | | | | | |
| | a3-a2 | | 3/8" | 1 | 32 | 1.90 | | | | | | | 34.05 |
| | ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8" x 1 @ 0.5, 6 @ 1.0, 1 @ 1.5 @ extrem. resto | | 3/4" | 1 | 2 | 2.77 | | | | | 5.54 | | 12.38 |
| | eje aD-aE y eje a1-ext | | | | | | | | | | | | |
| | VB-1(20x.70) | | 3/4" | 1 | 2 | 2.77 | | | | | 5.54 | | 12.38 |
| | 4634* | | | | | | | | | | | | |
| | montaje | | | | | | | | | | | | |
| | 2638* | | 3/8" | 1 | 2 | 1.87 | | 3.74 | | | | | 2.09 |
| | a3-a2 | | 3/8" | 1 | 15 | 1.80 | | 27.00 | | | | | 15.12 |
| | ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8" x 1 @ 0.5, 6 @ 1.0, 6 @ 1.5 @ extrem. resto | | 3/8" | 1 | 3 | 19.06 | | | | | 57.18 | | 127.80 |
| | 1V-19(30x.70) | | 3/4" | 1 | 3 | 18.99 | | | | | 56.97 | | 127.33 |
| | 6034* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 3/4" | 1 | 3 | 48.35 | | | | | 145.05 | | 324.19 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 3/4" | 1 | 3 | 48.35 | | | | | 145.05 | | 324.19 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 1" | 1 | 2 | 10.55 | | | | | 21.10 | | 83.83 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 1" | 1 | 2 | 11.65 | | | | | 23.30 | | 92.57 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 3/4" | 1 | 3 | 10.68 | | | | | 32.04 | | 71.61 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 3/4" | 1 | 3 | 10.76 | | | | | 32.28 | | 72.15 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 3/4" | 1 | 1 | 5.25 | | | | | 5.25 | | 11.73 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |
| | 1V-19(30x.90) | | 3/4" | 1 | 1 | 5.45 | | | | | 5.45 | | 12.18 |
| | (63-a2) | | | | | | | | | | | | |
| | 401* | | | | | | | | | | | | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.F. N° 61778

MARILYN ENDARA MAMANI
 Inge. Civil
 C.I.F. N° 8882

CONSORCIO CONSUL JILOR SAUL GARRIDO
 C.P.C. MAPA LUI
 REPR. EN
 TUMBES
 21566613

DAVID HECTOR TORRES
 CAP. 577
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP. N° 41815

CONFORME

10/17/07

10/17/07

10/17/07

10/17/07

10/17/07

10/17/07

10/17/07

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Parcial Kg | Total Kg |
|----------------|-----------------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|------|-------|-------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/M2 - VIGAS | | | | | | | | | | | | |
| 3034* | | 4.65m | 3/4" | 1 | 3 | 4.65 | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 | 31.18 |
| a10-a9 | | 2.65m | 3/4" | 1 | 2 | 2.65 | | | | | 5.30 | | 11.85 |
| 2034* | | 4.65m | 3/4" | 1 | 3 | 4.65 | | | | | 13.95 | | 31.18 |
| a8 | EDUARDO CERON TORRES JEFE DE PROYECTO C.I.E. N° 61778 | 4.65m | 5/8" | 1 | 1 | 4.65 | | | 4.65 | | | | 7.22 |
| 1058* | | 5.60m | 3/4" | 1 | 2 | 5.60 | | | | 11.20 | | | 25.03 |
| a6-a7 | | 5.60m | 5/8" | 1 | 1 | 5.60 | | | 5.60 | | | | 8.69 |
| 2034* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | 35.20 |
| a6-a7 | MARIA N. SANDARA MAMANI Ingeniero Civil C.I.P. 78882 | 5.25m | 1" | 1 | 1 | 5.25 | | | | 5.25 | | | 20.86 |
| 101* | | 5.65m | 3/4" | 1 | 1 | 5.65 | | | | 5.65 | | | 12.63 |
| a7-a6 | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | 35.20 |
| 1034* | | 5.40m | 5/8" | 1 | 1 | 5.40 | | | 5.40 | | | | 8.38 |
| a6 | CONSORCIO CONSULTOR SAUL GARRIDO | 6.45m | 1" | 1 | 3 | 6.45 | | | | 19.35 | | | 76.88 |
| a6-a5 | | 7.15m | 3/4" | 1 | 3 | 7.15 | | | | 21.45 | | | 47.94 |
| 1058* | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMITON DNI N° 2134428 | 6.65m | 1" | 1 | 3 | 6.65 | | | | 19.95 | | | 79.26 |
| a5 | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| 3034* | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| a4 | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| 301* | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| a4 | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| 1034* | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| a4-a3 | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |
| 1034* | | 6.65m | 3/4" | 1 | 1 | 6.65 | | | | 6.65 | | | 14.86 |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

10/2/78

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1/18/78

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 1" |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|----------------|-------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY= 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a3 | | 5.90m | 3/8" | 1 | 1 | 5.90 | | | | | | 5.90 | |
| a3-a2 | | 6.75m | 1" | 1 | 3 | 6.75 | | | | | | 80.45 | 80.45 |
| 201" | | 8.15m | 1" | 1 | 2 | 8.15 | | | | | | 64.76 | 64.76 |
| a3-a2 | | 8.15m | 3/4" | 1 | 1 | 8.15 | | | | 8.15 | | 18.22 | 18.22 |
| 103/4" | | 6.75m | 1" | 1 | 3 | 6.75 | | | | | | 80.45 | 80.45 |
| a2 | | 6.75m | 3/4" | 1 | 1 | 6.75 | | | | 6.75 | | 15.09 | 15.09 |
| 103/4" | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | | 5.65 | | 8.77 | 8.77 |
| a2-a1 | | 4.22m | 3/4" | 1 | 2 | 4.67 | | | | 9.34 | | 20.87 | 20.87 |
| 105/8" | | 66.49m | 3/8" | 1 | 2 | 66.49 | | | | | | 74.47 | 74.47 |
| a1 | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | | | | 11.82 | 11.82 |
| 203/4" | | 9.03m | 3/8" | 1 | 2 | 9.03 | | | | | | 10.11 | 10.11 |
| montale | | 30m | 3/8" | 1 | 30 | 2.00 | | | | | | 33.60 | 33.60 |
| 203/8" | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| montale | | 30m | 3/8" | 1 | 23 | 2.00 | | | | | | 25.76 | 25.76 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a11-a10 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a11-a11 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| a10-a8 | | 30m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | 44.80 |
| ESTRIBOS | | 30m | 3/8" | | | | | | | | | | |

007167

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | | |
|--------------|-------|------|-------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | | Parcial Kg | Total Kg | |
|--------------------|---------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------|----|------------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .70m | 38" | 1 | 1 | 2.00 | | | | | | | | | |
| a7- a6 | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .70m | 38" | 1 | 40 | 2.00 | 80.00 | | | | | | | 44.80 | |
| a6- a5 | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .70m | 38" | 1 | 40 | 2.00 | 80.00 | | | | | | | 44.80 | |
| a5- a4 | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .70m | 38" | 1 | 46 | 2.00 | 92.00 | | | | | | | 51.52 | |
| a4- a3 | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .70m | 38" | 1 | 40 | 2.00 | 80.00 | | | | | | | 44.80 | |
| a3- a2 | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .90m | 38" | 1 | 48 | 2.40 | 115.20 | | | | | | | 64.51 | |
| a2- a1 | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | .70m | 38" | 1 | 40 | 2.00 | 80.00 | | | | | | | 44.80 | |
| a1- | ESTRIBOS Ø38*11 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 15 | .70m | 38" | 1 | 12 | 2.00 | 24.00 | | | | | | | 13.44 | |
| 1V-30(30*70) 6034" | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78882 | .45m | 34" | 1 | 3 | 13.93 | | | | 41.79 | | | | 93.40 | |
| a11 2034" | CONSORCIO CONSULTOR SAUL GARRIDO | .45m | 34" | 1 | 3 | 13.90 | | | | 41.70 | | | | 93.20 | |
| a11 1058" | C.P.C. MARIA LUISA CARRAJO MUÑOZ REPRESENTANTE COMUN UNI N° 2134428 | 5.25m | 34" | 1 | 2 | 5.25 | | | | 10.50 | | | | 23.47 | |
| a11- a10 1034" | | 5.25m | 58" | 1 | 1 | 5.25 | | | | 5.25 | | | | 8.15 | |
| a10 7034" | | 5.55m | 34" | 1 | 1 | 5.55 | | | | 5.55 | | | | 12.40 | |
| montale 2038" | | 2.33m | 34" | 1 | 2 | 2.33 | | | | 4.66 | | | | 10.42 | |
| a11- a11 832" | | 12.92m | 38" | 1 | 2 | 12.92 | 25.84 | | | | | | | 14.47 | |
| ESTRIBOS | | .30m | 38" | 1 | 90 | 2.00 | 60.00 | | | | | | | 33.60 | |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Total Kg | |
|----------------|----------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|-------|-------|--------|-------|----------|----|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | 1" |
| 02.03.06 | VIGAS | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 | |
| 02.03.06.01 | VIGAS FC-29 KGC/M2 | | | | | | | | | | | | |
| 02.03.06.01.03 | ACERO DE REFUERZO FY = 4200 KGC/M2 - VIGAS Ø38" x 17 @ 05; 6Ø 10; 6Ø 15 @ extremi resto @ 25 | | 38" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | a11-a10 | | | | | | | | | | | | |
| | ESTRIBOS Ø38" x 11 @ 05; 6Ø 10; 6Ø 15 @ extremi resto @ 25 | | 38" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | 1V-21(30x70) 6Ø34" | | 34" | 1 | 3 | 40.71 | | | | 40.79 | | 91.17 | |
| | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | | | | | | | | | | | |
| | 1V-21(30x90) (Ø3-Ø2) 4Ø11" | | 11" | 1 | 2 | 10.55 | | | | 122.13 | | 272.96 | |
| | 6Ø34" | | 34" | 1 | 3 | 10.78 | | | | 32.34 | | 72.28 | |
| | MARIA MENDARA MAMANI Ingeniero Civil C.I.P. 78882 | | | | | | | | | | | | |
| | a8 3Ø34" | | 34" | 1 | 3 | 10.84 | | | | 32.52 | | 72.68 | |
| | a8 1Ø58" | | 34" | 1 | 3 | 2.90 | | | | 8.70 | | 19.44 | |
| | a8-a7 3Ø34" | | 56" | 1 | 1 | 2.90 | | | 2.90 | | | 4.50 | |
| | a8-a7 1Ø58" | | 34" | 1 | 3 | 5.70 | | | | 17.10 | | 38.22 | |
| | CONSORCIO CONSULTOR SADI-SARRIDO | | | | | | | | | | | | |
| | a7 3Ø34" | | 56" | 1 | 1 | 5.70 | | | 5.70 | | | 8.85 | |
| | C.P.C. MARIA LUISA CIRBAJO MUÑOZ REPRESENTANTE COMON DNI Nº 21516425 | | | | | | | | | | | | |
| | a7 1Ø58" | | 34" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| | a7-a6 1Ø58" | | 56" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| | a7-a6 1Ø58" | | 56" | 1 | 1 | 5.55 | | | 5.55 | | | 8.61 | |
| | a6 2Ø34" | | 34" | 2 | 2 | 5.25 | | | | 10.50 | | 23.47 | |



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION
 RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a6 10508' | | 5.25m | 56" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| a5 10508' | | 5.50m | 56" | 1 | 1 | 5.50 | | | 5.50 | | | 8.54 | |
| a5 3011' | EDWARD SACERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 6.45m | 1 " | 1 | 3 | 6.45 | | | | 19.35 | | 76.88 | |
| a5- a4 20344' | | 6.95m | 3/4" | 1 | 2 | 6.95 | | 13.90 | | | | 31.07 | |
| a5- a4 10508' | | 6.95m | 56" | 1 | 1 | 6.95 | | | 6.95 | | | 10.79 | |
| a4 3011' | | 6.45m | 1 " | 1 | 3 | 6.45 | | | | 19.35 | | 76.88 | |
| a4- a3 10508' | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 268882 | 5.50m | 56" | 1 | 1 | 5.50 | | | 5.50 | | | 8.54 | |
| a3 2011' | | 6.75m | 1 " | 1 | 2 | 6.75 | | | | 13.50 | | 53.64 | |
| a3 10344' | | 6.75m | 3/4" | 1 | 1 | 6.75 | | 6.75 | | | | 15.09 | |
| a3- a2 2011' | | 7.95m | 1 " | 1 | 2 | 7.95 | | | | 15.90 | | 63.17 | |
| a3- a2 10344' | CONSORCIO CONSULTOR SAUL GARRIDO | 7.95m | 3/4" | 1 | 1 | 7.95 | | 7.95 | | | | 17.77 | |
| a2 2011' | C.P.C. MARIA LUISA CARBUO MUÑOZ REPRESENTANTE COMUN DNI N° 21546425 | 6.75m | 1 " | 1 | 2 | 6.75 | | | | 13.50 | | 53.64 | |
| a2 10344' | | 6.75m | 3/4" | 1 | 1 | 6.75 | | 6.75 | | | | 15.09 | |
| a2- a1 10508' | | 5.40m | 56" | 1 | 1 | 5.40 | | | 5.40 | | | 8.36 | |
| a1 20344' | | 4.22m | 3/4" | 1 | 2 | 4.67 | | 9.34 | | | | 20.87 | |



ARQ. DAVID HECTOR TORRES PUENTE
 C.A.P. 578
 JEFE DE SUPERVISIÓN

INGENIERO CIVIL
 Reg. CIP N° 41815
 RICARDO VICTOR SIU DELGADO

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-I, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|-------|-------|-------|-------|
| Ø A" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.994 | 1.552 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial Acero (Mts) | | | | | Total Kg | |
|----------------------|----------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|-------|------|------|----------|----|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | 1" |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a1 | 1056" | | 36" | 1 | 1 | 4.67 | | | 4.67 | | | 7.25 | |
| montaje | | | | | | | | | | | | | |
| 2036" | | | 36" | 1 | 2 | 38.96 | | 77.92 | | | | 43.64 | |
| montaje | | | | | | | | | | | | | |
| 2036" | | | 36" | 1 | 2 | 10.55 | | 21.10 | | | | 11.82 | |
| montaje | | | | | | | | | | | | | |
| 2036" | | | 36" | 1 | 2 | 9.03 | | 18.06 | | | | 10.11 | |
| a6-a7 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| a7-a8 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| a8-a9 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| a9-a10 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 46 | 2.00 | | 92.00 | | | | 51.52 | |
| a10-a11 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| a11-a12 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 48 | 2.40 | | 115.20 | | | | 64.51 | |
| a12-a13 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| a13-a14 | ESTRIBOS Ø36"1" @ 05, 6@ 10, 6@ 15 @ extremo, resto @ 25 | | 36" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 | |
| 1V21a(2bx.70) 603/4" | | | 34" | 1 | 2 | 10.12 | | | 20.24 | | | 45.24 | |
| a5-a4 203/4" | | | 34" | 1 | 2 | 10.01 | | | 20.02 | | | 44.74 | |
| | | | 34" | 1 | 2 | 7.29 | | | 14.58 | | | 32.59 | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

INGENIERO CIVIL
 ENDARA MAMANI

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21540423



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

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1961



METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Parcial Kg | Total Kg | |
|----------------|------------------------------------------------------|---------|------|----------|----------|----------|--------------|--------|------|-------|-------|------------|----------|----|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | | 1" |
| | | | | | | | Ø A° Kg/ml | 3/8" | 1/2" | 5/8" | 3/4" | 1" | | |
| 02.03.08 | VIGAS | | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 | |
| 02.03.08.01 | VIGAS FC=28 M/GCM2 | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 T/GCM2 - VIGAS | | | | | | | | | | | | | |
| | Ø4 | | | | | | | | | | | | | |
| | 201" | | 1" | 1 | 2 | 2.83 | | | | | | | 22.49 | |
| | montaje | | | | | | | | | | | | | |
| | 20338" | | 3/8" | 1 | 2 | 9.07 | | 18.14 | | | | | 10.16 | |
| | a5- a4 | | | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | | | |
| | Ø3/8" * 1 @ 05 60 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 3/8" | 1 | 63 | 1.90 | | 119.70 | | | | | 67.03 | |
| | | | | | | | | | | | | | | |
| | 1V-22(30x7) | | | | | | | | | | | | | |
| | 603/4" | | 3/4" | 1 | 3 | 68.31 | | 204.93 | | | | | 458.02 | |
| | | | | | | | | | | | | | | |
| | | | 3/4" | 1 | 3 | 68.24 | | 204.72 | | | | | 457.95 | |
| | | | | | | | | | | | | | | |
| | 1V-22(30x9) | | | | | | | | | | | | | |
| | (63-a2) | | 1" | 1 | 2 | 10.55 | | | | 21.10 | | | 83.83 | |
| | 401" | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 603/4" | | 3/4" | 1 | 3 | 10.78 | | 32.34 | | | | | 72.28 | |
| | | | | | | | | | | | | | | |
| | | | 3/4" | 1 | 3 | 10.86 | | 32.98 | | | | | 72.82 | |
| | | | | | | | | | | | | | | |
| | a11 | | | | | | | | | | | | | |
| | 203/4" | | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | | | 23.47 | |
| | | | | | | | | | | | | | | |
| | a11 | | | | | | | | | | | | | |
| | 105/8" | | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | | 8.15 | |
| | | | | | | | | | | | | | | |
| | a11-a10 | | | | | | | | | | | | | |
| | 105/8" | | 3/4" | 1 | 1 | 5.65 | | 5.65 | | | | | 12.63 | |
| | | | | | | | | | | | | | | |
| | a10 | | | | | | | | | | | | | |
| | 203/4" | | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | | | 23.47 | |
| | | | | | | | | | | | | | | |
| | a10 | | | | | | | | | | | | | |
| | 105/8" | | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | | 8.15 | |
| | | | | | | | | | | | | | | |
| | a10-a9 | | | | | | | | | | | | | |
| | 105/8" | | 5/8" | 1 | 1 | 5.65 | | 5.65 | | | | | 8.77 | |
| | | | | | | | | | | | | | | |
| | a9 | | | | | | | | | | | | | |
| | 105/8" | | 5/8" | 1 | 1 | 5.65 | | 5.65 | | | | | 8.77 | |



EDUARDO CHIRON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ANDARA MAMAN
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 215-46425

CONFORME
 ARQ. DAVID RECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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10/15/68

CONFIDENTIAL

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 1.552 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | Nº Vezes | Nº Pieza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg |
|----------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-283 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a5-a8 | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | 8.77 | |
| 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a8 | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 | |
| a6-a7 | | 5.60m | 3/4" | 1 | 2 | 5.60 | | | | 11.20 | 25.03 | |
| 1656* | | 5.60m | 5/8" | 1 | 1 | 5.60 | | | 5.60 | | 8.69 | |
| a7 | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | 35.20 | |
| 1656* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 | |
| a7-a8 | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | 8.77 | |
| 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a6 | | 5.50m | 5/8" | 1 | 1 | 5.50 | | | 5.50 | | 8.54 | |
| a6-a5 | | 5.95m | 1" | 1 | 3 | 5.95 | | | | 17.85 | 70.92 | |
| 391* | | 5.95m | 3/4" | 1 | 1 | 5.95 | | | 5.95 | | 13.30 | |
| a5 | | 7.05m | 3/4" | 1 | 2 | 7.05 | | | | 14.10 | 31.51 | |
| 1634* | | 7.05m | 5/8" | 1 | 1 | 7.05 | | | 7.05 | | 10.94 | |
| a4 | | | | 1 | 1 | 5.05 | | | | | 11.90 | |



EDUARDO GERON TORRES
 JEFE DE PROYECTO
 CIP. N° 61778

MARIA M. ENCAPA MAMIA
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTORS SAUL GARRIDO
C.P.C. MARIA LUIS CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 7290423

DAVID TORRES
 ARQ. DAVID VECIOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SILL DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815



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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Piza | Long (m) | PESO NOMINAL | | | | Parcial Kg | Total Kg |
|-------------------------------------------|-----------------------------------------------------------------------------------|---------|------|----------|---------|----------|--------------|--------|-------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| a4- a3 2634' | | 5.95m | | 1 | 2 | 5.70 | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| a3 201' | | 5.70m | 3/4" | 1 | 2 | 6.80 | | 11.40 | | | 25.46 | |
| a3- a2 101' | | 6.80m | 1" | 1 | 2 | 6.80 | | | | 13.60 | 54.03 | |
| a3- a2 1034' | EDWARD GIBON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 7.95m | 1" | 1 | 1 | 7.95 | | | | 7.95 | 31.59 | |
| a2 201' | | 7.95m | 3/4" | 1 | 1 | 7.95 | | 7.95 | | | 17.77 | |
| a2 1034' | | 6.80m | 1" | 1 | 2 | 6.80 | | | | 13.60 | 54.03 | |
| a2- a1 1056' | MARIAM. ENDARA MAMANI Ingeniero Civil C.I.P. 78882 | 6.80m | 3/4" | 1 | 1 | 6.80 | | 6.80 | | | 15.20 | |
| a1 3034' | | 5.80m | 5/8" | 1 | 1 | 5.80 | | | 5.80 | | 9.00 | |
| a1 1056' | | 4.22m | 3/4" | 1 | 3 | 4.67 | | | | 14.01 | 31.31 | |
| montaje 2038' | CONSORCIO CONSULTOR SAUL GARRIDO | 4.22m | 5/8" | 1 | 1 | 4.67 | | | 4.67 | | 7.25 | |
| montaje 2038' | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI N° 21546425 | 66.49m | 3/8" | 1 | 2 | 66.49 | | 132.98 | | | 74.47 | |
| montaje 2038' | | 10.55m | 3/8" | 1 | 2 | 10.55 | | 21.10 | | | 11.82 | |
| a12- a11 ESTRIBOS | | 9.03m | 3/8" | 1 | 2 | 9.03 | | 18.06 | | | 10.11 | |
| a11- a10 ESTRIBOS | | 30m | 3/8" | 1 | 30 | 2.00 | | 60.00 | | | 33.60 | |
| a10- a9 ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | 44.80 | |
| | | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | 44.80 | |



RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

CONFORT
ARQ. DAVID HECTOR TORRES PUENTE
C.I.P. 5776
JEFE DE SUPERVISIÓN

Handwritten notes at the top left of the page.

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------|-------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | 38" | 1 | 1 | 7.00 | | | | | | |
| | a6- a6 | | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a6- a7 | | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a7- a6 | | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a6- a5 | | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a5- a4 | | 38" | 1 | 46 | 2.00 | | | | | | 51.52 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a4- a3 | | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a3- a2 | | 38" | 1 | 48 | 2.40 | | | | | | 64.51 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a2- a1 | | 38" | 1 | 40 | 2.00 | | | | | | 44.80 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a1- | | 38" | 1 | 12 | 2.00 | | | | | | 13.44 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 6@.15 @extremo, resto @.15 | | | | | | | | | | | |
| | e1e a6- a11 y a6- a16 | | 34" | 1 | 3 | 6.62 | | | | 25.86 | | 57.80 |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | |
| | 11-22b(25x.70) 6Ø3/4" | | | | | | | | | | | |
| | montaje | | | | | | | | | | | |
| | 2Ø3Ø8" | | 38" | 1 | 2 | 7.72 | | | | | | 8.65 |
| | a7- a6 | | 38" | 1 | 42 | 1.90 | | | | | | 44.69 |
| | ESTRIBOS Ø38":1"@.05, 6@.10, 5@.10, 5@.10, 5@.10, 5@.10 @extremo, resto @.25 | | | | | | | | | | | |
| | 11-22c(25x.70) 4Ø3/4" | | 34" | 1 | 2 | 4.49 | | | | 8.98 | | 20.07 |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | |
| | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN | | | | | | | | | | | |
| | DNI Nº 21548425 | | | | | | | | | | | |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | |
|--------------|-------|------|-------|-------|
| Ø A° | 1/4" | 3/8" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 1.552 | 2.235 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|------------|------|----------|----------|----------|---------------------|--------|------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS PC-260 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | |
| | montale | 45m | 3/4" | 1 | 2 | 4.42 | | | | | 19.76 |
| | 2636" | 3.97m | 3/8" | 1 | 2 | 3.97 | | 7.94 | | | 4.45 |
| | a5- a4 ESTRIBOS Ø38":1@.05, 6@.10, resto @.15 | 25m 25m | 3/8" | 1 | 20 | 1.90 | | 38.00 | | | 21.28 |
| | JEFF DE PROYECTO EDWARD CERON TORRES C.I.P. N° 61778 | 70m | 3/4" | 1 | 2 | 23.67 | | 47.34 | | | 105.80 |
| | 11-22a(25x.70) 4634" | 22.77m | 3/4" | 1 | 2 | 23.56 | | 47.12 | | | 105.31 |
| | a9 2634" | 5.30m | 3/4" | 1 | 2 | 5.30 | | 10.60 | | | 23.69 |
| | a9 1656" | 5.30m | 5/8" | 1 | 1 | 5.30 | | 5.30 | | | 8.23 |
| | a6 2634" | 5.10m | 3/4" | 1 | 2 | 5.10 | | 10.20 | | | 22.80 |
| | a6 1656" | 5.10m | 5/8" | 1 | 1 | 5.10 | | 5.10 | | | 7.92 |
| | montale | 22.66m | 3/8" | 1 | 2 | 22.66 | | 45.32 | | | 25.38 |
| | 2636" | 25m | 3/8" | 1 | 43 | 1.90 | | 81.70 | | | 45.75 |
| | a10- a9 ESTRIBOS Ø36":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 25m 25m | 3/8" | 1 | 41 | 1.90 | | 77.90 | | | 43.62 |
| | a6- a8 ESTRIBOS Ø38":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 25m 25m | 3/8" | 1 | 50 | 1.90 | | 95.00 | | | 53.20 |
| | a6- a7 ESTRIBOS Ø38":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 25m 25m | 3/4" | 1 | 3 | 54.34 | | 163.02 | | | 364.35 |
| | 11-23i(30x.70) 6634" EJE (A12-A5) | 53.84m | 3/4" | 1 | 3 | 54.29 | | 162.87 | | | 364.01 |
| | EJE (A12-A5) | 53.84m | 3/4" | 1 | 3 | 54.29 | | 162.87 | | | 364.01 |



CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | |
|--------------|------------|
| Ø A" Kg/ml | 1/4" 0.222 |
| | 3/8" 0.56 |
| | 1/2" 0.994 |
| | 5/8" 1.552 |
| | 3/4" 2.235 |
| | 1" 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Total Kg |
|-------------------------------------------|--------------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.08 02.03.06.01 02.03.06.01.03 | VIGAS VIGAS PC-280 KG/GM2 ACERO DE REFUERZO FT=4200 KG/GM2 - VIGAS 6034" EJE (A4-A3) | | 3/4" | 1 | 3 | 9.20 | | | | 27.60 | 61.69 |
| | | | 3/4" | 1 | 3 | 9.20 | | | | 27.60 | 61.69 |
| | 1V-23(30x30) (63-62) 481" | | 1 " | 1 | 2 | 9.35 | | | 18.70 | | 74.30 |
| | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 1 " | 1 | 2 | 10.45 | | | 20.90 | | 83.04 |
| | 6034" EJE (A2-A1) | | 3/4" | 1 | 3 | 10.68 | | | 32.04 | | 71.61 |
| | | | 3/4" | 1 | 3 | 10.76 | | | 32.28 | | 72.15 |
| | a11 2034" a11 1056" | | 3/4" | 1 | 2 | 5.25 | | | 10.50 | | 23.47 |
| | MARIA M. ENDERGA MAT Ingeniero C.I.P. 788 | | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |
| | a11-a10 1056" | | 3/4" | 1 | 1 | 5.65 | | | 5.65 | | 12.63 |
| | a10 2034" | | 3/4" | 1 | 2 | 5.25 | | | 10.50 | | 23.47 |
| | a10 1056" | | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |
| | CONSORCIO CONSULTOR SAUL GARRIDO a10-a8 1056" | | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | 8.77 |
| | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 21946425 | | 3/4" | 1 | 2 | 6.55 | | | 13.10 | | 29.28 |
| | a8-a8 1056" | | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | 8.77 |
| | a8 2034" | | 3/4" | 1 | 2 | 6.55 | | | 13.10 | | 29.28 |
| | a8-a7 1056" | | 5/8" | 1 | 1 | 5.70 | | | 5.70 | | 9.86 |



CONFORME

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

DR. DAVID HECTOR TORRES PUENTES
CAP. 5776
JEFE DE SUPERVISION

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 1 " |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcela ACERO (mts) | | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|-------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a7 | | 5.70m | 3/8" | 1 | 1 | 5.70 | | | | | | |
| 2634' | | 6.55m | 3/4" | 1 | 2 | 6.55 | | | 13.10 | | | 29.28 |
| a7 | | 6.55m | 5/8" | 1 | 1 | 6.55 | | | 6.55 | | | 10.17 |
| 1656' | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | | 8.77 |
| a7-a6 | | 6.55m | 3/4" | 1 | 2 | 6.55 | | | 13.10 | | | 29.28 |
| 2634' | | 6.55m | 5/8" | 1 | 1 | 6.55 | | | 6.55 | | | 10.17 |
| 1656' | | 10.08m | 5/8" | 1 | 1 | 10.08 | | | 10.08 | | | 15.64 |
| a5 | | 6.88m | 3/4" | 1 | 2 | 6.88 | | | 13.76 | | | 30.75 |
| 2634' | | 4.60m | 3/4" | 1 | 2 | 4.60 | | | 9.20 | | | 20.56 |
| a4 | | 5.70m | 5/8" | 1 | 1 | 5.70 | | | 5.70 | | | 8.85 |
| 2634' | | 6.60m | 1 " | 1 | 3 | 6.60 | | | | 19.80 | | 78.67 |
| a4-a3 | | 8.15m | 1 " | 1 | 2 | 8.15 | | | | 16.30 | | 64.76 |
| 1656' | | 6.60m | 1 " | 1 | 3 | 6.60 | | | | 19.80 | | 78.67 |
| a3 | | 6.60m | 3/4" | 1 | 1 | 6.60 | | | | | | 14.75 |
| 301' | | 5.60m | 5/8" | 1 | 1 | 5.60 | | | 5.60 | | | 8.69 |
| a3-a2 | | 5.02m | 5/8" | 1 | 2 | 5.47 | | | 10.94 | | | 16.98 |
| 201' | | | | | | | | | | | | |
| a2 | | | | | | | | | | | | |
| 301' | | | | | | | | | | | | |
| a2 | | | | | | | | | | | | |
| 1634' | | | | | | | | | | | | |
| a2-a1 | | | | | | | | | | | | |
| 1656' | | | | | | | | | | | | |
| a1 | | | | | | | | | | | | |
| 2656' | | | | | | | | | | | | |



EDUARDO CERON TORRES
JEFE DE PROYECTO
C.I.P. N° 61778

MARIA M. ENDRAN
Ingeniero
C.I.P. 7885C

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA LUISA CARBAJO MUÑOZ
REPRESENTANTE COMÚN
C.I.P. N° 21366433

CONFORME

RODOLFO HECTOR TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.954 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------|-------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | montale | | | | | | | | | | | |
| | 2Ø3/8" | 53.84m | 3/8" | 1 | 2 | 53.84 | | 107.68 | | | | 60.30 |
| | montale | | | | | | | | | | | |
| | 2Ø3/8" | 8.60m | 3/8" | 1 | 2 | 8.60 | | 17.20 | | | | 9.63 |
| | montale | | | | | | | | | | | |
| | 2Ø3/8" | 11.20m | 3/8" | 1 | 2 | 11.20 | | 22.40 | | | | 12.54 |
| | montale | | | | | | | | | | | |
| | 2Ø3/8" | 9.03m | 3/8" | 1 | 2 | 9.03 | | 18.06 | | | | 10.11 |
| a12- a11 | ESTRIBOS | 30m | 3/8" | 1 | 30 | 2.00 | | 60.00 | | | | 33.60 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a11- a10 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a10- a9 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a9- a8 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a8- a7 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a7- a6 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a6- a5 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a5- a4 | ESTRIBOS | 30m | 3/8" | 1 | 15 | 2.00 | | 30.00 | | | | 16.80 |
| | Ø3/8":1"@.05, 6@.10, 4@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a4- a3 | ESTRIBOS | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| a3- a2 | ESTRIBOS | 30m | 3/8" | 1 | 48 | 2.40 | | 115.20 | | | | 64.51 |
| | Ø3/8":1"@.05, 6@.10, 4@.15 @extremo, resto @.25 | 90m | | | | | | | | | | |
| a2- a1 | ESTRIBOS | 30m | 3/8" | 1 | 48 | 2.00 | | 96.00 | | | | 44.80 |



EDWARD GERSON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21548825

CONSORCIO CONSULTOR SAUL GARRIDO

CONFORME

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H.1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 1" |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|----------|----------|----------|---------------------|--------|------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=200 KG/CMZ ACERO DE REFUERZO FY= 4200 KG/CMZ - VIGAS Ø36";1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | | 36" | 1 | 1 | 70.00 | | | | | | |
| a1- | ESTRIBOS Ø36";1" @.05, 6@.10, resto @.15 | | 36" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 |
| VE32(30x.70) 6634" | eje aH-al y eje aT2-aT1 JEFE DE PROYECTO EDWARD GERON TORRES JEFES DE PROYECTO C.I.P. N° 61778 | | 34" | 1 | 3 | 4.72 | | | | 14.16 | | 31.65 |
| montaje 2636" | | | 38" | 1 | 2 | 3.82 | | 7.64 | | | | 4.28 |
| aT2-aT1 ESTRIBOS Ø36";1" @.05, 6@.10, 6@.15 @extremo, resto @.25 | | | 36" | 1 | 27 | 2.00 | | 54.00 | | | | 30.24 |
| 1V-23a(25x.70) 4634" | | | 34" | 1 | 2 | 7.54 | | | | 15.08 | | 33.70 |
| montaje 2636" | | | 34" | 1 | 2 | 7.44 | | | | 14.88 | | 33.26 |
| a5-a4 ESTRIBOS Ø36";1" @.05, 6@.10, 1@.15 @extremo, resto @.25 | MARIA M. ENDARA MAMANI Ingeniero Civil eje aG-aH y eje a5-a4, eje aH-al y eje a5-a4 | | 36" | 1 | 2 | 6.58 | | 13.16 | | | | 7.37 |
| 1V-23b(25x.70) 4634" | | | 34" | 2 | 2 | 10.12 | | | | 40.48 | | 90.47 |
| montaje 2636" | CONSORCIO CONSORTOR SAUL GARRIDO | | 34" | 2 | 2 | 10.01 | | | | 40.04 | | 89.49 |
| a5-a4 ESTRIBOS Ø36";1" @.05, 6@.10, 1@.15 @extremo, resto @.25 | MARIA LUISA CARRAJO MUÑOZ REPRESENTANTE COMÚN DNI N° 72546425 | | 36" | 2 | 56 | 1.90 | | 212.80 | | | | 119.17 |
| 1V-24a(25x.70) 7834" | | | 34" | 2 | 3 | 8.92 | | | | 53.52 | | 119.62 |
| | | | Ø1/4" | 1 | 4 | 0.04 | | | | 79.48 | | 147.60 |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

CONFORME

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|---------------------------------------------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|--------|-------|-------|----------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| 02.03.08.01 | VIGAS Fc=280 KG/CM2 | | | | | | 0.222 | 0.56 | 0.954 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | montaje | | | | | | | | | | | |
| 2038* | | 45m | 3/8" | 2 | 4 | 7.95 | | 31.80 | | | | 17.81 |
| a2 a1 | | 7.95m | 3/8" | 2 | 43 | 1.90 | | 163.40 | | | | 91.50 |
| ESTRIBOS | | 25m | 3/4" | 1 | 3 | 36.64 | | | | | | 245.67 |
| Ø38;1" @ 05; 6Ø; 10; 6Ø; 15 @extremo, resto @ 25" | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 45m | 3/4" | 1 | 3 | 36.56 | | | | | | 245.13 |
| 1V24;(30x70) | | 36.19m | 3/4" | 1 | 3 | 30.17 | | | | | | 202.29 |
| 6034* | | 30.17m | 3/4" | 1 | 3 | 30.17 | | | | | | 202.29 |
| EJE (A6-A3) | | 30.17m | 1" | 1 | 2 | 10.55 | | | | | 21.10 | 83.83 |
| 1V24;(30x90) | MARIA M. ENDARA MAMANI Ingeniero Civil | 10.55m | 1" | 1 | 2 | 11.65 | | | | | 23.30 | 92.57 |
| (63-a2) | | 55m | 3/4" | 1 | 3 | 10.68 | | | | | 32.04 | 71.61 |
| 401* | | 10.55m | 3/4" | 1 | 3 | 10.76 | | | | | 32.28 | 72.15 |
| EJE (A2-A1) | | 10.23m | 3/4" | 1 | 1 | 5.25 | | | | | 5.25 | 11.73 |
| 6034* | | 10.31m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| a11 1034* | CONSORCIO CONSULTOR SAUL GARRIDO | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 11.73 |
| a11 1058* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 11.73 |
| a10 1034* | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI N° 21546625 | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 11.73 |
| a9 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 11.73 |
| a8 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 11.73 |
| a7 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 11.73 |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-I, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcela ACERO (Mts) | | | | | Total Kg | |
|----------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|-------|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | 1" |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a7 | | 3.55m | 3/4" | 1 | 1 | 3.55 | | | | | | | 7.93 |
| a7-a6 | | 2.50m | 3/4" | 1 | 2 | 2.50 | | | | | | | 11.18 |
| 2a3/4 | | 4.25m | 5/8" | 1 | 1 | 4.25 | | | 4.25 | | | | 6.60 |
| a6 | | 5.40m | 5/8" | 1 | 1 | 5.40 | | | 5.40 | | | | 8.38 |
| a6-a5 | | 5.95m | 3/4" | 1 | 3 | 5.95 | | | | 17.85 | | | 39.89 |
| 1a5/8" | | 7.15m | 5/8" | 1 | 1 | 7.15 | | | | | 7.15 | | 11.10 |
| a4 | | 5.95m | 3/4" | 1 | 3 | 5.95 | | | | 17.85 | | | 39.89 |
| 3a3/4" | | 5.70m | 5/8" | 1 | 1 | 5.70 | | | | | 5.70 | | 8.85 |
| a4-a3 | | 6.10m | 1" | 1 | 3 | 6.10 | | | | | | 18.30 | 72.71 |
| 3a1" | | 6.10m | 3/4" | 1 | 1 | 6.10 | | | | 6.10 | | | 13.63 |
| a3 | | 7.95m | 1" | 1 | 2 | 7.95 | | | | | | 15.90 | 63.17 |
| 1a3/4" | | 7.95m | 3/4" | 1 | 1 | 7.95 | | | | | 7.95 | | 17.77 |
| a3-a2 | | 5.90m | 1" | 1 | 4 | 5.90 | | | | | | 23.60 | 93.76 |
| 4a1" | | 4.52m | 3/4" | 1 | 1 | 4.97 | | | | | | 4.97 | 11.11 |
| a1 | | 36.11m | 3/8" | 1 | 2 | 36.11 | | | | | 72.22 | | 40.44 |
| montaje | | | | | | | | | | | | | |
| 2a3/8" | | | | | | | | | | | | | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENOABA MAMANI
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 213-64623

CONFORME

DAVID HECIOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.954 | 1.552 | 2.235 |
| | | | | | 1 " |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veres | N° Plaza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------|------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | montaje | | | | | | | | | | | |
| | 2ø3ø8" | 28.87m | 3ø8" | 1 | 2 | 28.87 | | 57.74 | | | | 32.33 |
| | montaje | | | | | | | | | | | |
| | 2ø3ø8" | 11.20m | 3ø8" | 1 | 2 | 11.20 | | 22.40 | | | | 12.54 |
| | montaje | | | | | | | | | | | |
| | 2ø3ø8" | 9.03m | 3ø8" | 1 | 2 | 9.03 | | 18.06 | | | | 10.11 |
| | a12- a11 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 30 | 2.00 | | 60.00 | | | | 33.60 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a11- a10 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a10- a9 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a9- a8 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a8- a7 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a7- a6 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 21 | 2.00 | | 42.00 | | | | 23.52 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a6- a5 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a5- a4 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 46 | 2.00 | | 92.00 | | | | 51.52 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a4- a3 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a3- a2 | | | | | | | | | | | |
| | ESTRIBOS | 90m | 3ø8" | 1 | 48 | 2.40 | | 115.20 | | | | 64.51 |
| | ø3ø8":1@.05, 6@.10, 4@.15 @extremo, resto @.25 | 90m | | | | | | | | | | |
| | a2- a1 | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |
| | a1- | | | | | | | | | | | |
| | ESTRIBOS | 70m | 3ø8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 |
| | ø3ø8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | 70m | | | | | | | | | | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDABA MAMANI
 Ingeniera Civil
 C.I.P. 19863

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21346429

CONFOR
 ARQ. DAVID HEC TORRES PUENTE
 CAP. 6778
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------|------|----------|----------|----------|--------------|--------|-------|-------|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-200 KG/C/M2 ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS eje al-a.J y eje a7-a6 | 45m [3.80m] 45m | 3/4" | 1 | 3 | 4.70 | | | | | 14.10 | |
| | VE-2(30x.70) 6034" | | | | | | | | | | | 31.51 |
| | montaje | | | | | | | | | | | |
| | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | | | | | | | | | | |
| | a12- a11 ESTRIBOS Ø36"; 1" @ 05; 6 @ 10; 6 @ 15 @ extremo, resto @ 25 | 30m [30m] .70m | 3/8" | 1 | 27 | 2.00 | | 54.00 | | | | 30.24 |
| | VCH01 401/2" | 25m [1.15m] 25m | 1/2" | 2 | 2 | 1.65 | | | 6.60 | | | 6.56 |
| | eje al-a.J y eje a7-a6 | | | | | | | | | | | |
| | MARIA M. ENDARA Ingeniera C.I.P. 2882 | | | | | | | | | | | |
| | ESTRIBOS Ø36"; 1" @ 05; resto @ 10 | 25m [1.15m] 25m 40m [25m] 40m | 1/2" | 2 | 2 | 1.65 | | | 6.60 | | | 6.56 |
| | eje al-a.J y eje a6-a5 | | | | | | | | | | | |
| | 11-24a(30x.70) 6034" | 45m [8.02m] 45m | 3/4" | 1 | 3 | 8.92 | | 20.80 | | | 26.76 | 59.81 |
| | eje al-a.J y eje a6-a5 | | | | | | | | | | | |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | |
| | a6-a5 1034" | 45m [7.98m] 45m | 3/4" | 1 | 3 | 8.88 | | | | | 26.64 | 59.54 |
| | eje al-a.J y eje a6-a5 | | | | | | | | | | | |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | |
| | a6-a5 1011" | 5.88m [5.88m] 5.88m | 3/4" | 1 | 1 | 5.89 | | | | | 5.89 | 23.40 |
| | montaje | | | | | | | | | | | |
| | 2036" | 8.02m [8.02m] 8.02m | 3/8" | 1 | 2 | 8.02 | | 16.04 | | | | 8.98 |
| | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 21546435 | | | | | | | | | | | |
| | ESTRIBOS Ø36"; 1" @ 05; 6 @ 10; 6 @ 15 @ extremo, resto @ 25 | 30m [30m] .70m | 3/8" | 1 | 56 | 2.00 | | 112.00 | | | | 62.72 |
| | 11-24(30x.70) 5034" EJE a6-a5 | 9.60m [9.60m] 9.60m | 3/4" | 1 | 2 | 9.60 | | | | | 19.20 | 42.91 |
| | ARQ. DAVID HESTOR TORRES PUENTE CAP 5176 JEFE DE SUPERVISIÓN | | | | | | | | | | | |
| | CONFORME | | | | | | | | | | | |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | |
| | a6-a5 1034" | 9.60m [9.60m] 9.60m | 3/4" | 1 | 3 | 9.60 | | | | | 28.80 | 64.37 |
| | eje al-a.J y eje a6-a5 | | | | | | | | | | | |

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 3/8" | 1/4" | 3/8" | 5/8" | 1" |
| Kgr/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|------------------------------------------------------|---------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=289 KG/C/M2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS | | | | | | | | | | | |
| a3- a2 | | 8.15m | 3/4" | 1 | 1 | 8.15 | | | | 8.15 | | 18.22 |
| 103/4" | | 8.27m | 1" | 1 | 2 | 8.27 | | | | | 16.54 | 65.71 |
| a2 | | 8.27m | 3/4" | 1 | 1 | 8.27 | | | | 8.27 | | 18.48 |
| 103/4" | | 3.22m | 3/4" | 1 | 1 | 3.67 | | | | 3.67 | | 8.20 |
| a1 | | 36.11m | 3/8" | 1 | 2 | 36.11 | | 72.22 | | | | 40.44 |
| 103/4" | | 28.87m | 3/8" | 1 | 2 | 28.87 | | 57.74 | | | | 32.33 |
| montaje | | 11.20m | 3/8" | 1 | 2 | 11.20 | | 22.40 | | | | 12.54 |
| 203/8" | | 9.03m | 3/8" | 1 | 2 | 9.03 | | 18.06 | | | | 10.11 |
| montaje | | 9.03m | 3/8" | 1 | 2 | 9.03 | | 18.06 | | | | 10.11 |
| 203/8" | | 30m | 3/8" | 1 | 21 | 2.00 | | 42.00 | | | | 23.52 |
| a7- a6 | | 70m | 3/8" | 1 | 16 | 2.00 | | 32.00 | | | | 17.92 |
| ESTRIBOS | | 30m | 3/8" | 1 | 46 | 2.00 | | 92.00 | | | | 51.52 |
| Ø3/8" x 1" @ 05, 6 @ 10, 6 @ 15, resto @ 25 | | 70m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| a6- a5 | | 90m | 3/8" | 1 | 48 | 2.40 | | 115.20 | | | | 64.51 |
| ESTRIBOS | | 70m | 3/8" | 1 | 20 | 2.00 | | 40.00 | | | | 22.40 |
| Ø3/8" x 1" @ 05, 6 @ 10, 6 @ 15, resto @ 25 | | | | | | | | | | | | |
| a5- a4 | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | |
| Ø3/8" x 1" @ 05, 6 @ 10, 6 @ 15 @entremo, resto @ 25 | | | | | | | | | | | | |
| a4- a3 | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | |
| Ø3/8" x 1" @ 05, 6 @ 10, 6 @ 15 @entremo, resto @ 25 | | | | | | | | | | | | |
| a3- a2 | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | |
| Ø3/8" x 1" @ 05, 6 @ 10, 6 @ 15 @entremo, resto @ 25 | | | | | | | | | | | | |
| a2- a1 | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | |
| Ø3/8" x 1" @ 05, 6 @ 10, 6 @ 15, resto @ 25 | | | | | | | | | | | | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61578

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 7836

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARRASO MUÑOZ
 REPRESENTANTE COMUN
 DNI Nº 21546743

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

001700

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PROYECTO : METRADO DE ACERO
 ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | |
|--------------|-------|
| Ø 1/4" Kg/m | 0.222 |
| Ø 3/8" Kg/m | 0.56 |
| Ø 1/2" Kg/m | 0.994 |
| Ø 5/8" Kg/m | 1.56 |
| Ø 3/4" Kg/m | 2.235 |
| Ø 1" Kg/m | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Plaza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg |
|----------------|------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a1- | ESTRIBOS | 70m | 3/8" | 1 | 12 | 2.00 | | | | | | |
| | Ø3/8":1@.05, 6@.10, resto @.15 | | | | | | | | | | | 13.44 |
| VB-1(2bx.70) | | | | | | | | | | | | |
| 4Ø3/4" | | 45m | 3/4" | 1 | 2 | 36.85 | | | | | | 164.72 |
| | | | | | | | | | | | | |
| montaje | | 45m | 3/4" | 1 | 2 | 36.85 | | | | | | 164.72 |
| 2Ø3/8" | | 35.95m | 3/8" | 1 | 2 | 36.95 | | | | | | 40.26 |
| | | | | | | | | | | | | |
| a5-a4 | | 20m | 3/8" | 1 | 15 | 1.80 | | | | | | 15.12 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| a5-a4 | | 20m | 3/8" | 1 | 38 | 1.80 | | | | | | 36.30 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| a4-a3 | | 20m | 3/8" | 1 | 41 | 1.80 | | | | | | 41.33 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| a3-a2 | | 20m | 3/8" | 1 | 33 | 1.80 | | | | | | 33.26 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| a3-a2 | | 20m | 3/8" | 1 | 32 | 1.80 | | | | | | 32.26 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| a2-a1 | | 20m | 3/8" | 1 | 44 | 1.80 | | | | | | 44.36 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| a1- | | 20m | 3/8" | 1 | 14 | 1.80 | | | | | | 14.11 |
| ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | | | | | | | | | | |
| 1V-26(30x.70) | | 32.91m | 3/4" | 1 | 3 | 33.36 | | | | | | 223.68 |
| Ø3/8" | | | | | | | | | | | | |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | |
| | | 32.85m | 3/4" | 1 | 3 | 33.28 | | | | | | 223.14 |
| | | | | | | | | | | | | |
| | | 10.56m | 1" | 1 | 2 | 10.56 | | | | | | 83.91 |
| | | | | | | | | | | | | |
| | | 10.56m | 1" | 1 | 2 | 11.66 | | | | | | 92.65 |
| | | | | | | | | | | | | |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID Hector TORRES PUENTE
 CAP 5776
 JEFE DE SUPERVISIÓN

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A* | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A* | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|----------------|-------------------------------------------|---------|------|----------|----------|----------|---------------------|------|-------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=20 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 420 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a7 | 6Ø3/4" | | 3/4" | 1 | 3 | 8.43 | | | | 25.29 | | 56.52 | |
| a7 | 1Ø3/4" | | 3/4" | 1 | 3 | 8.51 | | | | 25.53 | | 57.06 | |
| a7 | 1Ø5/8" | | 3/4" | 1 | 1 | 2.88 | | | | 2.88 | | 6.44 | |
| a6 | 2Ø3/4" | | 5/8" | 1 | 1 | 2.88 | | | 2.88 | | | 4.47 | |
| a6 | 1Ø5/8" | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| a5 | 1Ø1" | | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| a5 | 1Ø1" | | 1" | 1 | 1 | 6.25 | | | | 6.25 | | 24.83 | |
| a5 | 1Ø3/4" | | 3/4" | 1 | 1 | 6.25 | | | | 6.25 | | 13.97 | |
| a4 | 1Ø3/4" | | 3/4" | 1 | 1 | 6.25 | | | | 6.25 | | 13.97 | |
| a3 | 3Ø3/4" | | 3/4" | 1 | 3 | 6.80 | | | | 20.40 | | 45.59 | |
| a3-a2 | 2Ø3/4" | | 3/4" | 1 | 2 | 7.75 | | | | 15.50 | | 34.64 | |
| a2 | 3Ø3/4" | | 3/4" | 1 | 3 | 6.80 | | | | 20.40 | | 45.59 | |
| a1 | 1Ø3/4" | | 3/4" | 1 | 1 | 3.32 | | | | 3.32 | | 7.42 | |
| Montaje | 2Ø3/8" | | 3/8" | 1 | 2 | 31.42 | | | 62.84 | | | 35.19 | |
| Montaje | 2Ø3/8" | | 3/8" | 1 | 2 | 10.56 | | | 21.12 | | | 11.83 | |



EDWARD CHIRON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61776

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21344425

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN



01/17/01

11/11

1/16

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1/16

METRADE DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.954 | 1.552 | 2.235 |
| | | | | | 1" |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Plaza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|----------------|----------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a7-a6 | ESTRIBOS Ø3/8" x 1' @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | 7.38m | 3/8" | 1 | 2 | 7.38 | | | | | | 8.27 | |
| a6-a5 | ESTRIBOS Ø3/8" x 1' @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | 7.0m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | |
| a5-a4 | ESTRIBOS Ø3/8" x 1' @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | 7.0m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | |
| a4-a3 | ESTRIBOS Ø3/8" x 1' @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | 7.0m | 3/8" | 1 | 46 | 2.00 | | | | | | 51.52 | |
| a3-a2 | ESTRIBOS Ø3/8" x 1' @ 05, 6 @ 10, 2 @ 15 @ extremo, resto @ 25 | 9.0m | 3/8" | 1 | 49 | 2.40 | | | | | | 65.86 | |
| a2-a1 | ESTRIBOS Ø3/8" x 1' @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | 7.0m | 3/8" | 1 | 40 | 2.00 | | | | | | 44.80 | |
| 11-27 (30x70) | | | 3/4" | 1 | 1 | 34.56 | | | | | | 77.24 | |
| 6034* | | 34.11m | 3/4" | 1 | 3 | 34.48 | | | | | | 231.19 | |
| a7 | | 34.03m | 3/4" | 1 | 2 | 2.88 | | | | | | 12.87 | |
| a7-A6 | | 2.88m | 3/4" | 1 | 1 | 5.65 | | | | | | 12.63 | |
| 1034* | | 5.65m | 3/4" | 1 | 2 | 5.25 | | | | | | 23.47 | |
| a6 | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | | | 8.15 | |
| 2034* | | 5.25m | 5/8" | 1 | 1 | 5.60 | | | | | | 8.69 | |
| 1056* | | 5.60m | 3/4" | 1 | 2 | 5.90 | | | | | | 26.37 | |
| a6 | | 5.90m | 3/4" | 1 | 2 | 5.90 | | | | | | 26.37 | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARILUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 ENI Nº 23346425



DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

1980

1980

1980

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007145

PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES" ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/m | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|--------------------------------------------------|---------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|----|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | | |
| 02.03.03 | VIGAS | | | | | | | | | | | | |
| 02.03.03.01 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | | |
| 02.03.03.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| | 16568 | 5.90m | 5/8" | 1 | 1 | 5.90 | | | | | | 9.16 | |
| a5- a4 | | 7.15m | 3/4" | 1 | 2 | 7.15 | | | | 14.30 | | 31.96 | |
| a4 | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 5.95m | 1" | 1 | 3 | 5.95 | | | | 17.85 | | 70.92 | |
| a4- a3 | | 5.70m | 3/4" | 1 | 2 | 5.70 | | | | 11.40 | | 25.48 | |
| 203/4" | | 5.65m | 3/4" | 1 | 1 | 5.65 | | | | 5.65 | | 12.63 | |
| a3 | | | | | | | | | | | | | |
| 103/4" | | | | | | | | | | | | | |
| montaje | | | | | | | | | | | | | |
| 203/8" | | 31.71m | 3/8" | 1 | 2 | 31.71 | | 63.42 | | | | 35.52 | |
| a7- a6 | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78662 | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| ESTRIBOS | | 30m | | | | | | | | | | | |
| Ø3/8":1" @ 05, 6@ 10, 6@ 15 @extremo, resto @ 25 | | 70m | | | | | | | | | | | |
| a6- a5 | | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| ESTRIBOS | | 30m | | | | | | | | | | | |
| Ø3/8":1" @ 05, 6@ 10, 6@ 15 @extremo, resto @ 25 | | 70m | | | | | | | | | | | |
| a5- a4 | | 30m | 3/8" | 1 | 46 | 2.00 | | 92.00 | | | | 51.52 | |
| ESTRIBOS | | 30m | | | | | | | | | | | |
| Ø3/8":1" @ 05, 6@ 10, 6@ 15 @extremo, resto @ 25 | | 70m | | | | | | | | | | | |
| a4- a3 | | 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| ESTRIBOS | | 30m | | | | | | | | | | | |
| Ø3/8":1" @ 05, 6@ 10, 6@ 15 @extremo, resto @ 25 | | 70m | | | | | | | | | | | |
| 11-20 (sb-70) | CONSORCIO CONSULTOR SAUL GARRIDO | 45m | 3/4" | 1 | 1 | 50.34 | | | | 50.34 | | 112.51 | |
| 603/4" | | 49.44m | | | | | | | | | | | |
| a7 | | | | | | | | | | | | | |
| 103/4" | | | | | | | | | | | | | |
| a7- a6 | | 45m | 3/4" | 1 | 3 | 50.34 | | | | 151.02 | | 337.53 | |
| 106/8" | MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI N° 21166423 | 49.44m | | | | | | | | | | | |
| a7 | | | | | | | | | | | | | |
| 103/4" | | 2.88m | 3/4" | 1 | 1 | 3.33 | | | | 3.33 | | 7.44 | |
| a7- a6 | | | | | | | | | | | | | |
| 106/8" | | 5.65m | 5/8" | 1 | 1 | 5.65 | | | 5.65 | | | 8.77 | |
| a6 | | | | | | | | | | | | | |
| 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| a6 | | | | | | | | | | | | | |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

001700

1997

1998

1999

2000

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2003

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001700

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| Ø A" Kg/m | PESO NOMINAL | | | |
|--------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 1.552 | 2.235 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquiema | Ø A" | N° Vezes | N° Piza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg | |
|-----------------------------------------------|--------------------------------------------------------------------|----------|------|----------|---------|----------|---------------------|------|--------|-------|------------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| 1958* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| a6- a5 | | 5.60m | 5/8" | 1 | 1 | 5.60 | | | 5.60 | | | 8.69 | |
| 1958* | | 5.90m | 1" | 1 | 2 | 5.90 | | | | 11.80 | | 46.88 | |
| a5 | | 5.90m | 3/4" | 1 | 1 | 5.90 | | | | 5.90 | | 13.19 | |
| 1934* | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 7.15m | 3/4" | 1 | 2 | 7.15 | | | | 14.30 | | 31.96 | |
| a5- a4 | | 6.05m | 1" | 1 | 2 | 6.05 | | | | | 12.10 | 48.07 | |
| 2934* | | 6.05m | 3/4" | 1 | 1 | 6.05 | | | | | 6.05 | 13.52 | |
| a4 | | 5.70m | 3/4" | 1 | 2 | 5.70 | | | | 11.40 | | 25.48 | |
| 2911* | | 5.35m | 3/4" | 1 | 1 | 5.35 | | | | 5.35 | | 11.96 | |
| a4 | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78882 | 49.36m | 3/8" | 1 | 2 | 49.36 | | | 98.72 | | | 55.28 | |
| montaje | | 30m | | | | | | | | | | | |
| 2938* | | 30m | | | | | | | | | | | |
| a7- a6 | CONSORCIO CONSULTOR SAUL GARRIDO | 70m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 | |
| ESTRIBOS | | 70m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 | |
| Ø38":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | 70m | 3/8" | 1 | 46 | 2.00 | | | 92.00 | | | 51.52 | |
| a6- a5 | MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 2146425 | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 46 | 2.00 | | | 92.00 | | | 51.52 | |
| Ø38":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 | |
| a4- a3 | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 40 | 2.00 | | | 80.00 | | | 44.80 | |
| Ø38":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | 30m | 3/8" | 1 | 50 | 2.00 | | | 100.00 | | | 56.00 | |
| a3- a2 | | 30m | 3/8" | 1 | 50 | 2.00 | | | 100.00 | | | 56.00 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 50 | 2.00 | | | 100.00 | | | 56.00 | |
| Ø38":1@.05, 6@.10, 6@.15 @extremo, resto @.25 | | 30m | | | | | | | | | | | |
| a2- a1 | | 30m | | | | | | | | | | | |



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

22/08

Handwritten notes in the lower left quadrant, including the word "CIVIL" in blue ink.

Vertical handwritten text in the lower middle section.

Vertical handwritten text in the lower right section.



PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO #1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Parcial Kg | Total Kg |
|------------------------------------------------------|-----------------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|-------|-------|--------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | 0.222 | 0.56 | 1.552 | 2.235 | 3.973 | |
| 02.03.08.01 | VIGAS Fc=280 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø36" x 1' @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 36" | 1 | 40 | 2.00 | | 80.00 | | | 44.80 | |
| | 1V-280af (30x.70) | | | | | | | | | | | |
| 60334* | | | 34" | 1 | 3 | 50.34 | | | | 151.02 | 337.53 | |
| a7 | EDUARDO CERON TORRES JEFE DE PROYECTO C.I.P. N° 81778 | | 34" | 1 | 3 | 50.34 | | | | 151.02 | 337.53 | |
| 10334* | | | 34" | 1 | 1 | 2.97 | | | | 2.97 | 6.64 | |
| a7 - a6 | | | 56" | 1 | 1 | 5.70 | | | 5.70 | | 8.85 | |
| 10558* | | | 34" | 1 | 2 | 5.10 | | | | 10.20 | 22.80 | |
| a6 | | | 34" | 1 | 2 | 6.10 | | | | 12.20 | 27.27 | |
| 20334* | | | 56" | 1 | 1 | 6.10 | | | 6.10 | | 9.47 | |
| a5 | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 18882 | | 56" | 1 | 1 | 7.50 | | | 7.50 | | 11.64 | |
| 10558* | | | 1 " | 1 | 2 | 6.10 | | | | 12.20 | 46.47 | |
| 201* | | | 34" | 1 | 2 | 5.70 | | | | 11.40 | 25.48 | |
| a4-53 | | | 34" | 1 | 1 | 5.20 | | | | 5.20 | 11.62 | |
| 20334* | | | 56" | 1 | 1 | 2.72 | | | 2.72 | | 4.22 | |
| a2 | CONSORCIO CONSULTOR SAUL GARRIDO | | 36" | 1 | 2 | 49.36 | | | 99.72 | | 55.28 | |
| 10334* | | | 36" | 1 | 37 | 2.00 | | | 74.00 | | 41.44 | |
| a1 | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 2134-6925 | | | | | | | | | | | |
| 10558* | | | | | | | | | | | | |
| montaje | | | | | | | | | | | | |
| 20338* | | | | | | | | | | | | |
| a7-a6 | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | |
| 036" x 1' @ 15, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | | | | | | | | | | | |
| a6-a5 | | | | | | | | | | | | |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

DR. DAVID HECYOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Parcial Kg | Total Kg |
|-----------------------------|---------------------------------------------------|---------|------|----------|----------|----------|--------------|--------|-------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| 02.03.08.01 | VIGAS FC-200 KG/CIM2 | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | 2038* | 49.36m | 38" | 1 | 2 | 49.36 | | 98.72 | | | | 98.72 |
| | a7- a6 | 30m | | | | | | | | | | |
| | ESTRIBOS | 70m | 38" | 1 | 40 | 2.00 | | 80.00 | | | | 80.00 |
| | Ø38"-1" @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a6- a5 | 30m | | | | | | | | | | |
| | ESTRIBOS | 70m | 38" | 1 | 40 | 2.00 | | 80.00 | | | | 80.00 |
| | Ø38"-1" @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a5- a4 | 30m | | | | | | | | | | |
| | ESTRIBOS | 70m | 38" | 1 | 46 | 2.00 | | 92.00 | | | | 92.00 |
| | Ø38"-1" @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a4- a3 | 30m | | | | | | | | | | |
| | ESTRIBOS | 70m | 38" | 1 | 40 | 2.00 | | 80.00 | | | | 80.00 |
| | Ø38"-1" @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a3- a2 | 30m | | | | | | | | | | |
| | ESTRIBOS | 70m | 38" | 1 | 30 | 2.00 | | 60.00 | | | | 60.00 |
| | Ø38"-1" @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| | a2- a1 | 30m | | | | | | | | | | |
| | ESTRIBOS | 70m | 38" | 1 | 40 | 2.00 | | 80.00 | | | | 80.00 |
| | Ø38"-1" @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| | VE-1 | | 58" | 4 | 3 | 3.95 | | | 47.40 | | | 47.40 |
| | Ø656* | 15m | | | | | | | | | | |
| | VIGA ESCALERA N°1 | 3.65m | | | | | | | | | | |
| | | 15m | 58" | 4 | 3 | 3.95 | | | | | | |
| | | 3.65m | | | | | | | | | | |
| | ESTRIBOS | 40m | 38" | 4 | 23 | 1.30 | | 119.60 | | | | 119.60 |
| | Ø38"-1" @.05, 6 @.10 @extremo, resto @.25 | | | | | | | | | | | |
| RESUMEN DE METRADO DE ACERO | | | | | | | | | | | | |
| TOTAL ACERO (KG DE ACERO) | | | | | | | | | | | | |
| 114" | | | | | | | | | | | | |
| 29,959.14 | | | | | | | | | | | | |
| 16,777.12 | | | | | | | | | | | | |
| 32.56 | | | | | | | | | | | | |
| 1,488.16 | | | | | | | | | | | | |
| 35,798.89 | | | | | | | | | | | | |
| 8,250.17 | | | | | | | | | | | | |
| 62346.90 | | | | | | | | | | | | |



CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CABRERO MUÑOZ
 REPRESENTANTE COMUNITARIO
 DNI N° 2330922

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|------|-------|-------|-------|-------|
| 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| 0.222 | 0.56 | 0.954 | 1.552 | 2.236 | 3.973 |
| Ø A° | | | | | |
| Kgr/ml | | | | | |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | | Total Kg | | | | | | |
|------------------------------------------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|------|----|----------|--|--|--|--|--|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | | | | | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CMP - VIGAS | | | | | | | | | | | | | | | | | | |
| aJ- aK | ESTRIBOS | | | | | | | | | | | | | | | | | | |
| | Ø38*11 @.05.6@.10, resto @.15 | | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | | | | | | | | 13.44 |
| 2A-2I.30x.70 | | | | | | | | | | | | | | | | | | | |
| 60334" | | | 3/4" | 1 | 3 | 63.09 | | | | 189.27 | | | | | | | | | 423.02 |
| | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 3/4" | 1 | 3 | 62.97 | | | | 188.91 | | | | | | | | | 422.21 |
| aB | | | 3/4" | 1 | 2 | 2.74 | | | | 5.48 | | | | | | | | | 12.25 |
| aC | | | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | | | | | | | 35.20 |
| aD | | | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | | | | | | | 35.20 |
| aE | | | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | | | | | | | 35.20 |
| aF | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78882 | | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | | | | | | | 35.20 |
| aG | | | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | | | | | | | 35.20 |
| aH | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | | | | | | | | 23.47 |
| aI | | | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | | | | | | | | 35.20 |
| aJ | CONSORCIO CONSULTOR SAUL GARRIDO | | 3/4" | 1 | 2 | 4.91 | | | | 9.82 | | | | | | | | | 21.95 |
| montale | | | 3/8" | 1 | 2 | 61.95 | | | | | | | | | | | | | 69.38 |
| 20338" | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI N° 21344413 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | | | | | | | 44.80 |
| EB- aD | | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | | | | | | | 44.80 |
| ESTRIBOS | | | | | | | | | | | | | | | | | | | |
| 6038*11 @.05.6@.10, 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | | | | | | | |
| IC- aJ | | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | | | | | | | 44.80 |
| ESTRIBOS | | | | | | | | | | | | | | | | | | | |
| 6038*11 @.05.6@.10, 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | | | | | | | |



RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

ARQ. DAVID HECTOR TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISIÓN



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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | | | |
|---------------|--------------|------|-------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | | Parcial Kg | Total Kg |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------|------|----------|----------|----------|---------------------|-------|------|-------|------|--------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | | |
| aB 2634' | | 45m 15.15m 45m | 3/4" | 1 | 3 | 16.05 | | | | | | 48.15 | 107.62 | |
| aC 2634' | | 45m 2.08m 45m | 3/4" | 1 | 2 | 2.53 | | | | | | 5.06 | 11.31 | |
| aD 2634' | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 5.30m | 3/4" | 1 | 2 | 5.30 | | | | | | 10.60 | 23.69 | |
| aD 1658' | | 1.94m 45m | 3/4" | 1 | 2 | 2.39 | | | | | | 4.78 | 10.68 | |
| montaje 2638' | | 1.94m 45m | 3/4" | 1 | 2 | 2.39 | | | | | | 4.78 | 10.68 | |
| aB-aC ESTRIBOS Ø38" x 1 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | | 15.11m | 3/8" | 1 | 2 | 15.11 | | 30.22 | | | | | 16.92 | |
| aC-aD ESTRIBOS Ø38" x 1 @ 05, 6 @ 10, 6 @ 15 @ extrem: resto @ 25 | ROSA M. ENDRAY MAMANI Ingeniero Civil C.I.P. 78882 | 30m 30m 30m 30m 70m | 3/8" | 1 | 42 | 2.00 | | 84.00 | | | | | 47.04 | |
| 21-261.30x.70 6634' | | 45m 39.32m 45m | 3/4" | 1 | 3 | 40.22 | | | | | | 120.66 | 269.68 | |
| aE 1658' | | 45m 39.20m 45m | 3/4" | 1 | 3 | 40.10 | | | | | | 120.30 | 268.67 | |
| aF 3634' | CONSORCIO CONSULTOR SAUL GARRIDO | 45m 2.53m 45m | 5/8" | 1 | 1 | 2.98 | | | 2.98 | | | | 4.62 | |
| aF 1658' | C.P.C. MARIATUZA CARRASO MUÑOZ REPRESENTANTE COMÚN DNI N° 73066223 | 5.00m | 3/4" | 1 | 3 | 5.00 | | | | 15.00 | | | 33.53 | |
| aF 1658' | | 5.00m | 5/8" | 1 | 1 | 5.00 | | | 5.00 | | | | 7.76 | |
| aF 1658' | | 4.30m | 5/8" | 1 | 1 | 4.30 | | | 4.30 | | | | 6.67 | |
| aG 2634' | | 5.10m | 3/4" | 1 | 2 | 5.10 | | | | 10.20 | | | 22.80 | |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.984 | 1.552 | 2.236 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|---------------------------------------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.06 | VIGAS | | | | | | | | | | | | |
| 02.03.06.01 | VIGAS PC-289 KG/CM2 | | | | | | | | | | | | |
| 02.03.06.01.03 | ACERO DE REFUERZO FT = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| 3634' | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | | 15.75 | 35.20 | |
| al | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | 10.50 | 23.47 | |
| 1956' | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| al | | 4.21m | 3/4" | 1 | 1 | 4.66 | | | | 4.66 | | 10.42 | |
| 1634' | | 39.20m | 3/8" | 1 | 2 | 39.20 | | 78.40 | | | | 43.90 | |
| montaje | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 | |
| 2636' | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| aE- af | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| Ø3/8":1@.05,7@.10,2@.15 @extrem; resto @.25 | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| aF- aG | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| Ø3/8":1@.05,7@.10,2@.15 @extrem; resto @.25 | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| aG- aH | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| Ø3/8":1@.05,7@.10,2@.15 @extrem; resto @.25 | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| aH- al | | 30m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 | |
| Ø3/8":1@.05,7@.10,2@.15 @extrem; resto @.25 | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| aI- aJ | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| Ø3/8":1@.05,7@.10,2@.15 @extrem; resto @.25 | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| aJ- aK | | 30m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 | |
| Ø3/8":1@.05,7@.10,2@.15 @extrem; resto @.25 | | 30m | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 | |
| 2V-3V.30x.70 | | 62.16m | 3/4" | 1 | 3 | 63.06 | | | | 189.18 | | 422.82 | |
| 6634' | CONSORCIO CONSULTOR SAUL GARRIDO | 62.07m | 3/4" | 1 | 3 | 62.97 | | | | 188.91 | | 422.21 | |
| ab | | 2.79m | 3/4" | 1 | 2 | 3.24 | | | | 6.48 | | 14.48 | |
| 2634' | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| 3634' | | | | | | | | | | | | | |
| ad | | | | | | | | | | | | | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MANTANI
 Ingeñiero Civil
 C.I.P. 78862

C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 O.N.I. N° 21546425

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-I, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kgr/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 1 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-----------------------------------------------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|------|--------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| 3634* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| aE | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| aF | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| 3634* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| aG | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| 3634* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| aH | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| 3634* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| al | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| 3634* | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | | 35.20 | |
| aJ | | 4.46m | 3/4" | 1 | 2 | 4.91 | | | | 9.82 | | 21.95 | |
| 2638* | | 62.01m | 3/8" | 1 | 2 | 62.01 | | | 124.02 | | | 69.45 | |
| montaje | | | | | | | | | | | | | |
| aB- aC | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aC- aD | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aD- aE | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aE- aF | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aF- aG | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aG- aH | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aH- aI | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aI- aJ | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| Ø3/8" x 1" @ 05, 6 @ 10, 5 @ 15 @extrem; resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |



EDWARD GERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA WAMIANI
 Ingeniera Civil
 C.I.P. 78832

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CABALLERO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21546425



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A² | 1/4" | 3/8" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|--------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 02.03.08.01.03 | ESTRIBOS Ø38": 1 @ 05, 6 @ 10, 5 @ 15 @extrem, resto @ 25 | | 38" | 1 | 39 | 2.00 | | | | | | 43.68 |
| aJ- aK | ESTRIBOS Ø38": 1 @ 05, 8 @ 10, resto @ 15 | | 38" | 1 | 12 | 2.00 | | | | | | 13.44 |
| 2V-4L (38x70) 6634" | <p>EDWARD GERON TORRES</p> <p>JEFE DE PROYECTO</p> <p>C.I.P. N° 61778</p> | | 34" | 1 | 3 | 71.09 | | | 213.27 | | | 476.66 |
| aA 1034" | | | 34" | 1 | 1 | 3.39 | | | 3.39 | | | 7.58 |
| aB 1058" | | | 58" | 1 | 1 | 4.35 | | | 4.35 | | | 6.75 |
| aC 2034" | | | 34" | 1 | 2 | 3.95 | | | 7.90 | | | 17.66 |
| aC 1058" | <p>MARIA M. ENDEBA MAMANI</p> <p>Ingeniero Civil</p> <p>C.I.P. 78882</p> | | 58" | 1 | 1 | 3.95 | | | 3.95 | | | 6.13 |
| aD 2034" | | | 34" | 1 | 2 | 5.25 | | | 10.50 | | | 23.47 |
| aD 1058" | | | 58" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| aD- aE 1034" | | | 34" | 1 | 1 | 4.05 | | | 4.05 | | | 9.05 |
| aE 2034" | <p>CONSORCIO CONSULTOR SAUL GARRIDO</p> <p>C.P.C. MARIA LUISA CARBAJO MUÑOZ</p> <p>REPRESENTANTE COMUN</p> <p>DNI Nº 215-66425</p> | | 34" | 1 | 2 | 5.25 | | | 10.50 | | | 23.47 |
| aE 1058" | | | 58" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| aE- aF 1034" | | | 34" | 1 | 1 | 4.05 | | | 4.05 | | | 9.05 |
| aF- aG 3034" | | | 34" | 1 | 3 | 12.75 | | | 38.25 | | | 86.49 |
| aH 3034" | <p>ARQ. DAVID HECTOR TORRES PUENTE</p> <p>CAP. 5776</p> <p>JEFE DE SUPERVISIÓN</p> | | 34" | 1 | 1 | 5.95 | | | 15.75 | | | 96.20 |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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CLIVE

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | 1 | 1 | | | | | | | |
| | aH- al 2Ø3/4" | | 3/4" | 1 | 2 | 4.05 | | | | 8.10 | | 18.10 |
| | al 1Ø3/4" | | 3/4" | 1 | 1 | 4.30 | | | | 4.30 | | 9.61 |
| | aJ 2Ø3/4" | | 3/4" | 1 | 2 | 6.69 | | | | 13.38 | | 29.90 |
| | montaje | | | | | | | | | | | |
| | 2Ø3/8" | | 3/8" | 1 | 2 | 70.00 | | 140.00 | | | | 78.40 |
| | aA- aB ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 41 | 2.00 | | 82.00 | | | | 45.92 |
| | aB- aC ESTRIBOS Ø3/8":1"@.05, 6@.10, 6@.15 @extremo, resto @.25 | | 3/8" | 1 | 27 | 2.00 | | 54.00 | | | | 30.24 |
| | aC- aD ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aD- aE ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aE- aF ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aF- aG ESTRIBOS Ø3/8":1"@.05, 6@.10, @extremo, resto @.15 | | 3/8" | 1 | 23 | 2.00 | | 46.00 | | | | 25.76 |
| | aG- aH ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aH- al ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | al- aJ ESTRIBOS Ø3/8":1"@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 23 | 2.00 | | 46.00 | | | | 25.76 |
| | aJ- aK ESTRIBOS Ø3/8":1"@.05, 6@.10, resto @.15 | | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 |



EDWARD CERROS TORRES
JEFE DE PROYECTO
C.I.P. N° 61778

MARIA EMEREA MARTA
INGENIERO (C) N° 11
C.I.P. 7882

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CARBAJO MUÑOZ
INGENIERO REPRESENTANTE COMAJIN
C.I.P. N° 23106038

CONFORME

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

ARQ. DAVID HECTOR TORRES PUENTE
CAP. 5776
I.E.F.F. DE SUPERVISIÓN

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PROYECTO : METRADO DE ACERO
 ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO H-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS ZV-48(25x.70) | | 3/4" | 1 | 2 | 4.52 | | | | 9.04 | | 20.20 |
| | montaje | | 3/4" | 1 | 2 | 4.43 | | | | 8.86 | | 19.80 |
| 20338* | ESTRIBOS | 3.53m | 3/8" | 1 | 2 | 3.53 | | 7.06 | | | | 3.95 |
| af- ac | ESTRIBOS | 25m | 3/8" | 1 | 25 | 1.90 | | 47.50 | | | | 26.60 |
| 020311* @ 05, @ 10, @ 15 @ extremo, resto @ .25 | | 70m | | | | | | | | | | |
| ZV-48(25x.70) | | | 3/4" | 1 | 3 | 46.43 | | | | 139.29 | | 311.31 |
| 60334* | | | 3/4" | 1 | 3 | 46.30 | | | | 138.90 | | 310.44 |
| ad | | | 3/4" | 1 | 1 | 2.78 | | | | 2.78 | | 6.21 |
| ae | | | 3/4" | 1 | 2 | 5.15 | | | | 10.30 | | 23.02 |
| af | | | 3/4" | 1 | 2 | 5.00 | | | | 10.00 | | 22.35 |
| af- ag | | | 3/4" | 1 | 1 | 4.30 | | | | 4.30 | | 9.61 |
| 10334* | | | 3/4" | 1 | 2 | 5.10 | | | | 10.20 | | 22.80 |
| ag | | | 3/4" | 1 | 2 | 5.20 | | | | 10.40 | | 23.24 |
| ah | | | 3/4" | 1 | 1 | 4.45 | | | | 4.45 | | 9.95 |
| ah- al | | | 3/4" | 1 | 2 | 5.20 | | | | 10.40 | | 23.24 |
| al | | | 3/4" | 1 | 1 | 3.01 | | | | 3.01 | | 6.73 |
| aj | | | | | | | | | | | | |
| 10334* | | | | | | | | | | | | |
| montaje | | | | | | | | | | | | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 631778

MARIAM ENDARA MAMAN
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 2.1346425

CONFORME

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A" Kgr/ml | PESO NOMINAL | | | | |
|-------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|----------------------------------------------------------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|--------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| aD 10334* | | 5.25m | | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| aD 1058* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| aE 10334* | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 | |
| aE 1058* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 | |
| aF 10334* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| aF aG 10334* | | 4.04m | 3/4" | 1 | 1 | 4.04 | | | | 4.04 | | 9.03 | |
| aG 10334* | MARIA M. EMPARADA JEFE DE PROYECTO C.I.P. 78882 | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| aG aH 10334* | | 4.04m | 3/4" | 1 | 1 | 4.04 | | | | 4.04 | | 9.03 | |
| aH 10334* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| aI 10334* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| aJ 10334* | CONSORCIO CONSULTOR SAUL GARRIDO | 3.87m | 3/4" | 1 | 1 | 4.32 | | | | 4.32 | | 9.66 | |
| aJ 1058* | C.P.C. MARIA YUSKA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI Nº 21546425 | 3.87m | 5/8" | 1 | 1 | 4.32 | | | 4.32 | | | 6.70 | |
| montaje | | | | | | | | | | | | | |
| 2038* | | 70.00m | 3/8" | 1 | 2 | 70.00 | | | | 140.00 | | 78.40 | |
| aA- aB ESTREBOS 038*11 @ 05 @ 0.15 @ 0.15 @ extremo resto @ 25 | | 30m | 3/8" | 1 | 41 | 2.00 | | | | 82.00 | | 45.92 | |
| aB- aC ESTREBOS 038*11 @ 06 @ 10 @ 15 @ extremo resto @ 25 | | 30m | 3/8" | 1 | 41 | 2.00 | | | | 82.00 | | 45.92 | |



EDWARD CERON TORRES
JEFE DE PROYECTO
C.I.P. N° 61778

MARIA M. EMPARADA
JEFE DE PROYECTO
C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA YUSKA CARBAJO MUÑOZ
REPRESENTANTE COMUN
DNI Nº 21546425

CONFORME

ARQ DAVID HECTOR TORRES PUENTE
CAP. 5776
IFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

| Ø A* Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A* | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|------------|------|-------------|-------------|-------------|---------------------|------|------|--------|------|-------------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS PC-280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | 4.52m | 3/8" | 1 | 4 | 7.44 | | | | | | 3.00 |
| | | 25m 25m | 3/8" | 1 | 28 | 1.90 | 53.20 | | | | | 29.79 |
| | | 45m | 3/4" | 1 | 3 | 8.62 | | | | 25.86 | | 57.80 |
| | | 45m | 3/4" | 1 | 6 | 8.62 | | | | 51.72 | | 115.59 |
| | | 7.72m | 3/8" | 1 | 2 | 7.72 | 15.44 | | | | | 8.65 |
| | | 25m 25m | 3/8" | 1 | 42 | 1.90 | 79.80 | | | | | 44.69 |
| | | 45m | 3/4" | 1 | 3 | 71.07 | | | | 213.21 | | 476.52 |
| | | 45m | 3/4" | 1 | 3 | 70.95 | | | | 212.85 | | 475.72 |
| | | 45m | 3/4" | 1 | 2 | 3.48 | | | | 6.96 | | 15.56 |
| | | 4.35m | 5/8" | 1 | 1 | 4.35 | | | 4.35 | | | 6.75 |
| | | 5.40m | 3/4" | 1 | 2 | 5.40 | | | | 10.80 | | 24.14 |
| | | 5.40m | 5/8" | 1 | 1 | 5.40 | | | 5.40 | | | 8.38 |
| | | 4.00m | 3/4" | 1 | 2 | 4.00 | | | | 8.00 | | 17.88 |
| | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| | | | 5/8" | 1 | 1 | 5.95 | | | 5.95 | | | 8.15 |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" |
| | 0.222 | 0.56 | 1.552 | 2.235 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Total Kg |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|--------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.08.01 VIGAS FC=280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | 5.25m | | 1 | 1 | 5.25 | | | | | 5.25 |
| aF 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 |
| aE 1658* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |
| aF 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 |
| aF 1658* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |
| aG 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 |
| aG 1658* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 |
| aH 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 |
| al 2634* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 |
| aj 1634* | | 4.47m | 3/4" | 1 | 1 | 4.92 | | 4.92 | | | 11.00 |
| montaje | | 70.05m | 3/8" | 1 | 2 | 70.05 | | | 140.10 | | 78.46 |
| aA- aB ESTRIBOS Ø38*1" @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | CONSORCIO CONSULTOR SAUL GARRIDO | 30m | 3/8" | 1 | 41 | 2.00 | | | 82.00 | | 45.92 |
| aB- aC ESTRIBOS Ø38*1" @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | C.P.C. MARIA NUBIA CARBAJO MUNOZ REPRESENTANTE COMUN DNI N° 41815 | 30m | 3/8" | 1 | 41 | 2.00 | | | 82.00 | | 45.92 |
| aC- aD ESTRIBOS Ø38*1" @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | 43.68 |
| aD- aE ESTRIBOS Ø38*1" @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | 43.68 |
| aE- aF ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | 43.68 |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDRAS MAMANI
 Ingeniero Civil
 CIP 74882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA NUBIA CARBAJO MUNOZ
 REPRESENTANTE COMUN
 DNI N° 41815

CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.954 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------|------|----------|----------|----------|---------------------|------|------|--------|--------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS Fc=280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | 70m 30m | 3/8" | 1 | 1 | 70.00 | | | | | | |
| | aF- aG ESTRIBOS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | 30m 70m 30m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 | |
| | aG- aH ESTRIBOS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | 30m 70m 30m | 3/8" | 1 | 38 | 2.00 | 76.00 | | | | 42.56 | |
| | aH- aI ESTRIBOS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | 30m 70m 30m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 | |
| | aI- aJ ESTRIBOS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | 30m 70m 30m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 | |
| | aJ- aK ESTRIBOS Ø3/8"1" @.05; 8@.10; resto @.15 | 30m 70m 30m | 3/8" | 1 | 12 | 2.00 | 24.00 | | | | 13.44 | |
| 2V-45a(30x70) 603/4" | MARIA M. ENDARA MAMAN Ingeniero Civil C.A.P. 78882 | 45m 7.67m | 3/4" | 1 | 2 | 8.57 | | | | 17.14 | 38.31 | |
| montaje 203/8" | | 7.58m | 3/4" | 1 | 4 | 8.48 | | | | 33.92 | 75.81 | |
| aI- aJ ESTRIBOS Ø3/8"1" @.05; 6@.10; 1@.15 @extremo, resto @.25 | | 30m 70m 30m | 3/8" | 1 | 42 | 2.00 | 84.00 | | | | 47.04 | |
| 2V-45b(25x70) 603/4" | CONSORCIO CONSULTOR SAUL GARRIDO | 45m 7.67m | 3/4" | 1 | 3 | 8.57 | | | | 25.71 | 57.46 | |
| montaje 203/8" | C.P.C. MARIA LUISA CARRASCO MUÑOZ REPRESENTANTE TECNICO DNI N° 21504185 | 7.58m | 3/4" | 1 | 3 | 8.48 | | | | 25.44 | 56.86 | |
| aI- aJ ESTRIBOS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | | 7.58m 25m 25m | 3/8" | 1 | 2 | 7.58 | 15.16 | | | | 8.49 | |
| 2V-7(30x70) 603/4" | | 62.12m | 3/4" | 1 | 41 | 1.90 | 77.90 | | | | 43.62 | |
| | | 45m | 3/4" | 1 | 3 | 62.57 | | | | 187.71 | 419.53 | |
| | | | 3/4" | 1 | 3 | 62.57 | | | | 187.71 | 419.53 | |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| Kgr/ml | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|----------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| 603/4" | | 45m | 3/4" | 1 | 3 | 3.70 | | | | 11.10 | | 24.81 | |
| | | 3.25m | 3/4" | 1 | 3 | 3.66 | | | | 10.98 | | 24.54 | |
| | | 3.21m | 3/4" | 1 | 1 | 3.39 | | | | 3.39 | | 7.58 | |
| | | 2.94m | 5/8" | 1 | 1 | 3.39 | | | | | 3.39 | 5.26 | |
| | | 2.94m | 3/4" | 1 | 2 | 5.40 | | | | 10.80 | | 24.14 | |
| | | 5.40m | 5/8" | 1 | 1 | 5.40 | | | | 5.40 | | 8.38 | |
| | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 | |
| | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 | |
| | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 | |
| | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 | |
| | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 | |
| | | 5.25m | 3/4" | 1 | 2 | 3.25 | | | | 10.50 | | 23.47 | |

EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.P.C. N° 61778

MARIA M. ENDARA MAMAN
 Ingeniera Civil
 C.P.C. N° 78862



CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA BARBAO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 215-66425

DR. DAVID TORRES PUEENTE
 CAP 5776
 JEFE DE SUPERVISIÓN

CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A* Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.954 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A* | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|------------------------------------------------------------------|---------------|------|-------------|-------------|-------------|---------------------|------|------|--------|----|-------------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS FC=2M KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| aI | 2x3/4" | 3.95m | 3/4" | 1 | 2 | 3.95 | | | | | | 17.66 |
| montaje | | | | | | | | | | | | |
| 2x3/8" | 62.04m | | 3/8" | 1 | 2 | 62.04 | 124.08 | | | | | 69.48 |
| montaje | | | | | | | | | | | | |
| 2x3/8" | 3.21m | | 3/8" | 1 | 2 | 3.21 | 6.42 | | | | | 3.60 |
| aA- aB | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 41 | 2.00 | 82.00 | | | | | 45.92 |
| aB- aC | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aC- aD | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aD- aE | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aE- aF | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aF- aG | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aG- aH | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aH- aI | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | | 43.68 |
| aJ- aK | ESTRIBOS Ø3/8" x 1' @ 05, 6@ 10, 5@ 15 @extremo, resto @ 25 | 30m 70m | 3/8" | 1 | 12 | 2.00 | 24.00 | | | | | 13.44 |
| 2x4L 30x70 6x3/4" | | 45m 61.87m | 3/4" | 1 | 3 | 62.77 | | | | 188.31 | | 420.87 |
| aA 10x3/4" | | 45m 61.75m | 3/4" | 1 | 3 | 62.65 | | | | 187.95 | | 420.07 |
| | | | 3/4" | 1 | 1 | 3.44 | | | | 3.44 | | 7.60 |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENABARA MAMAN
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 31146625

CONFORME

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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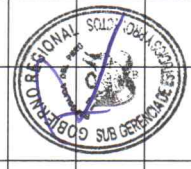
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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | |
|--------------|-------------------------------------------------------------------------------|
| Ø A" Kg/ml | 1/4" 0.222 3/8" 0.56 1/2" 0.994 5/8" 1.552 3/4" 2.235 1" 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg |
|----------------|-----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.06 | VIGAS | | | | | | | | | | | |
| 02.03.06.01 | VIGAS F.C-20 KG/CM2 | | | | | | | | | | | |
| 02.03.06.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | 45m | 5/8" | 1 | 1 | 4.5 | | | | | 1.00 | |
| aA | | 45m | 5/8" | 1 | 1 | 4.4 | | | 3.44 | | 5.34 | |
| aB | | 5.45m | 3/4" | 1 | 2 | 5.45 | | 10.90 | | | 24.36 | |
| aB | JEFED E PROYECTO EDWARD GERON TORRES C.A.F. N° 61778 | 5.45m | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | 8.46 | |
| aC | | 5.25m | 3/4" | 1 | 1 | 5.25 | | 5.25 | | | 11.73 | |
| aC | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 | |
| aD | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 | |
| aD | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78882 | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 | |
| aE | | 5.25m | 3/4" | 1 | 1 | 5.25 | | 5.25 | | | 11.73 | |
| aE | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | 8.15 | |
| aF | CONSORCIO CONSULTOR SAUL GARRIDO | 5.25m | 1" | 1 | 2 | 5.25 | | 10.50 | | | 41.72 | |
| aG | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN CNI N° 235-66435 | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 | |
| aH | | 5.25m | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | 23.47 | |
| al | | 3.61m | 3/4" | 1 | 1 | 4.06 | | 4.06 | | | 9.07 | |
| al | | 3.61m | 5/8" | 1 | 1 | 4.06 | | | 4.06 | | 6.30 | |
| montaje | | 61.75m | 3/8" | 1 | 2 | 61.75 | | 123.50 | | | 69.16 | |



CONFORME

DAVID TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A* | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.954 | 1.552 | 2.235 |
| | | | | | 1" |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A* | N° Veces | N° Plaza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------|----------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=20 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | aA- aB ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 42 | 2.00 | | 84.00 | | | | 47.04 |
| | aB- aC ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aC- aD ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aD- aE ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aE- aF ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aF- aG ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aG- aH ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aH- aI ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| | aI- aJ ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 6 | 2.00 | | 12.00 | | | | 6.72 |
| | 2V-8aI(.25x.70) 6Ø3/4" 1Ø5Ø" | | 3/4" | 1 | 2 | 8.97 | | | | 17.94 | | 40.10 |
| | montaje | | | | | | | | | | | |
| | 2Ø3/8" | | 5/8" | 1 | 1 | 8.97 | | | 8.97 | | | 13.92 |
| | aD- aE ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/4" | 1 | 4 | 8.88 | | | | 35.52 | | 79.39 |
| | 2V-9I(.30x.70) | | 3/8" | 1 | 2 | 7.98 | | | | 15.96 | | 8.94 |
| | 2V-9I(.30x.70) | | 3/8" | 1 | 54 | 1.90 | | | | 102.60 | | 57.46 |
| | 2V-9I(.30x.70) | | Ø4" | 1 | 3 | 23.00 | | | | 60.76 | | 297.40 |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENBARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 ONI Nº 21546425



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | PESO NOMINAL | | | | | Parcial Kg | Total Kg |
|----------------|------------------------------------------------------------|---------|------|----------|----------|----------|--------------|------|--------|--------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | 0.222 | 0.56 | 1.552 | 2.235 | 3.973 | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| aG | 1034" | 45m | 3/4" | 1 | 1 | 11.30 | | | | | | 11.30 | |
| aG | 1056" | 45m | 3/4" | 1 | 1 | 3.32 | | | | 3.32 | | 7.42 | |
| aG | 1056" | 2.87m | 5/8" | 1 | 1 | 3.32 | | | 3.32 | | | 5.15 | |
| aH | 2034" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| al | 1034" | 3.62m | 3/4" | 1 | 1 | 4.07 | | | | 4.07 | | 9.10 | |
| al | 1056" | 3.62m | 5/8" | 1 | 1 | 4.07 | | | 4.07 | | | 6.32 | |
| montaje | | 16.25m | 3/8" | 1 | 2 | 16.25 | | | 32.50 | | | 16.20 | |
| aG-aH | ESTRIBOS Ø38;1" @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| aH-al | ESTRIBOS Ø38;1" @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | |
| al-aJ | ESTRIBOS Ø38;1" @ 05, 6 @ 10, resto @ 15 | 30m | 3/8" | 1 | 6 | 2.00 | | | 12.00 | | | 6.72 | |
| 2V-9aI-(25x70) | 7034" | 45m | 3/4" | 1 | 3 | 8.97 | | | | 26.91 | | 60.14 | |
| montaje | | 7.98m | 3/4" | 1 | 4 | 8.88 | | | | 35.52 | | 79.39 | |
| 2638" | | 7.98m | 3/8" | 1 | 2 | 7.98 | | | 15.96 | | | 8.94 | |
| aD-aE | ESTRIBOS Ø38;1" @ 05, 6 @ 10, 3 @ 15 @ extremo, resto @ 25 | 25m | 3/8" | 1 | 54 | 1.90 | | | 102.60 | | | 57.46 | |
| 2V-11-(30x70) | 6034" | 45m | 3/4" | 1 | 3 | 62.76 | | | | 188.28 | | 420.81 | |
| | | | 3/4" | 1 | 3 | 62.76 | | | | 188.28 | | 420.81 | |



[Signature]
EDUARDO TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

[Signature]
MARIA M. ENDARA MAMAN
 Ingeniera Civil
 C.I.P. N° 43882

[Signature]
CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA ROSA GARRIDO MUÑOZ
 REPRESENTANTE COMISIN
 DNI N° 31988785



[Signature]
 DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

[Signature]
RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|---------------|------|----------|----------|----------|---------------------|------|-------|------|----|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | 45m 61.75m | 3/4" | 1 | 1 | 45.00 | | | | | | 740.00 |
| aa 1034* | | 45m 2.92m | 3/4" | 1 | 1 | 3.37 | | | 3.37 | | | 7.53 |
| aa 1058* | | 45m 2.92m | 5/8" | 1 | 1 | 3.37 | | | 3.37 | | | 5.23 |
| aa-ab 1058* | JEFEE DE PROYECTO EDWARD CERON TORRES C.I.P. N° 61778 | 4.50m | 5/8" | 1 | 1 | 4.50 | | | 4.50 | | | 6.98 |
| ab 2034* | | 5.45m | 3/4" | 1 | 2 | 5.45 | | | 10.90 | | | 24.36 |
| ac 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 |
| ac 1058* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| ad 1034* | MARIA M. ENDARA MAMIANI Ingeniero Civil C.I.P. 786827 | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 |
| ad 1058* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| ae 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 |
| ae 1058* | CONSORCIO CONSULTOR SAUL GARRIDO | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| af 201* | | 5.25m | 1" | 1 | 2 | 5.25 | | | 10.50 | | | 41.72 |
| ag 2034* | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 27546425 | 5.25m | 3/4" | 1 | 2 | 5.25 | | | 10.50 | | | 23.47 |
| ah 1034* | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | 5.25 | | | 11.73 |
| ah 1058* | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| aj 1034* | DR. DAVID RECTOR TORRES PUENTE CAP. 5776 IEFFE DE SUPERVISIÓN | 3.61m | 3/4" | 1 | 1 | 4.06 | | | 4.06 | | | 9.07 |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | PESO NOMINAL | | | | | Parcial Kg | Total Kg |
|------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------|------|----------|----------|----------|--------------|--------|-------|-------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | 0.222 | 0.56 | 1.552 | 2.235 | 3.973 | | |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| al | 105/8" |  | 5/8" | 1 | 1 | 4.06 | | | 4.06 | | | 6.30 | |
| montaje | | | | | | | | | | | | | |
| 203/8" | |  | 3/8" | 1 | 2 | 61.75 | | 123.50 | | | | 69.16 | |
| a4- a8 | ESTRIBOS |  | 3/8" | 1 | 42 | 2.00 | | 84.00 | | | | 47.04 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | JEFES DE PROYECTO | | | | | | | | | | | | |
| | EDWARD CERON TORRES | | | | | | | | | | | | |
| | C.I.P. N° 61778 | | | | | | | | | | | | |
| aB- aC | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aC- aD | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aD- aE | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aE- aF | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aF- aG | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aG- aH | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aH- aI | ESTRIBOS |  | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.25 | | | | | | | | | | | | | |
| aI- aJ | ESTRIBOS |  | 3/8" | 1 | 6 | 2.00 | | 12.00 | | | | 6.72 | |
| 0308"11@.05; 6@.10; 5@.15 @extremo, resto @.15 | | | | | | | | | | | | | |
| VB-1 | |  | 3/4" | 1 | 2 | 1.97 | | 3.94 | | | | 8.81 | |
| 403/4" | | | | | | | | | | | | | |
| montaje | | | | | | | | | | | | | |
| 203/8" | |  | 3/4" | 1 | 2 | 1.97 | | 3.94 | | | | 8.81 | |
| aI- aJ | ESTRIBOS |  | 3/8" | 1 | 2 | 1.07 | | 2.14 | | | | 1.20 | |
| | | | | | | | | | | | | | |
| | |  | 3/8" | 1 | 0 | 16.20 | | 16.20 | | | | 9.07 | |



CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=280 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS Ø3/8"1" @.05; 6@.10; 5@.15 @extremo, resto @.25 | | 3/4" | 1 | 1 | 70m | | | | | | |
| 2V-11a(25x.70) 4Ø3/4" | | | 3/4" | 1 | 2 | 8.97 | | 17.94 | | | | 40.10 |
| | | | 3/4" | 1 | 2 | 8.88 | | 17.76 | | | | 39.69 |
| aD-aE 1Ø3/4" | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 3/4" | 1 | 3 | 4.45 | | 13.35 | | | | 29.84 |
| aE 2Ø3/4" | | | 3/4" | 1 | 2 | 2.71 | | 5.42 | | | | 12.11 |
| aE 1Ø5/8" | | | 5/8" | 1 | 1 | 2.71 | | | 2.71 | | | 4.21 |
| montaje 2Ø3/8" | | | 3/8" | 1 | 2 | 7.98 | | 15.96 | | | | 8.94 |
| aD-aE ESTRIBOS Ø3/8"1" @.05; 7@.10; 2@.15 @extremo, resto @.25 | MARIA M. ENRIETA MAMANI Ingeniero Civil C.I.P. 78882 | | 3/8" | 1 | 42 | 1.90 | | 79.80 | | | | 44.69 |
| 2V-12(30x.70) 6Ø3/4" | | | 3/4" | 1 | 3 | 62.76 | | 188.28 | | | | 420.81 |
| | | | 3/4" | 1 | 3 | 62.65 | | 187.95 | | | | 420.07 |
| aA 1Ø3/4" | | | 3/4" | 1 | 1 | 2.77 | | 2.77 | | | | 6.19 |
| aA-aB 1Ø5/8" | CONSORCIO CONSULTOR SAUL GARRIDO | | 5/8" | 1 | 1 | 6.25 | | 6.25 | | | | 9.70 |
| aB 1Ø3/4" | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 215-66425 | | 3/4" | 1 | 1 | 5.45 | | 5.45 | | | | 12.18 |
| aB 1Ø5/8" | | | 5/8" | 1 | 1 | 5.45 | | | 5.45 | | | 8.46 |
| aB-aC 1Ø5/8" | | | 5/8" | 1 | 1 | 5.60 | | | 5.60 | | | 8.69 |
| aC 2Ø3/4" | | | 3/4" | 1 | 2 | 5.25 | | 10.50 | | | | 23.47 |



DAVID TORRES PUENTE
CAP. 5716
IEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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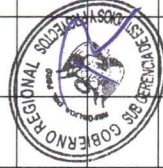
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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (mts) | | | | | Parcial Kg | Total Kg |
|----------------|-------------------------------------------------------------------|------------|------|-------------|-------------|-------------|---------------------|--------|------|------|----|---------------|-------------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| aD | 20334" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | | 23.47 |
| aE | 20334" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | | 23.47 |
| aF | 20334" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | | 23.47 |
| aG | 20334" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | | 23.47 |
| aH | 20334" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | | 23.47 |
| aI | 20334" | 3.08m | 3/4" | 1 | 2 | 3.51 | | | | | | | 15.69 |
| montaje | | 61.75m | 3/8" | 1 | 2 | 61.75 | | 123.50 | | | | | 69.16 |
| aA- aB | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 42 | 2.00 | | 84.00 | | | | | 47.04 |
| aB- aC | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |
| aC- aD | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |
| aD- aE | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |
| aE- aF | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |
| aF- aG | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |
| aG- aH | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |
| aH- aI | ESTRIBOS 0308" * 1 @ .05 6 @ .10 5 @ .15 @ extremo, resto @ 25 | 30m 30m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | | 44.80 |



EDWARD CERON TORRES
JEFE DE PROYECTO
C.I.P. N° 61778

MARIA M. ENDARA MAMANI
Ingeniero Civil
C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA LUISA BARBAO MUÑOZ
REPRESENTANTE COMUN
DNI N° 21346413

CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 3/4" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------|------|-------------|-------------|-------------|---------------------|-------|------|--------|------|-------------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-200 KGICM2 ACERO DE REFUERZO FY = 4200 KGICM2 - VIGAS | | | | | | | | | | | |
| | al- al ESTRIBOS Ø308*11@.05.6@.10, resto @.15 | | 308" | 1 | 6 | 2.00 | | 12.00 | | | | 6.72 |
| | 2V-12x(.25x.70) 4Ø3/4" | | 3/4" | 1 | 2 | 8.95 | | | | 17.90 | | 40.01 |
| | montaje 2Ø3/8" | | 3/4" | 1 | 2 | 8.85 | | 17.70 | | | | 38.56 |
| | 3H- al ESTRIBOS Ø308*11@.05.6@.15 @extremo, resto @.25 | | 308" | 1 | 42 | 1.90 | | 79.80 | | | | 8.90 |
| | 2V-13(.30x.70) 6Ø3/4" | | 3/4" | 1 | 3 | 44.50 | | | | 133.50 | | 298.37 |
| | 6Ø3/4" | | 3/4" | 1 | 3 | 44.50 | | | | 133.50 | | 298.37 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 3/4" | 1 | 3 | 3.35 | | | | 10.05 | | 22.46 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 3/4" | 1 | 3 | 3.31 | | | | 9.93 | | 22.19 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 3/4" | 1 | 1 | 4.45 | | | | 4.45 | | 9.95 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMÚN DNI Nº 21344425 | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 |



ARQ. DAVID VICTOR TORRES PUENTE
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RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------|---------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KGICM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KGICM2 - VIGAS | | | | | | | | | | | |
| | montaje | | | | | | | | | | | |
| | 2Ø3/8" | 44.05m | 3/8" | 1 | 2 | 44.05 | | 88.10 | | | | 49.34 |
| | montaje | | | | | | | | | | | |
| | 2Ø3/8" | 2.86m | 3/8" | 1 | 2 | 2.86 | | 5.72 | | | | 3.20 |
| | aC-aD | 30m | | | | | | | | | | |
| | ESTRIBOS | 30m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aD-aE | 30m | | | | | | | | | | |
| | ESTRIBOS | 30m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aE-aF | 30m | | | | | | | | | | |
| | ESTRIBOS | 30m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aF-aG | 30m | | | | | | | | | | |
| | ESTRIBOS | 30m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aG-aH | 30m | | | | | | | | | | |
| | ESTRIBOS | 30m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aH-aJ | 30m | | | | | | | | | | |
| | ESTRIBOS | 30m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 15 | 70m | 3/8" | 1 | 6 | 2.00 | | 12.00 | | | | 6.72 |
| | VB-1, 2Øx70 | | | | | | | | | | | |
| | 4Ø3/4" | 38.02m | 3/4" | 1 | 2 | 38.92 | | | | 77.84 | | 173.97 |
| | montaje | | | | | | | | | | | |
| | 2Ø3/8" | 37.50m | 3/4" | 1 | 2 | 38.80 | | | | 77.60 | | 173.44 |
| | aC-aD | 20m | | | | | | | | | | |
| | ESTRIBOS | 20m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 1.80 | | 70.20 | | | | 39.31 |
| | aD-aE | 20m | | | | | | | | | | |
| | ESTRIBOS | 20m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 42 | 1.80 | | 75.60 | | | | 42.34 |
| | aE-aF | 20m | | | | | | | | | | |
| | ESTRIBOS | 20m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | 70m | 3/8" | 1 | 39 | 1.80 | | 70.20 | | | | 39.31 |
| | aF-aG | 20m | | | | | | | | | | |
| | ESTRIBOS | 20m | | | | | | | | | | |
| | Ø3/8" 1" @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 15 | 70m | 3/8" | 1 | 40 | 1.80 | | 72.00 | | | | 40.90 |



CONFORME

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 Reg. CIP N° 41815

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|-------|----|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS Ø38*17 @.05, 6@.10, 6@.15 @extremo, resto @.25 | | 38" | 1 | 17 | 1.000 | | | | | | | |
| | aG-4H ESTRIBOS Ø38*17 @.05, 6@.10, 6@.15 @extremo, resto @.25 | | 38" | 1 | 41 | 1.80 | 73.80 | | | | | 41.33 | |
| | aH-4I ESTRIBOS Ø38*17 @.05, 6@.10, 6@.15 @extremo, resto @.25 | | 38" | 1 | 2 | 1.80 | 3.60 | | | | | 2.02 | |
| | 2V-14(30x.70) 6034* | | 34" | 1 | 3 | 9.07 | | 27.21 | | | | 60.81 | |
| | | | 34" | 1 | 3 | 8.99 | | 26.97 | | | | 60.28 | |
| | 2V-14(40x1.00) (810 -a8) 801* | | 1" | 1 | 4 | 16.65 | | | | 66.60 | | 264.60 | |
| | | | 1" | 1 | 4 | 17.55 | | | | 70.20 | | 276.90 | |
| | MARIA M. ENDRARA MAMIANI Ingeniero Civil C.P. 78882 | | 34" | 1 | 3 | 32.98 | | 98.94 | | | | 221.13 | |
| | | | 34" | 1 | 3 | 33.06 | | 99.18 | | | | 221.67 | |
| a10 101* | | | 1" | 1 | 1 | 5.00 | | | | 5.00 | | 19.87 | |
| a10 103/4* | | | 3/4" | 1 | 1 | 5.00 | | | | 5.00 | | 11.18 | |
| a10-a8 303/4* | CONSORCIO CONSULTOR SAUL GARRIDO | | 3/4" | 1 | 3 | 4.30 | | 12.90 | | | | 26.83 | |
| a9-a8 303/4* | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 21940428 | | 3/4" | 1 | 3 | 4.05 | | 12.15 | | | | 27.16 | |
| a8 101* | | | 1" | 1 | 1 | 5.65 | | | | 5.65 | | 22.45 | |
| a8 103/4* | | | 3/4" | 1 | 1 | 5.65 | | 5.65 | | | | 12.63 | |
| a7 105/8" | | | 5/8" | 1 | 1 | 5.10 | | | | 5.10 | | 7.90 | |



CONFORME

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ARQ. DAVID HECTOR TORRES BUENTE
CAP. 5776
JEFE DE SUPERVISIÓN

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4° | 3/8° | 1/2° | 5/8° |
| | 0.222 | 0.56 | 1.552 | 2.235 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg | |
|----------------------|--------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|------------|----------|--|
| | | | | | | | 1/4° | 3/8° | 1/2° | 5/8° | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | 5.10m | | 1 | 1 | 5.25 | | | | | | 8.15 | |
| a6 | 1658* | 5.25m | 5/8" | 1 | 1 | 5.75 | | | 5.25 | | | 25.70 | |
| a5 | 2034* | 5.75m | 3/4" | 1 | 2 | 3.81 | | 11.64 | | 11.50 | | 6.52 | |
| a4 | 1034* | 3.36m | 3/4" | 1 | 1 | 5.82 | | | | 3.81 | | 6.52 | |
| montaje | | 5.82m | 3/8" | 1 | 2 | 16.40 | | | | | | 18.37 | |
| 2038* | | 16.40m | 3/8" | 1 | 2 | 32.53 | | | | | | 36.43 | |
| montaje | | 32.53m | 3/8" | 1 | 2 | 2.00 | | | | | | 31.36 | |
| 2038* | | 30m | 3/8" | 1 | 28 | 2.80 | | | | | | 72.13 | |
| a11-a10 | ESTRIBOS | 30m | 3/8" | 1 | 46 | 2.80 | | | | | | 68.99 | |
| 0308-1* | 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/8" | 1 | 37 | 2.00 | | | | | | 41.44 | |
| a10-a9 | ESTRIBOS | 40m | 3/8" | 1 | 39 | 2.00 | | | | | | 45.68 | |
| 0308-1* | 05, 9 @ 10, 7 @ 15 @ extremo, resto @ 25 | 40m | 3/8" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| a8-a8 | ESTRIBOS | 40m | 3/8" | 1 | 45 | 2.00 | | | | | | 50.40 | |
| 0308-1* | 05, 9 @ 10, 5 @ 15 @ extremo, resto @ 25 | 40m | 3/8" | 1 | 3 | 81.48 | | | | | | 546.32 | |
| a7-a7 | ESTRIBOS | 30m | 3/4" | 1 | 3 | 64.70 | | | | | | 420.45 | |
| 0308-1* | 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/4" | 1 | 3 | 64.70 | | | | | | 420.45 | |
| a7-a6 | ESTRIBOS | 30m | 3/8" | 1 | 39 | 2.00 | | | | | | 45.68 | |
| 0308-1* | 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/8" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| a6-a5 | ESTRIBOS | 30m | 3/8" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| 0308-1* | 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/8" | 1 | 45 | 2.00 | | | | | | 50.40 | |
| a5-a4 | ESTRIBOS | 30m | 3/8" | 1 | 45 | 2.00 | | | | | | 50.40 | |
| 0308-1* | 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | 30m | 3/8" | 1 | 45 | 2.00 | | | | | | 50.40 | |
| 2015(30x70) 6034* | | 81.03m | 3/4" | 1 | 3 | 81.48 | | | | 244.44 | | 546.32 | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.A.P. N° 61778

MARIA M. ENAYA MIAMANI
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 B.N.I. N° 23546425

CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|--------|--------|--------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.984 | 1.552 | 2.235 |
| | 1" | 1 1/4" | 1 1/2" | 1 3/4" | 2" |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|--------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|--------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC-300 KGCM2 ACERO DE REFUERZO FY = 4200 KGCM2 - VIGAS | 64.20m | | 1 | 1 | 64.20 | | | | | | | |
| | 2V-15(30x90) (63-a2) 3Ø1" | 55m | 1" | 1 | 3 | 11.65 | | | | 34.95 | 138.86 | | |
| | 1Ø3/4" | 8.48m | 3/4" | 1 | 1 | 8.93 | | | | 8.93 | 19.96 | | |
| | 3Ø3/4" | 8.56m | 3/4" | 1 | 3 | 9.01 | | | | 27.03 | 60.41 | | |
| | Ø11 2Ø3/4" | 4.45m | 3/4" | 1 | 2 | 4.45 | | | | 8.90 | 19.89 | | |
| | Ø11 1Ø5/8" | 4.45m | 5/8" | 1 | 1 | 4.45 | | | | 4.45 | 6.91 | | |
| | Ø10 2Ø3/4" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | | |
| | Ø10 1Ø5/8" | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | 8.15 | | |
| | Ø9 2Ø3/4" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | | |
| | Ø8 1Ø3/4" | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | 11.73 | | |
| | Ø8 1Ø5/8" | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | 8.15 | | |
| | Ø7 2Ø3/4" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | | |
| | Ø7 1Ø5/8" | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | 5.25 | 8.15 | | |
| | Ø6 2Ø3/4" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | | |
| | Ø6-Ø5 1Ø3/4" | 5.60m | 3/4" | 1 | 1 | 5.60 | | | | 5.60 | 12.52 | | |
| | Ø5 3Ø3/4" | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | 15.75 | 35.20 | | |

EDUARDO TORRES
 Jefe de Proyecto
 C.A.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21546425



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|--------------------------------------------------|--------------------------------------------|---------|------|----------|----------|----------|--------------|--------|-------|-------|----------|-------|
| | | | | | | | 1/4° | 3/8° | 1/2° | 5/8° | | |
| 02.03.08 | VIGAS | | | | | | 1/4° | 3/8° | 1/2° | 5/8° | 1° | |
| 02.03.08.01 | VIGAS F/C=300 KG/CM2 | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a4 | | 5.25m | 3/4" | 1 | 3 | 5.25 | | | | | 15.75 | 35.20 |
| a4-a3 | | 4.09m | 3/4" | 1 | 1 | 4.09 | | | | | 4.09 | 9.14 |
| a3 | | 6.10m | 1" | 1 | 2 | 6.10 | | | | 12.20 | 48.47 | |
| 03 | | 6.10m | 3/4" | 1 | 1 | 6.10 | | | | 6.10 | 13.63 | |
| 03-a2 | | 5.55m | 3/4" | 1 | 3 | 5.55 | | | | 16.65 | 37.21 | |
| a2 | | 4.90m | 1" | 1 | 2 | 4.90 | | | | 9.80 | 38.94 | |
| a2 | | 4.90m | 3/4" | 1 | 1 | 4.90 | | | | 4.90 | 10.95 | |
| montaje | | 6.149m | 3/8" | 1 | 2 | 6.149 | | 122.98 | | | 68.87 | |
| 2038* | | 10.55m | 3/8" | 1 | 2 | 10.55 | | 21.10 | | | 11.82 | |
| montaje | | 3.32m | 3/8" | 1 | 2 | 3.32 | | 6.64 | | | 3.72 | |
| 2038* | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| a11-a10 | | .70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| 0308-1* @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| a10-a9 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| 0308-1* @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| a8-a7 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| 0308-1* @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| a7-a6 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |
| 0308-1* @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25 | | .30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ANDARA MAIMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 0308-1* @ 05.6 @ 10.5 @ 15 @ extremo, resto @ 25

CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

19 1700

19 1700

19 1700

19 1700

007108

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pizaa | Long (m) | PESO NOMINAL | | | | Total Kg | |
|----------------------------------------------------------|----------------------------------------------------------|---------|------|----------|----------|----------|--------------|--------|-------|-------|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 YGCM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a6- a5 | ESTRIBOS Ø308" *1 @.05.6 @.10.5 @.15 @extrem; resto @.25 | | 308" | 1 | 39 | 2.00 | | 76.00 | | | | 43.68 |
| a5- a4 | ESTRIBOS Ø308" *1 @.05.6 @.10.5 @.15 @extrem; resto @.25 | | 308" | 1 | 45 | 2.00 | | 90.00 | | | | 50.40 |
| a4- a3 | ESTRIBOS Ø308" *1 @.05.6 @.10.5 @.15 @extrem; resto @.25 | | 308" | 1 | 39 | 2.00 | | 76.00 | | | | 43.68 |
| a3- a2 | ESTRIBOS Ø308" *1 @.05.9 @.10.7 @.15 @extrem; resto @.25 | | 308" | 1 | 53 | 2.40 | | 127.20 | | | | 71.23 |
| a2- a1 | ESTRIBOS Ø308" *1 @.05.6 @.10.5 @.15 @extrem; resto @.5 | | 308" | 1 | 25 | 2.00 | | 50.00 | | | | 28.00 |
| 2V-15s(,25x,7) | | | 3/4" | 1 | 2 | 5.67 | | | | 11.34 | | 25.34 |
| 40334" | | | 3/4" | 1 | 2 | 5.66 | | | | 11.32 | | 25.30 |
| montaje | | | | | | | | | | | | |
| 20338" | | | 308" | 1 | 2 | 4.85 | | 9.70 | | | | 5.43 |
| 012- a11 | | | 308" | 1 | 29 | 1.90 | | 55.10 | | | | 30.86 |
| ESTRIBOS Ø308" *1 @.05.6 @.10.5 @.15 @extrem; resto @.25 | | | 308" | 1 | 29 | 1.90 | | 55.10 | | | | 30.86 |
| 2V-15s(,25x,7) | | | 3/4" | 1 | 2 | 17.84 | | | | 35.68 | | 79.74 |
| 40334" | | | 3/4" | 1 | 2 | 17.84 | | | | 35.68 | | 79.74 |
| a6 | | | 308" | 1 | 2 | 3.17 | | | | 6.34 | | 14.17 |
| 20334" | | | 308" | 1 | 2 | 3.17 | | | | 6.34 | | 14.17 |
| a6- a5 | | | 508" | 1 | 2 | 4.50 | | | 9.00 | | | 13.97 |
| 20508" | | | 508" | 1 | 2 | 4.50 | | | 9.00 | | | 13.97 |
| a5 | | | 308" | 1 | 2 | 5.70 | | | | 11.40 | | 25.48 |
| 20334" | | | 308" | 1 | 2 | 5.70 | | | | 11.40 | | 25.48 |
| a5- a4 | | | 508" | 1 | 2 | 5.20 | | | 10.40 | | | 16.14 |
| 20508" | | | 508" | 1 | 2 | 5.20 | | | 10.40 | | | 16.14 |



CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

10/1/66

10/1/66

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METRADE DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Total Kg |
|---------|-------------|---------|------|----------|----------|----------|---------------------|------|-------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| | | | | | | | 0.222 | 0.56 | 0.984 | 1.552 | 2.256 | 3.973 |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | | | | | | | Parcial ACERO (Mts) | | | | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4 | |

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Parcial Kg | Total Kg | |
|----------------------------------------------------|--------------------------------------------|---------|------|----------|----------|----------|--------------|------|--------|-------|-------|------------|----------|----|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | | 1" |
| 02.03.08 | VIGAS | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | | |
| a6 | 2Ø3/4" | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | | |
| a5 | 2Ø3/4" | 5.75m | 3/4" | 1 | 2 | 5.75 | | | | 11.50 | | 25.70 | | |
| a5-a4 | 1Ø3/4" | 4.95m | 3/4" | 1 | 1 | 4.95 | | | | 4.95 | | 11.06 | | |
| a4 | 2Ø3/4" | 5.75m | 3/4" | 1 | 2 | 5.75 | | | | 11.50 | | 25.70 | | |
| a3 | 3Ø1" | 6.10m | 1" | 1 | 3 | 6.10 | | | | 18.30 | | 72.71 | | |
| a3-a2 | 3Ø1" | 5.55m | 1" | 1 | 3 | 5.55 | | | | 16.65 | | 66.15 | | |
| a2 | 3Ø1" | 6.10m | 1" | 1 | 3 | 6.10 | | | | 18.30 | | 72.71 | | |
| a1 | 1Ø5/8" | 2.86m | 5/8" | 1 | 1 | 3.31 | | | 3.31 | | | 5.14 | | |
| montaje | | | | | | | | | | | | | | |
| 2Ø3/8" | | 68.09m | 3/8" | 1 | 2 | 68.09 | | | 136.18 | | | 76.26 | | |
| montaje | | | | | | | | | | | | | | |
| 2Ø3/8" | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | 21.10 | | | 11.82 | | |
| montaje | | | | | | | | | | | | | | |
| 2Ø3/8" | | 7.38m | 3/8" | 1 | 2 | 7.38 | | | 14.76 | | | 8.27 | | |
| EXTREMO a12 | | | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | | | |
| Ø3/8" *1 @.05, 6 @.10, resto @.15 | | 70m | 3/8" | 1 | 12 | 2.00 | | | 24.00 | | | 13.44 | | |
| a12, a11 | | | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | | | |
| Ø3/8" *1 @.05, 6 @.10, 5 @.15 @extremo, resto @.25 | | 70m | 3/8" | 1 | 29 | 2.00 | | | 58.00 | | | 32.48 | | |
| a11, a10 | | | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | | | |
| Ø3/8" *1 @.05, 6 @.10, 5 @.15 @extremo, resto @.25 | | 70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | | |
| a10, a9 | | | | | | | | | | | | | | |
| ESTRIBOS | | | | | | | | | | | | | | |
| Ø3/8" *1 @.05, 6 @.10, 5 @.15 @extremo, resto @.25 | | 70m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 | | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ESCOBAR MIAMANI
 Ingeniero Civil
 C.I.P. 78892

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 2346628

CONFORME

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg | |
|----------------|----------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|------|------|------------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | | |
| 02.03.08.01 | VIGAS | | | | | | | | | | | | | |
| 02.03.08.01.03 | VIGAS FC-200 KGCM2 ACERO DE REFUERZO FY = 4200 KGCM2 - VIGAS | | | | | | | | | | | | | |
| a6- a8 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 39 | 2.00 | | | | | | 78.00 | 43.68 | |
| a6- a7 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 39 | 2.00 | | | | | | 78.00 | 43.68 | |
| a7- a6 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 39 | 2.00 | | | | | | 78.00 | 43.68 | |
| a6- a5 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 39 | 2.00 | | | | | | 78.00 | 43.68 | |
| a5- a4 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 48 | 2.00 | | | | | | 96.00 | 53.76 | |
| a4- a3 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 39 | 2.00 | | | | | | 78.00 | 43.68 | |
| a3- a2 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 7@, 10, 7@, 15 @extrem; resto @ 25 | | 38° | 1 | 54 | 2.40 | | | | | | 129.60 | 72.58 | |
| a2- a1 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 38° | 1 | 39 | 2.00 | | | | | | 78.00 | 43.68 | |
| a12 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 34° | 1 | 3 | 87.00 | | | | | | 261.00 | 583.34 | |
| a11 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 34° | 1 | 3 | 69.59 | | | | | | 208.77 | 466.60 | |
| a11 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 34° | 1 | 3 | 11.65 | | | | | | 34.95 | 78.11 | |
| a11 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 34° | 1 | 3 | 8.86 | | | | | | 26.88 | 60.08 | |
| a11 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 56° | 1 | 1 | 4.08 | | | | | | 4.08 | 6.33 | |
| a11 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 34° | 1 | 1 | 4.40 | | | | | | 4.40 | 9.83 | |
| a11 | ESTRIBOS Ø38°:1" @ 05, 6@, 10, 5@, 15 @extrem; resto @ 25 | | 56° | 1 | 1 | 4.40 | | | | | | 4.40 | 6.83 | |



JEFE DE PROYECTO
EDWARD CERON TORRES
 C.I.P. N° 61778

INGENIERO CIVIL
MARIA M. EMPATA MAMANI
 C.I.P. N° 8882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA ELISA CARBAJO MUÑOZ
 INGENIERA CIVIL
 DNI N° 2156638

CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | | | |
|---------------|--------------|------|-------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | | Total Kg | |
|-------------------------------------------|----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------|----|----------|-------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS FC-200 Y GCH2 ACERO DE REFUERZO FY = 4200 (GSM2 - VIGAS) | | | | | | | | | | | | | |
| a10 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | | | 23.47 |
| a8 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | | | 23.47 |
| a5 105/8" | EDWARD GERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | | | 8.15 |
| a9-a8 105/8" | | 4.04m | 5/8" | 1 | 1 | 4.04 | | | 4.04 | | | | | 6.27 |
| a8 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | | | 23.47 |
| a7 103/4" | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | | | 11.73 |
| a7 105/8" | MARIA M. ENDARA MAMAN Ingeniero Civil C.I.P. 79882 | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | | | 8.15 |
| a6 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | | | 23.47 |
| a5 203/4" | | 5.75m | 3/4" | 1 | 2 | 5.75 | | | | 11.50 | | | | 25.70 |
| a5-a4 103/4" | | 4.95m | 3/4" | 1 | 1 | 4.95 | | | | 4.95 | | | | 11.06 |
| a4 301" | CONSORCIO CONSULTOR SAUL GARRIDO | 5.75m | 1" | 1 | 3 | 5.75 | | | | 17.25 | | | | 68.53 |
| a3 301" | | 6.10m | 1" | 1 | 3 | 6.10 | | | | 18.30 | | | | 72.71 |
| a3-a2 201" | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 21546425 | 5.55m | 1" | 1 | 2 | 5.55 | | | | 11.10 | | | | 44.10 |
| a3-a2 103/4" | | 5.55m | 3/4" | 1 | 1 | 5.55 | | | | 5.55 | | | | 12.40 |
| a2 301" | | 6.10m | 1" | 1 | 3 | 6.10 | | | | 18.30 | | | | 72.71 |



CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID Hector TORRES PUENTE
 CAP. 5776
 IEFEE DE SUPERVISION

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg |
|----------------------------------------------|--------------------------------------------|---------|------|----------|----------|----------|--------------|--------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.08 | VIGAS | | | | | | 0.272 | 0.56 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01 | VIGAS FC=280 KG/CM2 | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | |
| a1 | | | | | | | | | | | |
| 201* | | 2.86m | 1" | 1 | 2 | 3.31 | | | | | 6.62 |
| montaje | | | | | | | | | | | |
| 20338* | | 68.09m | 3/8" | 1 | 2 | 68.09 | | 136.18 | | | 76.26 |
| montaje | | | | | | | | | | | |
| 20338* | | 10.55m | 3/8" | 1 | 2 | 10.55 | | 21.10 | | | 11.82 |
| montaje | | | | | | | | | | | |
| 20338* | | 7.38m | 3/8" | 1 | 2 | 7.38 | | 14.76 | | | 8.27 |
| EXTREMO a12 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | 13.44 |
| 0308*1@.05, 6@.10, resto @.15 | | .70m | | | | | | | | | |
| a12- a11 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 29 | 2.00 | | 58.00 | | | 32.48 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a11- a10 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a10- a9 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a9- a8 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a8- a7 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a7- a6 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a6- a5 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a5- a4 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 47 | 2.00 | | 94.00 | | | 52.64 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a4- a3 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .70m | | | | | | | | | |
| a3- a2 | | | | | | | | | | | |
| ESTRIBOS | | 30m | 3/8" | 1 | 56 | 2.40 | | 134.40 | | | 75.26 |
| 0308*1@.05, 6@.10, 5@.15 @extrem, resto @.25 | | .90m | | | | | | | | | |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARY MAMANI
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARRIDO MUÑOZ
 REPRESENTANTE COMUN
 C.I.P. N° 2144423

ARQ. DAVID HECTOR TORRES PUENTE
 CAP 5776
 JEFE DE SUPERVISION



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

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PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO I-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.984 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | Parcial Kg | Total Kg |
|----------------|--------------------------------------------------------------------------------|----------------|------|----------|----------|----------|---------------------|--------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | | |
| 02.03.08 | VIGAS | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/CM2 | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | |
| a2-a1 | ESTRIBOS Ø38"1 @ .05, 6@ .10, 5@ .15 @extrem; resto @.25 | 70m [30m] | 38" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| 2V-17d(25x.7) | 9Ø3/4" JEFÉ DE PROYECTO EDUARDO CERON TORRES C.I.P. N° 68778 | .45m [7.72m] | 3/4" | 2 | 3 | 8.62 | | | 51.72 | | 115.59 |
| montaje | | | | | | | | | | | |
| 2Ø38" | ESTRIBOS Ø38"1 @ .05, 6@ .10, 1@ .15 @extrem; resto @.25 | 70m [25m] | 38" | 2 | 42 | 1.90 | | 159.60 | | | 89.38 |
| 2V-17d(25x.7) | 4Ø3/4" MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78882 | .45m [4.37m] | 3/4" | 1 | 2 | 5.27 | | | 10.54 | | 23.56 |
| montaje | | | | | | | | | | | |
| 2Ø38" | ESTRIBOS Ø38"1 @ .05, 6@ .10, 5@ .15 @extrem; resto @.25 | .70m [25m] | 38" | 1 | 28 | 1.90 | | 53.20 | | | 29.79 |
| 2V-17e(25x.7) | 4Ø3/4" CONSORCIO CONSULTOR SAUL GARRIDO | .45m [3.12m] | 3/4" | 1 | 2 | 4.02 | | | 8.04 | | 17.97 |
| montaje | | | | | | | | | | | |
| 2Ø38" | ESTRIBOS Ø38"1 @ .05, 6@ .10, 5@ .15 @extrem; resto @.25 | .70m [25m] | 38" | 1 | 23 | 1.90 | | 43.70 | | | 24.47 |
| 2V-17f(25x.7) | 4Ø3/4" C.P.C. MARIA LUISA CARRASCO MUÑOZ REPRESENTANTE CONTRA DNI N° 215-66425 | .45m [6.35m] | 3/4" | 1 | 2 | 7.25 | | | 14.50 | | 32.41 |
| montaje | | | | | | | | | | | |
| 2Ø38" | ESTRIBOS Ø38"1 @ .05, 6@ .10, 5@ .15 @extrem; resto @.25 | .45m [6.33m] | 3/4" | 1 | 2 | 7.23 | | | 14.46 | | 32.32 |



CONFIRME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

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METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|--------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|--------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=760 KGCH2 ACERO DE REFUERZO FY = 4200 KGCM2 - VIGAS | | | | | | | | | | | |
| | monte | | | | | | | | | | | |
| | 2x3x8" | 6.28m | 3/8" | 1 | 2 | 6.28 | | 12.56 | | | | 7.03 |
| | a3-a2 | 25m | | | | | | | | | | |
| | ESTRIBOS Ø3/8"-1 @.05, 6 @.10, 5 @.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 35 | 1.90 | | 66.50 | | | | 37.24 |
| | eje ad-æ y eje a3-a2 | | | | | | | | | | | |
| | VE1-(1.25x.40) 40/12" | 25m | 1/2" | 1 | 2 | 4.97 | | 9.94 | | | | 9.88 |
| | | 25m | 1/2" | 1 | 2 | 4.97 | | 9.94 | | | | 9.88 |
| | a3-a2 | 25m | | | | | | | | | | |
| | ESTRIBOS Ø3/8"-1 @.05, resto @.10 | 40m | 3/8" | 1 | 41 | 1.30 | | 53.30 | | | | 29.85 |
| | VB-(1.20x.70) 40/3/4"-1'95/8" | 25m | 3/4" | 1 | 2 | 2.37 | | | | 4.74 | | 10.59 |
| | | 25m | 3/4" | 1 | 2 | 2.37 | | | | 4.74 | | 10.59 |
| | | 25m | 5/8" | 1 | 1 | 2.37 | | | 2.37 | | | 3.68 |
| | monte | 1.87m | | | | | | | | | | |
| | 2x3x8" | 1.87m | 3/8" | 1 | 2 | 1.87 | | 3.74 | | | | 2.09 |
| | ESTRIBOS Ø3/8"-1 @.05, 6 @.10, 5 @.15 @extremo, resto @.25 | 20m | 3/8" | 1 | 15 | 1.80 | | 27.00 | | | | 15.12 |
| | 2x-18x.30x.70 60/3/4" | 70m | 3/4" | 1 | 3 | 88.71 | | | | 266.13 | | 594.80 |
| | | 45m | 3/4" | 1 | 3 | 89.14 | | | | 207.42 | | 483.98 |
| | | 45m | 3/4" | 1 | 3 | 11.65 | | | | 34.95 | | 78.11 |
| | | 45m | 3/4" | 1 | 3 | 10.11 | | | | 30.33 | | 67.79 |
| | | 45m | 5/8" | 1 | 1 | 4.08 | | | 4.08 | | | 6.33 |



EDWARD CERON TORRES
JEFE DE PROYECTO
C.I.P. N° 61778

MARIA M. ENDAÑA MAMANI
Ingeniera Civil
C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA LUISA CARRASCO MUÑOZ
REPRESENTANTE COMUN
DNI N° 21546425

ARQ. DAVID HECTOR TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISION

CONFORME

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

007100

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II.1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | 1 | 1 | 1 | 1 | 1 |
| | 3.973 | | | | |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|-----------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS F.C-200 KGICM2 ACERO DE REFUERZO FY = 4200 KGICM2 - VIGAS | | | | | | | | | | | |
| a11 103/4" | | 4.40m | 3/4" | 1 | 1 | 4.40 | | | | 4.40 | | 9.83 |
| a11 105/8" | | 4.40m | 5/8" | 1 | 1 | 4.40 | | | 4.40 | | | 6.83 |
| a10 103/4" | | 4.40m | 3/4" | 1 | 1 | 4.40 | | | | 4.40 | | 9.83 |
| a10 105/8" | | 4.40m | 5/8" | 1 | 1 | 4.40 | | | 4.40 | | | 6.83 |
| a9 203/4" | | 6.95m | 3/4" | 1 | 2 | 6.95 | | | | 13.90 | | 31.07 |
| a8 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| a8-a7 105/8" | | 4.09m | 5/8" | 1 | 1 | 4.09 | | | 4.09 | | | 6.35 |
| a7 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| a6 103/4" | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 |
| a6 105/8" | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | 5.25 | | | 8.15 |
| a5 301" | | 5.75m | 1" | 1 | 3 | 5.75 | | | | | 17.25 | 88.53 |
| a5-a4 105/8" | | 4.95m | 5/8" | 1 | 1 | 4.95 | | | 4.95 | | | 7.68 |
| a4 301" | | 5.75m | 1" | 1 | 3 | 5.75 | | | | 17.25 | | 68.53 |
| a4-a3 205/8" | | 4.09m | 5/8" | 1 | 2 | 4.09 | | | 8.18 | | | 12.70 |
| a3 203/4" | | 6.10m | 3/4" | 1 | 2 | 6.10 | | | | 12.20 | | 27.27 |



EDWARD GERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 DNI N° 21546425

CONFORME

DR. DAVID TORRES PUENTE
 CAP 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| Ø A" | PESO NOMINAL | | | | |
|-------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 1 " |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|---------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|--------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| a3 10598* | | 6.10m | 5/8" | 1 | 1 | 6.10 | | | 6.10 | | | 9.47 |
| a3-a2 201* | | 5.55m | 1 " | 1 | 2 | 5.55 | | | | 11.10 | | 44.10 |
| a2 201* | | 6.10m | 1 " | 1 | 2 | 6.10 | | | | 12.20 | | 48.47 |
| a2 10334* | JEFE DE PROYECTO EDWARD GERON TORRES C.I.P. N° 61778 | 6.10m | 3/4" | 1 | 1 | 6.10 | | | 6.10 | | | 13.63 |
| a2-a1 10598* | | 3.95m | 5/8" | 1 | 1 | 3.99 | | | 3.99 | | | 6.19 |
| a1 10334* | | 4.47m | 3/4" | 1 | 1 | 4.92 | | | | 4.92 | | 11.00 |
| montaje 20398* | JEFE DE PROYECTO MARIA M. ENDARA MAMIANI Ingeniero Civil C.I.P. 18492 | 68.09m | 3/8" | 1 | 2 | 68.09 | | | 136.18 | | | 76.26 |
| montaje 20398* | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | 21.10 | | | 11.82 |
| montaje 20398* | | 9.06m | 3/8" | 1 | 2 | 9.06 | | | 18.12 | | | 10.15 |
| EXTREMO a12 ESTRIBOS 0398-11 @ 05, 6 @ 10, resto @ 15 | CONSORCIO CONSULTOR SAUL GARRIDO | 30m | 3/8" | 1 | 11 | 2.00 | | | 22.00 | | | 12.32 |
| a12-a11 ESTRIBOS 0398-11 @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | C.P.C. MARIA LUISA CARBAÑO MUÑOZ REPRESENTANTE COMUN DNI N° 21546423 | 30m | 3/8" | 1 | 29 | 2.00 | | | 58.00 | | | 32.48 |
| a11-a10 ESTRIBOS 0398-11 @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 30m | 3/8" | 1 | 41 | 2.00 | | | 82.00 | | | 45.92 |
| a10-a9 ESTRIBOS 0398-11 @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 30m | 3/8" | 1 | 29 | 2.00 | | | 58.00 | | | 32.48 |
| a9-a8 ESTRIBOS 0398-11 @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 30m | 3/8" | 1 | 47 | 2.00 | | | 94.00 | | | 52.64 |
| a8-a7 ESTRIBOS 0398-11 @ 05, 6 @ 10, 6 @ 15 @ extremo, resto @ 25 | | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.68 |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

007098

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vezes | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg |
|----------------------------------------------------|----------------------------------------------------|---------|------|----------|----------|----------|--------------|--------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.08 | VIGAS | | | | | | 0.272 | 0.55 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01 | VIGAS F.C.=38 KG/CM2 | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | |
| a7- a6 | ESTRIBOS | .70m | 3/8" | 1 | 39 | 2.00 | | 76.00 | | | 43.68 |
| | Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | |
| a5- a5 | ESTRIBOS | .70m | 3/8" | 1 | 39 | 2.00 | | 76.00 | | | 43.68 |
| | Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | |
| a5- a4 | ESTRIBOS | .70m | 3/8" | 1 | 47 | 2.00 | | 94.00 | | | 52.64 |
| | Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | |
| a4- a3 | ESTRIBOS | .70m | 3/8" | 1 | 39 | 2.00 | | 76.00 | | | 43.68 |
| | Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | |
| a3- a2 | ESTRIBOS | .90m | 3/8" | 1 | 56 | 2.40 | | 134.40 | | | 75.26 |
| | Ø3/8" *1 @.05, 7 @.10, 7 @.15 @extremo, resto @.25 | | | | | | | | | | |
| a2- a1 | ESTRIBOS | .70m | 3/8" | 1 | 39 | 2.00 | | 76.00 | | | 43.68 |
| | Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | |
| EXTREMO a1 | ESTRIBOS | .70m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | 13.44 |
| | Ø3/8" *1 @.05, 6 @.10, resto @.15 | | | | | | | | | | |
| 2V-18x(25x.70) | | .45m | 3/4" | 1 | 3 | 16.43 | | | 48.29 | | 110.16 |
| 6Ø3/4" | | .45m | 3/4" | 1 | 3 | 16.40 | | | 48.20 | | 109.96 |
| a10- a9 | | .615m | 5/8" | 1 | 1 | 6.15 | | | 6.15 | | 9.54 |
| 1Ø5/8" | | | | | | | | | | | |
| a8 | | .510m | 5/8" | 1 | 2 | 5.10 | | | 10.20 | | 15.83 |
| a8- a8 | | .580m | 5/8" | 1 | 1 | 5.80 | | | 5.80 | | 9.00 |
| 1Ø5/8" | | | | | | | | | | | |
| multilata | | .15.46m | 3/8" | 1 | 2 | 15.46 | | 30.92 | | | 17.32 |
| 2Ø2/8" | | .25m | 3/8" | 1 | 42 | 1.90 | | 79.80 | | | 44.69 |
| a10- a9 | | .25m | 3/8" | 1 | 42 | 1.90 | | 79.80 | | | 44.69 |
| ESTRIBOS | | .25m | 3/8" | 1 | 42 | 1.90 | | 79.80 | | | 44.69 |
| Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |
| a8- a8 | | .25m | 3/8" | 1 | 40 | 1.90 | | 76.00 | | | 42.56 |
| ESTRIBOS | | .25m | 3/8" | 1 | 40 | 1.90 | | 76.00 | | | 42.56 |
| Ø3/8" *1 @.05, 6 @.10, 6 @.15 @extremo, resto @.25 | | | | | | | | | | | |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | PESO NOMINAL | | | | Parcial Kg | Total Kg |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------|------|----------|----------|----------|--------------|-------|-------|--------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.08 | VIGAS | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 1" | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 2V-19(.30x.70) 603/4" | | 45m [14.55m] | 3/4" | 1 | 3 | 15.49 | | | | | 46.47 | 103.86 |
| a12 16568" | JEFES DE PROYECTO EDWARD CERON TORRES C.I.P.N° 64778 | 45m [14.60m] | 3/4" | 1 | 3 | 15.50 | | | | | 46.50 | 103.93 |
| a11 1011" | | 45m [3.63m] | 5/8" | 1 | 1 | 4.08 | | | 4.08 | | | 6.33 |
| a10 1011" | | 4.40m | 1" | 1 | 1 | 4.40 | | | | 4.40 | | 17.48 |
| a10 1011" | | 2.87m | 1" | 1 | 1 | 3.32 | | | | 3.32 | | 13.19 |
| a10 103/4" | | 2.87m | 3/4" | 1 | 1 | 3.32 | | | | 3.32 | | 7.42 |
| montaje 20368" | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78862 | 14.52m | 3/8" | 1 | 2 | 14.52 | | 29.04 | | | | 16.26 |
| EXTREMO a12 ESTRIBOS 0308"1" @ .05, 8 @ .10, resto @ .15 | | .70m [.30m] | 3/8" | 1 | 11 | 2.00 | | 22.00 | | | | 12.32 |
| a12- a11 ESTRIBOS 0308"1" @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | .70m [.30m] | 3/8" | 1 | 29 | 2.00 | | 56.00 | | | | 32.48 |
| a11- a10 ESTRIBOS 0308"1" @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 211-56425 | .70m [.30m] | 3/8" | 1 | 39 | 2.00 | | 76.00 | | | | 43.68 |
| 2V-20(.30x.70) 603/4" | | 45m [39.66m] | 3/4" | 1 | 3 | 40.11 | | | | 120.33 | | 268.94 |
| a11- a10 ESTRIBOS 0308"1" @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 45m [39.58m] | 3/4" | 1 | 3 | 40.03 | | | | 120.09 | | 268.40 |
| 2V-20(.30x.90) 601" | | 10.55m | 1" | 1 | 3 | 10.55 | | | | 31.65 | | 125.75 |
| a11- a10 ESTRIBOS 0308"1" @ .05, 6 @ .10, 6 @ .15 @ extremo, resto @ .25 | | 55m [10.55m] | 1" | 1 | 3 | 11.65 | | | | 34.95 | | 138.86 |
| 603/4" | | 9.70m | 3/4" | 1 | 3 | 10.15 | | | | 30.45 | | 68.06 |

007097



CONFORME

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

ARQ. DAVID HECTOR TORRES PUENTE
CAP. 5776
JEFE DE SUPERVISIÓN

007096

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II', DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|---------------|-------|------|-------|-------|-------|
| Ø A° Kg/ml | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcela ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|--------------|------|-------------|-------------|-------------|---------------------|------|------|-------|------|---------------|-------------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=280 KG/CM2 ACERO DE REFUERZO FY=4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a8 201* | | 9.66m | 3/4" | 1 | 3 | 10.11 | | | | 30.33 | | 67.79 | |
| a7 201* | | 45m 2.87m | 1 " | 1 | 2 | 3.32 | | | | 6.64 | | 26.38 | |
| a6 2034* | JEFE DE PROYECTO EDWARD GIBSON TORRES C.I.P. N° 61778 | 5.25m | 1 " | 1 | 2 | 5.25 | | | | 10.50 | | 41.72 | |
| a5 301* | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| a5-a4 1958* | | 5.25m | 1 " | 1 | 3 | 5.25 | | | | 15.75 | | 62.57 | |
| a4 301* | | 4.95m | 5/8" | 1 | 1 | 4.95 | | | 4.95 | | | 7.68 | |
| a3 201* | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 48882 | 5.25m | 1 " | 1 | 3 | 5.25 | | | | 15.75 | | 62.57 | |
| a3 1034* | | 6.10m | 1 " | 1 | 2 | 6.10 | | | | 12.20 | | 48.47 | |
| a3-a2 301* | | 6.10m | 3/4" | 1 | 1 | 6.10 | | | | 6.10 | | 13.63 | |
| a2 201* | CONSORCIO CONSULTOR SAUL GARRIDO | 5.55m | 1 " | 1 | 3 | 5.55 | | | | 16.65 | | 66.15 | |
| a2 1034* | C.P.C. MARIA LUISA CARRASO MUÑOZ REPRESENTANTE COMUN DNI N° 27546623 | 6.30m | 1 " | 1 | 2 | 6.30 | | | | 12.60 | | 50.06 | |
| a1 1034* | | 6.30m | 3/4" | 1 | 1 | 6.30 | | | | 6.30 | | 14.08 | |
| montaje 2038* | | 3.87m | 3/4" | 1 | 1 | 4.32 | | | | 4.32 | | 9.66 | |
| montaje 2038* | | 38.98m | 3/8" | 1 | 2 | 38.98 | | | | 77.96 | | 43.66 | |
| montaje 2038* | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | | 21.10 | | 11.82 | |



ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

007095

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|----------------------------------------------------------|------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS FC-200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS montaje | | | | | | | | | | | |
| 20308" | | 9.06m | 3/8" | 1 | 2 | 9.06 | | | | | | 10.15 |
| a6- a7 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 39 | 2.00 | | 18.12 | | | | 43.68 |
| a7- a6 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| a6- a5 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| a5- a4 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 47 | 2.00 | | 94.00 | | | | 52.64 |
| a4- a3 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| a3- a2 | ESTRIBOS Ø3/8":1@.05, 7@.10, 7@.10, 7@.15 @extremo, resto @.25 | 90m | 3/8" | 1 | 54 | 2.40 | | 129.60 | | | | 72.58 |
| a2- a1 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 |
| EXTREMO a1 ESTRIBOS Ø3/8":1@.05, 6@.10, resto @.15 | | 70m | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | | 13.44 |
| 2V-20b(25x.7) 403/4" | ele af-aG y ele ab-a5 | 45m | 3/4" | 2 | 2 | 4.15 | | 16.60 | | | | 37.10 |
| montaje | | 3.25m | | | | | | | | | | |
| 20308" | | 45m | 3/4" | 2 | 2 | 4.15 | | 16.60 | | | | 37.10 |
| a6- a5 | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | 70m | 3/8" | 2 | 24 | 1.90 | | 91.20 | | | | 51.07 |
| 2V-20a(25x.7) 603/4" | | 45m | 3/4" | 1 | 3 | 10.08 | | 30.24 | | | | 67.59 |
| | | 45m | 3/4" | 1 | 3 | 10.02 | | 30.06 | | | | 67.18 |



JEFE DE PROYECTO
EDWARD CERON TORRES
 C.I.P. N° 414778

INGENIERO CIVIL
MARIA M. ENDARA MAMANI
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA ROSA CARRAO MUNCE
 REPUBLICANA DE TUMBES
 C.M.I. N° 2346425

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

007094

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|------|-------|-------|-------|-------|
| 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| Ø A° | | | | | |
| Kgr/ml | | | | | |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg | |
|--------------------------------|---------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|-------|------------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-281 VIGAS CP | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FT = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a5- a4 | ESTRIBOS Ø3Ø" x 11 @ 05; 6Ø" x 10; 1Ø" x 15 @ extrem; resto @ 25 | | 3Ø" | 1 | 49 | 1.90 | | 93.10 | | | | 52.14 | |
| 2V-21(30x70) 6Ø3/4" | | | 3/4" | 1 | 3 | 88.71 | | 266.13 | | | | 594.80 | |
| 2V-18(30x90) 6Ø3-Ø2 4Ø1" | | | 3/4" | 1 | 3 | 69.64 | | 208.92 | | | | 466.94 | |
| 3Ø3/4" | | | 1" | 1 | 4 | 11.65 | | | | 46.60 | | 185.14 | |
| a12 | | | 3/4" | 1 | 3 | 10.61 | | 31.83 | | | | 71.14 | |
| 1Ø5Ø" | | | 5Ø" | 1 | 1 | 4.08 | | | 4.08 | | | 6.33 | |
| a11 | | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| 1Ø5Ø" | | | 5Ø" | 1 | 1 | 5.25 | | | | 5.25 | | 8.15 | |
| a10 | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| 2Ø3/4" | | | 1" | 1 | 2 | 5.25 | | | | 10.50 | | 41.72 | |
| a8 | | | 1" | 1 | 2 | 5.25 | | | | 10.50 | | 41.72 | |
| 2Ø3/4" | | | 5Ø" | 1 | 1 | 4.10 | | | | 4.10 | | 6.36 | |
| a7 | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| 2Ø3/4" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 | |
| a5 | | | 3/4" | 1 | 2 | 5.75 | | | | 11.50 | | 25.70 | |



CONFORME

EDUARDO CERON TORRES
JEFE DE PROYECTO
C.I.P. N° 65178

MARIA M. ENDARA MAMANI,
Ingeniero Civil
C.I.P. 28862

CONSORCIO CONSULTOR SAUL GARRIDO
C.P.C. MARIA LUISA CARRASCO MUÑOZ
REPRESENTANTE LEGAL
DNI N° 21156239

ARC DAVID VECIOR TORRES PUENTE
CAP. 5776
IFFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

007093

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg | | |
|----------------|---------------------------------------------|---------|------|----------|----------|----------|---------------------|------|--------|-------|-------|----------|-------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | 1" | |
| 02.03.08 | VIGAS | | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-280 KG/C/M2 | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C.M2 - VIGAS | | | | | | | | | | | | | |
| a5 | 1958" | 5.75m | 5/8" | 1 | 1 | 5.75 | | | 5.75 | | | | 8.92 | |
| a4 | 2834" | 5.75m | 3/4" | 1 | 2 | 5.75 | | | | 11.50 | | | 25.70 | |
| a4 | 1658" | 5.75m | 5/8" | 1 | 1 | 5.75 | | | 5.75 | | | | 8.92 | |
| a3 | 301" | 6.10m | 1" | 1 | 3 | 6.10 | | | | | 18.30 | | 72.71 | |
| a3-a2 | 2834" | 5.55m | 3/4" | 1 | 2 | 5.55 | | | | 11.10 | | | 24.81 | |
| a2 | 301" | 6.60m | 1" | 1 | 3 | 6.60 | | | | | 19.80 | | 78.67 | |
| a2 | 1634" | 6.60m | 3/4" | 1 | 1 | 6.60 | | | | 6.60 | | | 14.75 | |
| a1 | 1034" | 3.92m | 3/4" | 1 | 1 | 4.37 | | | | 4.37 | | | 9.77 | |
| montaje | | 68.09m | 3/8" | 1 | 2 | 68.09 | | | 136.18 | | | | 76.26 | |
| 2838" | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | 21.10 | | | | 11.82 | |
| montaje | | 9.06m | 3/8" | 1 | 2 | 9.06 | | | 18.12 | | | | 10.15 | |
| 2838" | | 30m | 3/8" | 1 | 11 | 2.00 | | | 22.00 | | | | 12.32 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 29 | 2.00 | | | 58.00 | | | | 32.48 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | | 43.68 | |
| ESTRIBOS | | 30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | | 43.68 | |



EDUARDO CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniera Civil
 C.I.P. 18982

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMISIN
 D.H.I.N.F. 21546425

CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

007091

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 5/8" | 1" |
| 0.222 | 0.56 | 1.12 | 2.235 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Piezas | Long (m) | Parcela ACERO (mlb) | | | | Parcela Kg | Total Kg |
|----------------------------------|----------------------------------------------------------------------------|---------|------|----------|-----------|----------|---------------------|------|------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 5/8" | 1" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO Fy = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 6634* | | | 3/4" | 1 | 3 | 29.20 | | | | | 87.60 | 185.79 |
| | | | 3/4" | 1 | 3 | 10.20 | | | | | 30.60 | 68.39 |
| 2V-2Z(30x30) (e3 -e2) 481* | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 1" | 1 | 4 | 11.65 | | | | 46.60 | 185.14 | |
| 3634* | | | 3/4" | 1 | 3 | 10.61 | | | | 31.83 | 71.14 | |
| a11 2634* | | | 3/4" | 1 | 2 | 4.40 | | | | 8.80 | 19.67 | |
| a10 2634* | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a9 2634* | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 78884 | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a8 2634* | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a7 2634* | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a6 2634* | CONSORCIO CONSULTOR SAUL GARRIDO | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | 23.47 | |
| a5 2634* | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN DNI N° 21546423 | | 3/4" | 1 | 2 | 6.75 | | | | 13.50 | 30.17 | |
| a5 1658* | | | 5/8" | 1 | 1 | 6.75 | | | 6.75 | | 10.48 | |
| a5 2634* | | | 3/4" | 1 | 2 | 5.85 | | | | 11.70 | 26.15 | |
| a4 2634* | | | 3/4" | 1 | 2 | 4.45 | | | | 8.90 | 19.89 | |
| a3 361* | ARQ. DAVID HECTOR TORRES PUENTE CAP. 5776 IFEFE DE SUPERVISION | | 1" | 1 | 3 | 6.10 | | | | 18.30 | 72.71 | |



CONFORME

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
Reg. CIP N° 41815

007090

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | Nº Veces | Nº Pieza | Long (m) | PESO NOMINAL | | | | Total Kg |
|----------------|------------------------------------------------|---------|------|----------|----------|----------|--------------|------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.08 | VIGAS | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | |
| | 83- a2 | 5.55m | 3/4" | 1 | 2 | 5.55 | | | | | 24.81 |
| | 2634' | 6.10m | 1 " | 1 | 4 | 6.10 | | | 11.10 | | 96.94 |
| | a2 | | | | | | | | | | |
| | 40'1" | | | | | | | | | | |
| | a1 | | | | | | | | | | |
| | 105'08" | 4.47m | 5/8" | 1 | 1 | 4.92 | | | 4.92 | | 7.84 |
| | montaje | | | | | | | | | | |
| | 263'08" | 55.94m | 3/8" | 1 | 2 | 55.94 | 11.88 | | | | 62.85 |
| | montaje | | | | | | | | | | |
| | 263'08" | 9.10m | 3/8" | 1 | 2 | 9.10 | 18.20 | | | | 10.19 |
| | montaje | | | | | | | | | | |
| | 263'08" | 10.55m | 3/8" | 1 | 2 | 10.55 | 21.10 | | | | 11.82 |
| | montaje | | | | | | | | | | |
| | 263'08" | 9.06m | 3/8" | 1 | 2 | 9.06 | 18.12 | | | | 10.15 |
| | EXTREMO a12 | | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, resto @.15 | .70m | 3/8" | 1 | 11 | 2.00 | 22.00 | | | | 12.32 |
| | a12- a11 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 29 | 2.00 | 58.00 | | | | 32.48 |
| | a11- a10 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 |
| | a10- a9 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 |
| | a9- a8 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 |
| | a8- a7 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 |
| | a7- a6 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 |
| | a6- a5 | .30m | | | | | | | | | |
| | ESTRIBOS | .30m | | | | | | | | | |
| | Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | .70m | 3/8" | 1 | 39 | 2.00 | 78.00 | | | | 43.68 |



RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARO DAVID HECTOR TORRES PUENTE
 CAP: 576
 IFFE DE SUPERVISION

007089

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | |
|--------------|-------|------|-------|-------|
| Ø A° | 1/4" | 3/8" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 1.552 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pizaa | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg | |
|-----------------------|--------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|-------|------------|----------|--|
| | | | | | | | 1/4" | 3/8" | 5/8" | 1" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=200 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| a5- a4 | ESTRIBOS Ø308*1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 20 | 2.00 | | | | | | 22.40 | |
| a4- a3 | ESTRIBOS Ø308*1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| a3- a2 | ESTRIBOS Ø308*1@.05, 7@.10, 7@.15 @extremo, resto @.25 | | 308" | 1 | 54 | 2.40 | | | | | | 72.58 | |
| a2- a1 | ESTRIBOS Ø308*1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 40 | 2.00 | | | | | | 44.80 | |
| EXTREMO a1 | ESTRIBOS Ø308*1@.05, 6@.10, resto @.15 | | 308" | 1 | 12 | 2.00 | | | | | | 13.44 | |
| 2V-22a(,25x,70) 4634" | | | 3/4" | 1 | 2 | 10.08 | | | | | 20.16 | 46.06 | |
| montaje 26308" | | | 3/4" | 1 | 2 | 10.05 | | | | | 20.10 | 44.92 | |
| a5- a4 | ESTRIBOS Ø308*1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 54 | 1.90 | | | | | | 57.46 | |
| VE3-2(,30x,70) 6634" | eje aH-I y eje a12-a11 | | 3/4" | 1 | 3 | 4.72 | | | | 14.16 | 31.65 | | |
| montaje 26308" | | | 3/4" | 1 | 3 | 4.72 | | | | 14.16 | 31.65 | | |
| a12- a11 | ESTRIBOS Ø308*1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 26 | 2.00 | | | | | | 29.12 | |
| 2V-22(,30x,70) 6634" | | | 3/4" | 1 | 3 | 68.11 | | | | | 204.33 | 466.68 | |
| montaje 26308" | | | 3/4" | 1 | 3 | 68.07 | | | | | 204.21 | 466.41 | |



EDWARD CENEN TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78892

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CABAJA MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 215-46425

CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquemas | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|----------------|--------------------------------------------|----------|------|----------|----------|----------|--------------|------|-------|-------|----------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 | 3.973 |
| VIGAS | | | | | | | | | | | | |
| 02.03.08 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 02.03.08.01.03 | 2V-22L(30x.50) | | | | | | | | | | | |
| a3 -a1 | | 19.65m | 1 " | 1 | 2 | 20.10 | | | | | 40.20 | 159.71 |
| 201* | | 5.5m | 1 " | 1 | 4 | 11.65 | | | | | 46.60 | 185.14 |
| 401* | | 10.16m | 3/4" | 1 | 3 | 10.61 | | | 31.83 | | | 71.14 |
| 303/4" | | 4.40m | 3/4" | 1 | 1 | 4.40 | | | 4.40 | | | 9.83 |
| a11 | EDWARD CERON TORRES | | | | | | | | | | | |
| 103/4" | JEFE DE PROYECTO | | | | | | | | | | | |
| a10 | C.A.P. N° 61778 | | | | | | | | | | | |
| 203/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | 10.50 | | | 23.47 |
| a9 | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | 10.50 | | | 23.47 |
| 203/4" | | 5.25m | | | | | | | | | | |
| a8 | MARIA MYENDARA MAMANI | | | | | | | | 5.25 | | | 8.15 |
| 105/8" | Ingeniero Civil | | | | | | | | | | | |
| a7 | C.A.P. N° 78882 | | | | | | | | | | | |
| 201* | | 5.25m | 1 " | 1 | 2 | 5.25 | | | 10.50 | | | 41.72 |
| a7 -a6 | | 4.04m | 3/4" | 1 | 1 | 4.04 | | | 4.04 | | | 9.03 |
| 103/4" | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | 10.50 | | | 23.47 |
| a6 | | 5.75m | 3/4" | 1 | 2 | 5.75 | | | 11.50 | | | 25.70 |
| 203/4" | | 5.75m | 5/8" | 1 | 1 | 5.75 | | | 5.75 | | | 8.92 |
| a5 | | 4.95m | 3/4" | 1 | 2 | 4.95 | | | 9.90 | | | 22.13 |
| 203/4" | | 5.75m | 3/4" | 1 | 2 | 5.75 | | | 11.50 | | | 25.70 |
| a5 | | 6.10m | 1 " | 1 | 3 | 6.10 | | | 18.30 | | | 72.71 |
| a5 -a4 | | | | | | | | | | | | |
| 203/4" | | | | | | | | | | | | |
| a4 | | | | | | | | | | | | |
| 203/4" | | | | | | | | | | | | |
| a3 | | | | | | | | | | | | |
| 301* | | | | | | | | | | | | |
| a3 -a2 | | | | | | | | | | | | |



CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

097087

PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESTRUCTURAS

| Ø A° Kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 5/8" | 1" |
| | 0.222 | 0.56 | 1.552 | 2.225 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcela ACERO (mts) | | | | Parcela Kg | Total Kg |
|------------------------------------------------|--------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|--------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 5/8" | 1" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| 2634* | | 5.55m | 3/4" | 1 | 2 | 5.55 | | | | | | 24.81 |
| a2 | | | | | | | | | | | | |
| 3041* | | 6.10m | 1" | 1 | 3 | 6.10 | | | | 11.10 | | 72.71 |
| a2 | | | | | | | | | | | | |
| 1034* | | 6.10m | 3/4" | 1 | 1 | 6.10 | | | | 6.10 | | 13.63 |
| a1 | | | | | | | | | | | | |
| 1056* | | 4.47m | 5/8" | 1 | 1 | 4.92 | | | 4.92 | | | 7.64 |
| montaje | | | | | | | | | | | | |
| 2038* | | 66.55m | 3/8" | 1 | 2 | 66.55 | | | 133.12 | | | 74.55 |
| montaje | | | | | | | | | | | | |
| 2039* | | 10.55m | 3/8" | 1 | 2 | 10.55 | | | 21.10 | | | 11.82 |
| montaje | | | | | | | | | | | | |
| 2038* | | 9.06m | 3/8" | 1 | 2 | 9.06 | | | 18.12 | | | 10.15 |
| a12- a11 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 28 | 2.00 | | | 56.00 | | | 31.36 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | MARIA M. ENDARA MIAMI Ingeniero Civil C.I.F. 79882 | .30m | | | | | | | | | | |
| a11- a10 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 41 | 2.00 | | | 82.00 | | | 46.92 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | .30m | | | | | | | | | | |
| a10- a9 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.66 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | .30m | | | | | | | | | | |
| a9- a8 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.66 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | .30m | | | | | | | | | | |
| a8- a7 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.66 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | CONSORCIO CONSULTOR SAUL GARRIDO | .30m | | | | | | | | | | |
| a7- a6 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.66 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | C.P.C. MARIA LUISA CARBAJO MUÑOZ INGENIERA REPRESENTANTE COMÚN DNI N° 31546425 | .30m | | | | | | | | | | |
| a6- a5 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 39 | 2.00 | | | 78.00 | | | 43.66 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | .30m | | | | | | | | | | |
| a5- a4 | | | | | | | | | | | | |
| ESTRIBOS | | .30m | 3/8" | 1 | 48 | 2.00 | | | 96.00 | | | 53.76 |
| Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | .30m | | | | | | | | | | |
| a4- a3 | | | | | | | | | | | | |



EDWARD GERRON TORRES
 JEFE DE PROYECTO
 C.I.F. N° 61778

MARIA M. ENDARA MIAMI
 Ingeniero Civil
 C.I.F. 79882

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA LUISA CARBAJO MUÑOZ
 INGENIERA REPRESENTANTE COMÚN
 DNI N° 31546425

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

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007086

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A" Kgr/ml | PESO NOMINAL | | | | 1 " |
|-------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 5/8" | 3/4" | |
| | 0.222 | 0.56 | 1.552 | 2.225 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | Nº Veces | Nº Piezas | Long (m) | | | | Parcial ACERO (Kgs) | | | | Total Kg | |
|----------------|-------------------------------------------------------------------|-------------------|------|----------|-----------|----------|--------|------|------|---------------------|-------|------|------|----------|--|
| | | | | | | 1/4" | 3/8" | 5/8" | 3/4" | 1/2" | 3/8" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/C/M2 | | | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | 70m [30m] | 3/8" | 1 | 40 | | 80.00 | | | | | | | 44.80 | |
| | a3- a2 | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 7 @ .10, 7 @ .15 @ extremo, resto @ .25 | 90m [30m] | 3/8" | 1 | 54 | | 129.60 | | | | | | | 72.58 | |
| | a2- a1 | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | 70m [30m] | 3/8" | 1 | 40 | | 80.00 | | | | | | | 44.80 | |
| | EXTREMO a1 | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | 70m [30m] | 3/8" | 1 | 12 | | 24.00 | | | | | | | 13.44 | |
| | 2V-23a (0.20x0.70) 4ø3/4" + 1ø5/8" | 45m [5.22m] | 3/4" | 1 | 2 | | | | | | 12.24 | | | 27.36 | |
| | | 45m [5.22m] | 3/4" | 1 | 2 | | | | | | 12.24 | | | 27.36 | |
| | | 45m [5.22m] | 5/8" | 1 | 1 | | | | | 6.12 | | | | 9.50 | |
| | montaje | | | | | | | | | | | | | | |
| | 2ø3/8" | 5.22m [5.22m] | 3/8" | 1 | 2 | | 10.44 | | | | | | | 5.85 | |
| | a12- a11 | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | 70m [20m] | 3/8" | 1 | 34 | | 61.20 | | | | | | | 34.27 | |
| | 2V-23a (0.20x0.70) 4ø3/4" + 1ø5/8" | 45m [19.62m] | 3/4" | 1 | 2 | | | | | 20.52 | | | | 9.172 | |
| | | 45m [19.62m] | 3/4" | 1 | 2 | | | | | 20.52 | | | | 9.172 | |
| | | 45m [19.62m] | 5/8" | 1 | 1 | | | | | 20.52 | | | | 31.85 | |
| | montaje | | | | | | | | | | | | | | |
| | 2ø3/8" | 19.62m [19.62m] | 3/8" | 1 | 2 | | 39.24 | | | | | | | 21.97 | |
| | a11- a10 | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | 70m [20m] | 3/8" | 1 | 29 | | 52.20 | | | | | | | 29.23 | |
| | a10- a9 | | | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | 70m [20m] | 3/8" | 1 | 43 | | 77.40 | | | | | | | 43.34 | |
| | a9- a8 | | | | | | | | | | | | | | |



JEFE DE PROYECTO
EDWARD CERON TORRES
 C.I.P. N° 611778

MARIA M. ENDARA MARIANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21546425



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

007085

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|------|------|-------|
| Ø A" | 3/8" | 1/2" | 5/8" | 3/4" | 1" |
| Kg/ml | 0.222 | 0.56 | 1.52 | 2.25 | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° pieza | Long (m) | Parcial ACERO (Mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|------|-------|------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS F'C-300 KGICM2 ACERO DE REFUERZO FY = 4200 KGICM2 - VIGAS ESTRIBOS Ø3/8": 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 42 | 1.80 | | 75.60 | | | | 42.34 | |
| | eje a1-a1 y eje a7-a6 VES-24(30x.70) 6/834" | | 3/4" | 1 | 3 | 4.72 | | | | 14.16 | | 31.65 | |
| | moniale 2/63/8" | | 3/4" | 1 | 3 | 4.72 | | | | 14.16 | | 31.65 | |
| | ESTRIBOS Ø3/8": 1 @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 C.I.P. N° 61778 | | 3/8" | 1 | 2 | 3.82 | | 7.64 | | | | 4.28 | |
| | eje a1-a1 y eje a7-a6 VCH01 4/912" | | 1/2" | 1 | 2 | 1.64 | | | 3.28 | | | 3.26 | |
| | ESTRIBOS Ø3/8": 1 @ .05, 5 @ .10, 5 @ .15 @ extremo, resto @ .25 C.I.P. N° 78887 | | 1/2" | 1 | 2 | 1.64 | | | 3.28 | | | 3.26 | |
| | ESTRIBOS Ø3/8": 1 @ .05, 5 @ .10, 5 @ .15 @ extremo, resto @ .25 C.I.P. N° 78887 | | 3/8" | 1 | 8 | 1.30 | | 10.40 | | | | 5.62 | |
| | eje a1-a1 y eje a7-a6 ZV-23a(30x.70) 8/634" | | 3/4" | 1 | 2 | 8.92 | | | | 17.84 | | 39.87 | |
| | moniale 2/63/8" | | 3/4" | 1 | 6 | 8.08 | | | | 53.28 | | 119.08 | |
| | CONSORCIO CONSULTOR SAUL GARRIDO eje a1-a1 y eje a7-a6 ZV-24(30x.70) 6/834" | | 3/8" | 1 | 2 | 8.02 | | 16.04 | | | | 8.98 | |
| | ESTRIBOS Ø3/8": 1 @ .05, 5 @ .10, 6 @ .15 @ extremo, resto @ .25 C.P.C. MARIA LUISA CARRASO MUÑOZ C.I.N.I. N° 71946425 | | 3/8" | 1 | 55 | 2.00 | | 110.00 | | | | 61.60 | |
| | eje a1-a1 y eje a7-a6 ZV-24(30x.70) 6/834" | | 3/4" | 1 | 3 | 9.60 | | | | 28.80 | | 64.37 | |
| | eje a1-a1 y eje a7-a6 ZV-24(30x.70) 6/834" | | 3/4" | 1 | 3 | 9.60 | | | | 28.80 | | 64.37 | |
| | eje a1-a1 y eje a7-a6 ZV-24(30x.70) 6/834" | | 3/4" | 1 | 3 | 19.20 | | | | 57.60 | | 128.74 | |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

14.7.20

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14.7.20

PROYECTO : METRADO DE ACERO
 ESPECIALIDAD : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES' ESTRUCTURAS

| Ø A° kg/ml | PESO NOMINAL | | | | |
|---------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.894 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vercas | N° Pizca | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------|---------|------|-----------|----------|----------|---------------------|------|-------|-------|-------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS FC=300 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | 2V-24(30x30) (a3-a2) 4Ø1" | | 3/4" | 1 | 3 | 19.20 | | | | | 57.60 | 128.74 |
| | | | 1" | 1 | 2 | 10.55 | | | | 21.10 | 83.83 | |
| | | | 1" | 1 | 2 | 11.65 | | | | 23.30 | 92.57 | |
| | EDWARD CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 3/4" | 1 | 3 | 10.15 | | | | 30.45 | 88.06 | |
| | | | 3/4" | 1 | 3 | 10.11 | | | | 30.33 | 67.79 | |
| a6 2Ø3/4" | | | 3/4" | 1 | 2 | 2.65 | | | | 5.30 | 11.85 | |
| a5 1Ø1" | | | 1" | 1 | 1 | 4.95 | | | | 4.95 | 19.67 | |
| a5 1Ø3/4" | MARIA M. ENDARA MAMANI Ingeniera Civil C.P. 78882 | | 3/4" | 1 | 1 | 4.95 | | | | 4.95 | 11.06 | |
| a5-a4 1Ø5/8" | | | 5/8" | 1 | 1 | 4.95 | | | | 4.95 | 7.68 | |
| a4 2Ø3/4" | | | 3/4" | 1 | 2 | 5.75 | | | | 11.50 | 25.70 | |
| a4 1Ø5/8" | CONSORCIO CONSULTOR SAUL GARRIDO | | 5/8" | 1 | 1 | 5.75 | | | | 5.75 | 8.92 | |
| a3 2Ø3/4" | C.P.C. MARIA LUISA CARBAJO MUÑOZ REPRESENTANTE COMUN C.I.P. N° 41815 | | 3/4" | 1 | 2 | 6.10 | | | | 12.20 | 27.27 | |
| a3-a2 1Ø3/4" | | | 3/4" | 1 | 1 | 5.55 | | | | 5.55 | 12.40 | |
| a2 2Ø3/4" | | | 3/4" | 1 | 2 | 5.00 | | | | 10.00 | 22.35 | |
| montaje 2Ø3/8" | | | 3/8" | 1 | 2 | 9.60 | | | 19.20 | | 10.75 | |
| montaje | | | 3/8" | 1 | 1 | | | | | | 10.75 | |



CONFORME

ING. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| Kg/ml | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 1 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcela ACERO (mts) | | | | | Parcelal Kg | Total Kg |
|----------------|----------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|------|------|-------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 3/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/CMZ | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CMZ - VIGAS 2Ø3Ø" | | 3Ø" | 1 | 4 | 18.10 | | | | | | | 65.64 |
| | montaje | | | | | | | | | | | | |
| 2Ø3Ø" | | | 3Ø" | 1 | 2 | 10.55 | | 21.10 | | | | 11.82 | |
| | montaje | | | | | | | | | | | | |
| 2Ø3Ø" | | | 3Ø" | 1 | 2 | 9.06 | | 18.12 | | | | 10.15 | |
| | ESTRIBOS | | | | | | | | | | | | |
| a7 - a6 | | | 3Ø" | 1 | 26 | 2.00 | | 52.00 | | | | 29.12 | |
| | Ø3Ø": 1 @ 05, 5 @ 10, 5 @ 15 @ extremo, resto @ 25 | | | | | | | | | | | | |
| a5 - a4 | | | | | | | | | | | | | |

EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniera Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARBAJO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 21346425

CONFORME

DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815



007083

007082

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-I, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° Kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" |
| | 0.272 | 0.56 | 0.994 | 1.552 |
| | | | | 2.235 |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vices | N° Pieza | Long (m) | Parcial ACERO (Kgs) | | | | Total Kg | |
|----------------|---------------------------------------------------------|---------|------|----------|----------|----------|---------------------|--------|-------|------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| 02.03.00 | VIGAS | | | | | | | | | | | |
| 02.03.00.01 | VIGAS FC-200 KG/C/MZ | | | | | | | | | | | |
| 02.03.00.01.03 | ACERO DE REFUERZO FY = 4200I KG/C/MZ - VIGAS | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, @extremo, resto @ .15 | | 3/8" | 1 | 20 | 2.00 | | 40.00 | | | 22.40 | |
| | a5- a4 | | 3/8" | 1 | 48 | 2.00 | | 96.00 | | | 63.76 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, 5 @ .15 @extremo, resto @ .25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | 44.80 | |
| | a4- a3 | | 3/8" | 1 | 54 | 2.40 | | 129.60 | | | 72.56 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 7 @ .10, 7 @ .15 @extremo, resto @ .25 | | 3/8" | 1 | 20 | 2.00 | | 40.00 | | | 22.40 | |
| | a2- a1 | | 3/8" | 1 | 12 | 2.00 | | 24.00 | | | 13.44 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, 6 @ .15 @extremo, resto @ .25 | | 3/8" | 1 | 2 | 44.57 | | | 88.14 | | 189.23 | |
| | EXTREMO #1 | | 3/4" | 1 | 2 | 44.57 | | | 88.14 | | 189.23 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, resto @ .15 | | 3/8" | 1 | 1 | 44.57 | | | 44.57 | | 69.17 | |
| | VB-1 (Ø 20x0.70) | | 3/8" | 1 | 2 | 43.67 | | 87.34 | | | 48.91 | |
| | 4Ø3/4" * 1Ø5Ø8" | | 3/8" | 1 | 2 | 43.67 | | 87.34 | | | 48.91 | |
| | montaje | | | | | | | | | | | |
| | 2Ø3/8" | | | | | | | | | | | |
| | a6- a5 | | 3/8" | 1 | 43 | 1.80 | | 77.40 | | | 43.34 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, 5 @ .15 @extremo, resto @ .25 | | 3/8" | 1 | 48 | 1.80 | | 86.40 | | | 48.38 | |
| | a5- a4 | | 3/8" | 1 | 40 | 1.80 | | 72.00 | | | 40.32 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, 5 @ .15 @extremo, resto @ .25 | | 3/8" | 1 | 32 | 1.80 | | 57.60 | | | 32.26 | |
| | a4- a3 | | 3/8" | 1 | 31 | 1.80 | | 55.80 | | | 31.25 | |
| | ESTRIBOS | | | | | | | | | | | |
| | Ø3/8" * 1 @ .05, 6 @ .10, 5 @ .15 @extremo, resto @ .25 | | 3/8" | 1 | 1 | 1.80 | | 1.80 | | | 31.25 | |



EDUARDO CERDAS TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 70882

CONSORCIO CONSULTOR SAUL GARRIDO
 MARIA LUISA BARBAJO MUNOZ
 REPRESENTANTE COMUN
 DNI N° 215-06429

CONFORME

DAVID HECTOR TORRES PUEENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Vices | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | | |
|-----------------------------|-------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|-----------|-------|--------|-----------|----------|-----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=300 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS a2- a1 | | 3/8" | 1 | 43 | 1.80 | 71.40 | | | | 43.34 | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 5 @ .10, 5 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 15 | 1.80 | 27.00 | | | | 15.12 | | |
| | ESTRIBOS Ø3/8" x 1 @ .05, 5 @ .10, 5 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 15 | 1.80 | 27.00 | | | | 15.12 | | |
| RESUMEN DE METRADO DE ACERO | | | | | | | | | | | | | |
| TOTAL ACERO (KG DE ACERO) | | | | | | | 1/4" | 24,670.88 | 26.44 | 530.96 | 13,242.91 | 1,008.88 | 48,272.26 |
| | | | | | | | 3/8" | 308 | 172 | 598 | 344 | 1 | |
| | | | | | | | | 13,815.75 | 26.28 | 824.05 | 29,597.90 | 4,008.28 | 48,272.26 |

CONSORCIO CONSULTOR SAUL GARRIDO

C.P.C. MARIA ROSA CARBAJO MUÑOZ
 REPRESENTANTE COMÚN
 C.I.P. N° 31566425

MARIA M. ENDEBA MAMIANI
 Ingeniero Civil
 C.L.P. 78882



CONFORME

EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. C.I.P. N° 41815

097081

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | | Parcial Kg | Total Kg |
|----------------|---------------------------------------------------------------|---------|------|----------|----------|----------|--------------|-------|------|-------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| | | | | | | | Kg/ml | 0.222 | 0.56 | 0.984 | 1.552 | 2.235 | 3.973 |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-300 KG/C/M2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS TERCER PISO | | | | | | | | | | | | |
| | 3V-1,30x70 | 52.82m | 3/4" | 1 | 3 | 52.82 | | | | | | 158.46 | 354.16 |
| | 60x3/4" | 52.82m | 3/4" | 1 | 3 | 52.82 | | | | | | 158.46 | 354.16 |
| aC | | 4.45m | 3/4" | 1 | 1 | 4.45 | | | | | | 4.45 | 9.95 |
| aD | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 5.25 | 11.73 |
| aE | | 5.25m | 3/4" | 1 | 1 | 5.25 | | | | | | 5.25 | 11.73 |
| aF | | 5.25m | 5/8" | 1 | 1 | 5.25 | | | | | | 5.25 | 8.15 |
| aG | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | 10.50 | 23.47 |
| aH | | 3.88m | 3/4" | 1 | 1 | 3.88 | | | | | | 3.88 | 8.69 |
| aI | | 3.88m | 5/8" | 1 | 1 | 3.88 | | | | | | 3.88 | 6.04 |
| aJ | | 5.25m | 3/4" | 1 | 2 | 5.25 | | | | | | 10.50 | 23.47 |
| aK | | 4.05m | 5/8" | 1 | 1 | 4.05 | | | | | | 4.05 | 6.29 |
| aL | | 4.35m | 5/8" | 1 | 1 | 4.35 | | | | | | 4.35 | 6.75 |
| aM | | 2.90m | 5/8" | 1 | 1 | 2.90 | | | | | | 2.90 | 4.50 |
| montaje | | 50.97m | 3/8" | 1 | 2 | 50.97 | | | | | | 101.94 | 57.09 |
| aC-aD | ESTRIBOS Ø3/8" x 1 @ 05, 6 @ 10, 5 @ 15 @ extremo, resto @ 25 | .30m | 3/8" | 1 | 39 | 2.00 | | | | | | 78.00 | 43.66 |
| aD-aE | | .70m | | | | | | | | | | | |
| | | .30m | | | | | | | | | | | |

EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MARIANA
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA GARRIDO MUÑOZ
 REPRESENTANTE LEGAL
 C.I.P. N° 256665

CONFORME

DR. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN



007079

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A" Kg/ml | PESO NOMINAL | | | |
|------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" |
| | 0.222 | 0.56 | 0.994 | 1.552 |
| | | | | 3/4" |
| | | | | 1" |
| | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | Nº Veces | Nº Pieza | Long (m) | Ponderación (kg) | | | | Total kg |
|----------------|---------------------------------------------------------|---------|------|----------|----------|----------|------------------|-------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | |
| 02.03.00 | VIGAS | | | | | | | | | | |
| 02.03.00.01 | VIGAS FC-200 KG/C/M2 | | | | | | | | | | |
| 02.03.00.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| | aE- aF | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| | aF- aG | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 23 | 2.00 | | 46.00 | | | 25.76 |
| | aG- aH | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 39 | 2.00 | | 78.00 | | | 43.68 |
| | aH- aI | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 43 | 2.00 | | 86.00 | | | 48.16 |
| | aI- aJ | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 28 | 2.00 | | 56.00 | | | 31.36 |
| | 3V-1a(25x.70) 6Ø3/4" | | 3/4" | 1 | 3 | 4.34 | | | 13.02 | | 29.10 |
| | montaje | | | | | | | | | | |
| | 2Ø3/8" | | 3/4" | 1 | 3 | 4.37 | | | 13.11 | | 29.30 |
| | aC- aD | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 2 | 3.44 | | 6.88 | | | 3.85 |
| | aH | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 24 | 1.90 | | 45.60 | | | 25.54 |
| | 3V-1b(25x.70) 6Ø3/4" | | 3/4" | 1 | 3 | 12.48 | | | 37.44 | | 83.68 |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | |
| | aH- aI 1Ø5/8" | | 3/4" | 1 | 3 | 12.37 | | | 37.11 | | 82.94 |
| | montaje | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 1 | 6.29 | | 6.29 | | | 9.76 |
| | aH- aI 1Ø5/8" | | 3/4" | 1 | 3 | 4.45 | | | 13.35 | | 29.84 |
| | montaje | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 2 | 11.58 | | 23.16 | | | 12.97 |
| | aG- aH | | | | | | | | | | |



CONFORME

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-I, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A° kg/ml | PESO NOMINAL | | | |
|---------------|--------------|------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" |
| | 0.22 | 0.56 | 0.994 | 1.552 |
| | | | 2.235 | 3.573 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcial ACERO (Mts) | | | | Parcial Kg | Total Kg | |
|----------------|-----------------------------------------------------------|---------------------------------------------------------------------|------|----------|----------|----------|---------------------|--------|------|--------|------------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC=300 KG/CM2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8" x 1' @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 20 | 1.90 | | 36.00 | | | | 21.28 | |
| | pH - al | | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8" x 1' @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 47 | 1.90 | | 89.30 | | | | 50.01 | |
| | 3V-2(.30x.70) | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 3 | 56.92 | | | | 170.76 | | 381.65 | |
| | | ----- EDWARD GERONIMORRES JEFE DE PROYECTO C.I.P. N° 61178 | | | | | | | | | | | |
| | | | 3/4" | 1 | 3 | 56.82 | | | | 170.46 | | 380.98 | |
| | aC | | | | | | | | | | | | |
| | 4ø1" | | 1" | 1 | 4 | 6.27 | | | | | 25.08 | 89.64 | |
| | aD | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | aE | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | aF | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | aG | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | aH | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | al | | | | | | | | | | | | |
| | 1603/4' | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 | |
| | aj | | | | | | | | | | | | |
| | 1605/8" | | 5/8" | 1 | 1 | 2.71 | | | 2.71 | | | 4.21 | |
| | monte | | | | | | | | | | | | |
| | 2003/8" | | 3/8" | 1 | 2 | 56.02 | | 112.04 | | | | 62.74 | |
| | aB - aC | | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8" x 1' @ .05, 6 @ .10, resto @ .15 | | 3/8" | 1 | 22 | 2.00 | | 44.00 | | | | 24.64 | |
| | aC - aD | | | | | | | | | | | | |
| | ESTRIBOS | | | | | | | | | | | | |
| | Ø3/8" x 1' @ .05, 6 @ .10, 5 @ .15 @ extremo, resto @ .25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | aD - aE | | | | | | | | | | | | |
| | | | | | | | | | | | | | |



CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

10/15/20

10/15/20

10/15/20

10/15/20

10/15/20

10/15/20

007077

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES*
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A° | 1/4" | 3/8" | 1/2" | 5/8" | 1" |
| Kg/ml | 0.222 | 0.56 | 0.984 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A° | N° Veces | N° Pieza | Long (m) | Parcela ACERO (Mts) | | | | | Total Kg | |
|----------------|---------------------------------------------------------|---------|------|----------|----------|----------|---------------------|-------|------|-------|------|----------|--|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | | |
| 02.03.08 | VIGAS | | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/C/M2 | | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/M2 - VIGAS | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | aE- aF | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | aF- aG | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | ag- aH | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | aH- aI | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | aI- aJ | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 40 | 2.00 | | 80.00 | | | | 44.80 | |
| | 3V-2a(25x70) 6Ø3/4" | | 3/4" | 1 | 3 | 4.44 | | | | 13.32 | | 29.77 | |
| | montaje | | | | | | | | | | | | |
| | 2Ø3/8" | | 3/4" | 1 | 3 | 4.32 | | | | 12.96 | | 26.97 | |
| | aB- aC | | | | | | | | | | | | |
| | ESTRIBOS Ø3/8":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 24 | 1.90 | | 45.60 | | | | 25.54 | |
| | 3V-2a(25x70) 4Ø3/4" | | 3/4" | 1 | 2 | 8.62 | | | | 17.24 | | 36.53 | |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | | |
| | aF- aG | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/4" | 1 | 2 | 8.50 | | | | 17.00 | | 36.00 | |
| | 1Ø5/8" | | 5/8" | 1 | 1 | 4.40 | | | 4.40 | | | 6.63 | |
| | CONSORCIO CONSULTOR SAUL GARRIDO | | | | | | | | | | | | |
| | aF- aG | | | | | | | | | | | | |
| | ESTRIBOS Ø38":1@.05, 6@.10, 5@.15 @extremo, resto @.25 | | 3/8" | 1 | 2 | 7.72 | | 15.44 | | | | 8.65 | |
| | 2Ø3/8" | | 3/8" | 1 | 43 | 1.90 | | 81.70 | | | | 45.75 | |



CONFORME

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

ARQ DAVID HECTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISION

11/19/50

11/19/50

11/19/50

11/19/50

11/19/50

11/19/50

11/19/50

007076

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO 'RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES'
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | PESO NOMINAL | | | | Total Kg | |
|----------------|----------------------------------------------------------------------|---------|------|----------|----------|----------|--------------|-------|-------|--------|----------|--------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | | |
| | | | | | | | 0.222 | 0.594 | 1.552 | 2.235 | 3.973 | |
| 02.03.08 | VIGAS | | | | | | | | | | | |
| 02.03.08.01 | VIGAS FC-200 KG/CM2 | | | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS | | | | | | | | | | | |
| | 3x-20x(25x.70) | | 3/4" | 2 | 2 | 4.27 | | | | 17.08 | | 38.17 |
| | 4x3/4" | | 3/4" | 2 | 2 | 4.27 | | | | 17.08 | | 38.17 |
| | montaje | | | | | | | | | | | |
| 2x3/8" | EDWARO CERON TORRES JEFE DE PROYECTO C.I.P. N° 61778 | | 3/8" | 2 | 2 | 3.37 | | 13.48 | | | | 7.55 |
| aF-4G | ESTRIBOS | | 3/8" | 2 | 25 | 1.90 | | 95.00 | | | | 53.20 |
| | Ø3/8" x 1 @ 05, 6 @ 10, 5 @ 15 @metrdo, resto @ 25 | | | | | | | | | | | |
| 3x-3/32x.70 | | | 3/4" | 1 | 3 | 56.94 | | | | 170.82 | | 381.78 |
| 6x3/4" | | | 3/4" | 1 | 3 | 56.82 | | | | 170.46 | | 380.98 |
| aC | | | 1" | 1 | 4 | 6.27 | | | | 25.08 | | 99.64 |
| 4Ø1" | | | 3/4" | 1 | 1 | 5.25 | | | | 5.25 | | 11.73 |
| aD | MARIA M. ENDARA MAMANI Ingeniero Civil C.I.P. 48882 | | 5/8" | 1 | 1 | 5.25 | | | | | | 6.15 |
| 1Ø5/8" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| aE | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| 2Ø3/4" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| aF | CONSORCIO CONSULTOR SAUL GARRIDO | | 5/8" | 1 | 1 | 4.05 | | | 4.05 | | | 6.29 |
| aF-aG | C.P.C. MARIA LUISA CAMBAJO MUÑOZ REPRESENTANTE COMUN DIRECTORA | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| 1Ø5/8" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| aG | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| 2Ø3/4" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| aH | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| 2Ø3/4" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| aI | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| 2Ø3/4" | | | 3/4" | 1 | 2 | 5.25 | | | | 10.50 | | 23.47 |
| montaje | | | 3/8" | 1 | 2 | 5.25 | | | | | | 6.15 |



ARQ. DAVID HECTOR TORRES PUENTE
 CAP. 5776
 JEFE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

METRADO DE ACERO

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| kg/ml | 0.222 | 0.55 | 0.994 | 1.552 | 2.235 |
| | | | | | 1 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Vezes | N° Piezas | Long (m) | Parcial ACERO (Mts) | | | | | Total Kg |
|-------------------------------------------|---------------------------------------------------------------------------------------|---------------|------|----------|-----------|----------|---------------------|-------|------|-------|------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS F.C=200 KG/CM2 ACERO DE REFUERZO FY = 4200 KG/CM2 - VIGAS 203Ø8" | 56.02m | 3/8" | 1 | 4 | 56.02 | | | | | | |
| | aB- aC ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 22 | 2.00 | | 44.00 | | | | 24.64 |
| | aC- aD ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 36 | 2.00 | | 76.00 | | | | 42.56 |
| | aD- aE ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aE- aF ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aF- aG ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aG- aH ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aH- aI ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | aI- aJ ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 30m | 3Ø8" | 1 | 39 | 2.00 | | 78.00 | | | | 43.68 |
| | 3W-3al,25x70 Ø63Ø4" | 45m x 7.65m | 3/4" | 1 | 3 | 6.59 | | | | 25.77 | | 57.60 |
| | al 105Ø8" | 45m x 7.55m | 3/4" | 1 | 3 | 8.45 | | | | 25.35 | | 56.66 |
| | aj 105Ø8" | 45m x 2.65m | 5Ø8" | 1 | 1 | 3.08 | | | 3.08 | | | 4.78 |
| | montale 203Ø8" | 7.65m x 2.55m | 3Ø8" | 1 | 2 | 7.69 | | 15.38 | | | | 8.61 |
| | aF- aG ESTRIBOS Ø3Ø8" *1 @.05, 5 @.10, 5 @.15 @extremo, resto @.25 | 70m x 25m | 3Ø8" | 1 | 40 | 1.90 | | 76.00 | | | | 42.56 |



CONFORME

DR. DAVID HECTOR TORRES PUEENTE
 CAP. 5776
 IIEE DE SUPERVISION

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

007074

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| PESO NOMINAL | | | | | |
|--------------|-------|------|-------|-------|-------|
| Ø A" Kg/m | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.235 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | Nº Veces | Nº Piezas | Leng (m) | Ponderal ACERO (kgs) | | | Total Kg |
|----------------|---------------------------------------------|---------|------|----------|-----------|----------|----------------------|--------|--------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | |
| 02.03.08 | VIGAS | | | | | | | | | |
| 02.03.08.01 | VIGAS F C=200 KG/C/MZ | | | | | | | | | |
| 02.03.08.01.03 | ACERO DE REFUERZO FY = 4200 KG/C/MZ - VIGAS | | | | | | | | | |
| | 3V-4L-30x70 | | | | | | | | | |
| | 6x34" | | 34" | 1 | 3 | 50.56 | | | 151.66 | 338.00 |
| | | | 34" | 1 | 3 | 50.49 | | | 151.47 | 338.54 |
| ac | 301' | | 1 " | 1 | 3 | 6.28 | | 18.84 | | 74.85 |
| | | | 34" | 1 | 1 | 6.28 | | 6.28 | | 14.04 |
| ad | 1034" | | 34" | 1 | 1 | 5.25 | | 5.25 | | 11.73 |
| ae | 2034" | | 34" | 1 | 2 | 5.25 | | 10.50 | | 23.47 |
| af | 201' | | 1 " | 1 | 2 | 5.25 | | 10.50 | | 41.72 |
| ag | 2034" | | 34" | 1 | 2 | 5.25 | | 10.50 | | 23.47 |
| ah | 2034" | | 34" | 1 | 2 | 5.25 | | 10.50 | | 23.47 |
| ai | 2034" | | 34" | 1 | 2 | 4.45 | | 8.90 | | 19.89 |
| aj | 1069" | | 56" | 1 | 1 | 4.45 | | 4.45 | | 6.91 |
| moniale | | | 36" | 1 | 2 | 50.04 | | 100.08 | | 56.04 |
| 2038" | | | 36" | 1 | 22 | 2.00 | | 44.00 | | 24.64 |
| 2038" | | | 36" | 1 | 39 | 2.00 | | 78.00 | | 43.68 |
| 2038" | | | 36" | 1 | 39 | 2.00 | | 78.00 | | 43.68 |
| 2038" | | | 36" | 1 | 39 | 2.00 | | 78.00 | | 43.68 |



EDWARD CERON TORRES
 JEFE DE PROYECTO
 C.I.P. N° 61778

MARIA M. ENDARA MAMANI
 Ingeniero Civil
 C.I.P. 78882

CONSORCIO CONSULTOR SAUL GARRIDO
 C.P.C. MARIA LUISA CARRASO MUÑOZ
 REPRESENTANTE COMUN
 DNI N° 25346429

CONFORME

ARQ. DAVID HESTOR TORRES PUENTE
 CAP. 5776
 IFFE DE SUPERVISIÓN

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 41815

RICARDO VICTOR SIU DELGADO
 INGENIERO CIVIL
 Reg. CIP N° 4815

007072

PROYECTO : ELABORACION DEL EXPEDIENTE TECNICO, EQUIPAMIENTO Y CONTINGENCIA DEL PROYECTO "RECONSTRUCCION DEL HOSPITAL SAUL GARRIDO ROSILLO II-1, DISTRITO DE TUMBES, PROVINCIA DE TUMBES, DEPARTAMENTO DE TUMBES"
 ESPECIALIDAD : ESTRUCTURAS

METRADO DE ACERO

| Ø A" Kg/ml | PESO NOMINAL | | | | |
|------------|--------------|------|-------|-------|-------|
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| | 0.222 | 0.56 | 0.994 | 1.552 | 2.225 |
| | | | | | 3.973 |

| PARTIDA | DESCRIPCION | Esquema | Ø A" | N° Veces | N° Pieza | Long (m) | Parcial ACERO (mts) | | | | | Parcial Kg | Total Kg |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|----------|----------|----------|---------------------|------|------|------|-------|------------|----------|
| | | | | | | | 1/4" | 3/8" | 1/2" | 3/8" | 3/4" | | |
| 02.03.08 02.03.08.01 02.03.08.01.03 | VIGAS VIGAS F.C-200 XGICH2 ACERO DE REFUERZO FY = 4200 XGICM2 - VIGAS Ø308*11 @.15, 6@.10, 5@.15 @extremo, resto @.25 aE - aF ESTRIBOS Ø308*11 @.15, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| | 3V-6(Øx.70) 6Ø3/4" | | 308" | 1 | 16 | 2.00 | | | | | | 17.92 | |
| | JEFE DE PROYECTO EDWARD CERON TORRES C.I.P. N° 61778 | | 34" | 1 | 3 | 17.27 | | | | | 51.81 | 115.80 | |
| | montaje | | 34" | 1 | 3 | 17.17 | | | | | 51.51 | 115.12 | |
| | 2Ø3/8" | | 308" | 1 | 2 | 16.37 | | | | | | 18.33 | |
| | aE - aH ESTRIBOS Ø308*11 @.15, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| | aH - aI ESTRIBOS Ø308*11 @.15, 6@.10, 5@.15 @extremo, resto @.25 | | 308" | 1 | 39 | 2.00 | | | | | | 43.68 | |
| | aI - aJ ESTRIBOS | | 308" | 1 | 7 | 2.00 | | | | | | 7.84 | |
| | 3V-7(3Øx.70) 6Ø3/4" | | 34" | 1 | 3 | 21.42 | | | | | 64.26 | 143.62 | |
| | MARIA M. ENDARA MAMANI Ingeniera Civil C.I.P. 78882 | | 34" | 1 | 3 | 21.32 | | | | | 63.96 | 142.95 | |
| | aC 2Ø1" | | 1" | 1 | 2 | 6.27 | | | | | | 12.54 | 49.82 |
| | aD 1Ø5/8" | | 5/8" | 1 | 1 | 5.25 | | | | | 5.25 | 8.15 | |
| | CONSORCIO CONSULTOR SAUL GARRIDO C.P.C. MARIA LUISA CABRERO MUÑOZ INGENIERA CIVIL DNI Nº 27388811 | | 1" | 1 | 3 | 5.23 | | | | | 15.69 | 62.34 | |
| | aE 1Ø3/4" | | 3/4" | 1 | 1 | 5.23 | | | | | 5.23 | 11.69 | |
| | montaje | | 308" | 1 | 2 | 20.52 | | | | | 41.04 | 22.98 | |
| | 2Ø3/8" | | 308" | 1 | 2 | 20.52 | | | | | | 22.98 | |
| | aE - aC | | | | | | | | | | | | |



CONFORME

RICARDO VICTOR SIU DELGADO
INGENIERO CIVIL
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DR. DAVID HECTOR TORRES PUENTE
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IFFE DE SUPERVISIÓN

