

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

THE DETAILED DESIGN
ON
PORT REACTIVATION PROJECT IN LA UNION PROVINCE
OF
THE REPUBLIC OF EL SALVADOR

FINAL REPORT

QUANTITY CALCULATION REPORT

Civil Works (3/4)

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OCTOBER 2002

NIPPON KOEI CO., LTD.

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ON
PORT REACTIVATION PROJECT IN LA UNION PROVINCE
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FINAL REPORT

QUANTITY CALCULATION REPORT

Civil Works (3/4)

OCTOBER 2002

NIPPON KOEI CO., LTD.



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| BOQ Item | Work Section Title | Quantity Item | Quantity | Unit | Remarks |
|-----------|--|------------------------------------|-----------|------|---------|
| | Reclamation Work | | | | |
| 2F-01 | Land Reclamation incld. Fill Material Supply | Reclamation Area | 1,518,000 | m3 | |
| 2F-0201 | Land Reclamation by dredged Material | Reclamation Area | 1,487,000 | m3 | |
| 2F-0202 | | Dumping Area A | 934,000 | m3 | |
| 2F-0203 | | Dumping Area B | 434,000 | m3 | |
| 2F-0204 | | Sand Replacement of West Revetment | 156,400 | m3 | |
| 2F-0205 | | Sand Replacement of East Revetment | 83,600 | m3 | |
| | Pavement Work | | | | |
| 2G-01 | Concrete Pavement (Type-1) | | 8,600 | m2 | |
| 2G-0101 | | Subgrade Preparation | 8,600 | m2 | |
| 2G-0102 | | Subbase Course | 1,300 | m3 | t=15cm |
| 2G-0103 | | Base Course | 1,300 | m3 | t=15cm |
| 2G-0104 | | Prime Coating | 8,600 | m2 | |
| 2G-010501 | | Concrete Slab | 3,020 | m3 | t=35cm |
| 2G-010502 | | Reinforcement and joint bar | 77,800 | kg | |
| 2G-010503 | | Elas Tigh Board | 20 | m2 | |
| 2G-010504 | | Joint filter | 340 | m2 | |
| 2G-010505 | | Iron mesh | 8,600 | m2 | |
| 2G-02 | Concrete Pavement (Type-2) | | 71,200 | m2 | |
| 2G-0201 | | Subgrade Preparation | 71,200 | m2 | |
| 2G-0202 | | Subbase Course | 10,680 | m3 | t=15cm |
| 2G-0203 | | Base Course | 10,680 | m3 | t=15cm |
| 2G-0204 | | Prime Coating | 71,200 | m2 | |
| 2G-020501 | | Concrete Slab | 21,360 | m3 | t=30cm |
| 2G-020502 | | Reinforcement and joint bar | 201,700 | kg | |
| 2G-020503 | | Elas Tigh Board | 250 | m2 | |
| 2G-020504 | | Joint filter | 872 | m2 | |
| 2G-020505 | | Iron mesh | 71,200 | m2 | |
| 2G-03 | Asphalt Concrete Pavement (Type-3) | | 19,000 | m2 | |
| 2G-0301 | | Subgrade Preparation | 19,000 | m2 | |
| 2G-0302 | | Subbase Course | 5,700 | m3 | t=30cm |
| 2G-0303 | | Base Course | 1,900 | m3 | t=10cm |
| 2G-0304 | | Prime Coating | 19,000 | m2 | |
| 2G-0305 | | Asphalt Base Course | 475 | m3 | t=2.5cm |
| 2G-0306 | | Tack Coating | 19,000 | m2 | |
| 2G-0307 | | Surface Course | 475 | m3 | t=2.5cm |
| 2G-04 | Macadam Pavement (1) (Type-4) | | 16,000 | m2 | |
| 2G-0401 | | Subgrade Preparation | 16,000 | m2 | |
| 2G-0402 | | Subbase Course | 5,600 | m3 | t=35cm |
| 2G-0403 | | Base Course | 4,000 | m3 | t=25cm |
| 2G-0404 | | Prime Coating | 16,000 | m2 | |
| 2G-05 | Macadam Pavement (2) (Type-5) | | 56,000 | m2 | |
| 2G-0501 | | Subgrade Preparation | 56,000 | m2 | |
| 2G-0502 | | Subbase Course | 14,000 | m3 | t=25cm |
| 2G-0503 | | Base Course | 11,200 | m3 | t=20cm |
| 2G-0504 | | Prime Coating | 56,000 | m2 | |
| 2G-06 | Interlocking Concrete Block Pavement for Sidewalk (Type-6) | | 2,600 | m2 | |

| BOQ Item | Work Section Title | Quantity Item | Quantity | Unit | Remarks |
|-----------|--|-----------------------------|----------|------|-----------------|
| 2G-0601 | | Subgrade Preparation | 2,600 | m2 | |
| 2G-0602 | | Base Course | 260 | m3 | t=10cm |
| 2G-0603 | | Sand Cushion | 52 | m3 | t=2cm |
| 2G-0604 | | Interlocking Concrete Block | 260 | m3 | t=10cm |
| 2G-07 | Gravel Pavement with Concrete plate (Container Stacking Plate) | | 23,000 | m2 | |
| 2G-070101 | | Subgrade Preparation | 23,000 | m2 | |
| 2G-070102 | | Gravel Pavement | 6,075 | m3 | t=30cm, 20250m2 |
| | Concrete Stacking Plate (Type-A) | | 1,070 | Nos | 2140m2 |
| 2G-070201 | | Base Course | 1,070 | m3 | t=50cm |
| 2G-070202 | | Lean Concrete | 107 | m3 | t=5cm |
| 2G-070301 | | Form for Type-A | 3,430 | m2 | 3.2m2 / N |
| 2G-070302 | | Re-Bar for Type-A | 62,000 | kg | 57.9kg / N |
| 2G-070303 | | Concrete for Type-A | 430 | m3 | 0.4m3 / N |
| | Concrete Stacking Plate (Type-B) | | 420 | Nos | 462m2 |
| 2G-070203 | | Base Course | 240 | m3 | t=50cm |
| 2G-070204 | | Lean Concrete | 24 | m3 | t=5cm |
| 2G-070401 | | Form for Type-B | 900 | m2 | 2.12m2 / N |
| 2G-070402 | | Re-Bar for Type-B | 14,000 | kg | 33.1kg / N |
| 2G-070403 | | Concrete for Type-B | 93 | m3 | 0.22m3 / N |
| | Concrete Stacking Plate (Type-C) | | 40 | Nos | 56m2 |
| 2G-070205 | | Base Course | 28 | m3 | t=50cm |
| 2G-070206 | | Lean Concrete | 2.8 | m3 | t=5cm |
| 2G-070501 | | Form for Type-C | 100 | m2 | 2.48m2 / N |
| 2G-070502 | | Re-Bar for Type-C | 1,700 | kg | 41.3kg / N |
| 2G-070503 | | Concrete for Type-C | 12 | m3 | 0.28m3 / N |
| | Concrete Stacking Plate (Type-D) | | 28 | Nos | 28m2 |
| 2G-070207 | | Base Course | 14 | m3 | t=50cm |
| 2G-070208 | | Lean Concrete | 1.4 | m3 | t=5cm |
| 2G-070601 | | Form for Type-D | 51 | m2 | 1.8m2 / N |
| 2G-070602 | | Re-Bar for Type-D | 770 | kg | 27.2kg / N |
| 2G-070603 | | Concrete for Type-D | 6 | m3 | 0.2m3 / N |
| | Concrete Stacking Plate (Type-E) | | 56 | Nos | 39.2m2 |
| 2G-070209 | | Base Course | 20 | m3 | t=50cm |
| 2G-070210 | | Lean Concrete | 2.0 | m3 | t=5cm |
| 2G-070701 | | Form for Type-E | 78 | m2 | 1.38m2 / N |
| 2G-070702 | | Re-Bar for Type-E | 1,100 | kg | 19.5kg / N |
| 2G-070703 | | Concrete for Type-E | 8 | m3 | 0.14m3 / N |
| 2G-08 | Grass Area | | 13,700 | m2 | |
| 2G-09 | Concrete Curb (Type-1) | | 3,600 | m | |
| 2G-090101 | | Concrete for Curb | 173 | m3 | |
| 2G-090102 | | Form (side) for Curb | 2,880 | m2 | |
| 2G-090103 | | Form (bottom) for Curb | 648 | m2 | |
| 2G-090201 | | Cement Concrete Base | 30.6 | m3 | |
| 2G-090202 | | Cement Mortar | 12.3 | m3 | |
| 2G-10 | Concrete Curb (Type-2) | | 2,000 | m | |
| 2G-100101 | | Concrete for Curb | 60.0 | m3 | |
| 2G-100102 | | Form (side) for Curb | 1,040 | m2 | |
| 2G-100103 | | Form (bottom) for Curb | 320 | m2 | |

| BOQ Item | Work Section Title | Quantity Item | Quantity | Unit | Remarks |
|-----------|------------------------|------------------------|----------|------|---------|
| 2G-100201 | | Excavation | 300 | m3 | |
| 2G-100202 | | Crushed stone | 25.0 | m3 | |
| 2G-100203 | | Cement Concrete Base | 50.0 | m3 | |
| 2G-100204 | | Backfill | 165 | m | |
| 2G-100205 | | Compaction | 700 | m2 | |
| 2G-11 | Concrete Curb (Type-3) | | 1,100 | m | |
| 2G-110101 | | Concrete for Curb | 59.4 | m3 | |
| 2G-110102 | | Form (side) for Curb | 1,020 | m2 | |
| 2G-110103 | | Form (bottom) for Curb | 176 | m2 | |
| 2G-110201 | | Excavation | 165 | m3 | |
| 2G-110202 | | Crushed stone | 13.8 | m3 | |
| 2G-110203 | | Cement Concrete Base | 27.5 | m3 | |
| 2G-110204 | | Backfill | 89.9 | m | |
| 2G-110205 | | Compaction | 385 | m2 | |
| 2G-12 | Traffic Marking | | 7,400 | m2 | |
| 2G-13 | Traffic Sign Board | | | | |
| 2G-1301 | Guide Post | | 2 | Nos | |
| 2G-130101 | | Excavation | 5.0 | m3 | |
| 2G-130102 | | Form | 10.0 | m2 | |
| 2G-130103 | | Concrete | 2.0 | m3 | |
| 2G-130104 | | Backfill | 4.0 | m3 | |
| 2G-130105 | | Compaction | 3.0 | m2 | |
| 2G-1302 | Sign Post | | 5 | Nos | |
| 2G-130201 | | Excavation | 2.0 | m3 | |
| 2G-130202 | | Form | 10.0 | m2 | |
| 2G-130203 | | Concrete | 1.0 | m3 | |
| 2G-130204 | | Backfill | 1.0 | m3 | |
| 2G-130205 | | Compaction | 2.0 | m2 | |
| 2G-1303 | Road Sign | | 12.0 | m2 | |