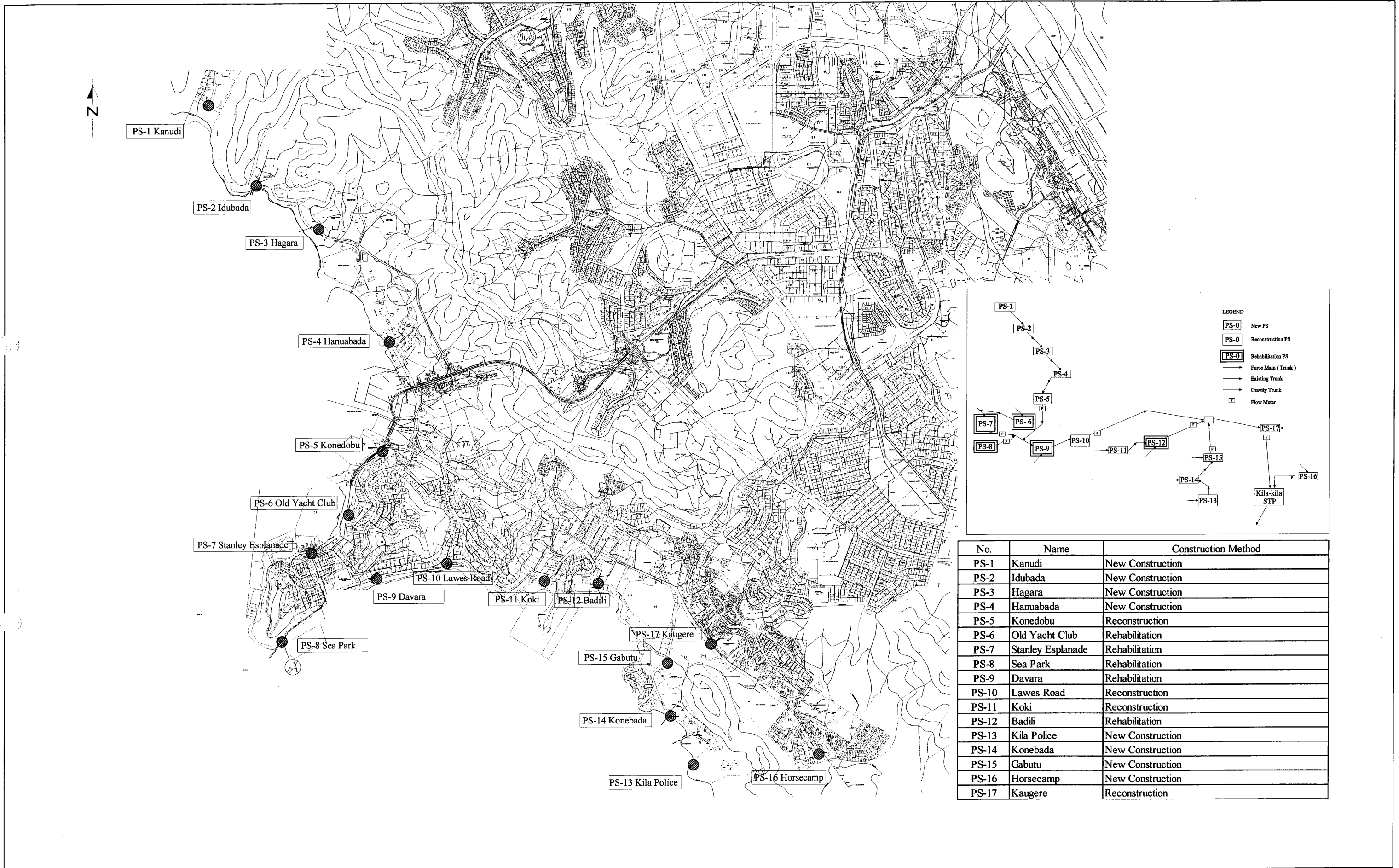
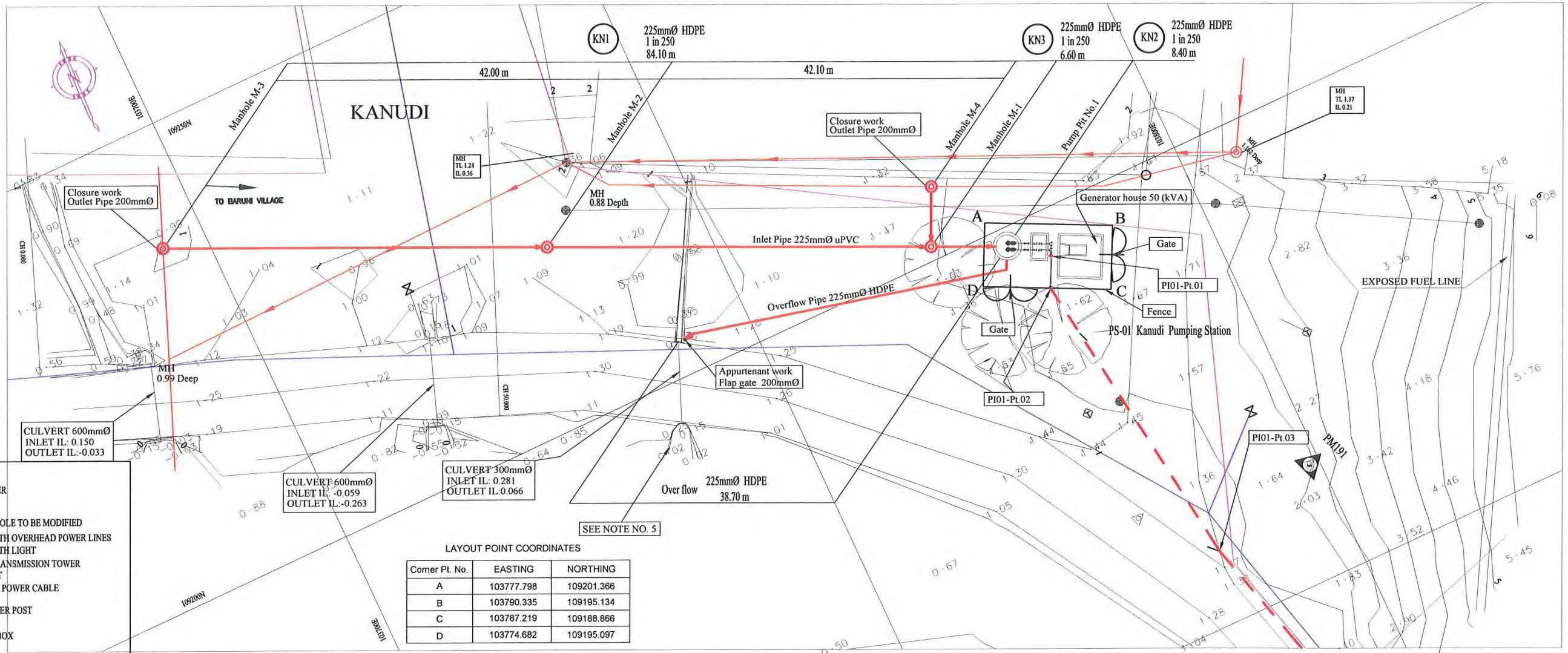


LIST OF TENDER DRAWINGS

| Drawing No. | Title | Scale | Drawing No. | Title | Scale |
|-------------|---|-------|--------------|---|-------------|
| | <PUMPING STATION> | | | | |
| | | | | < KILA POLICE Pumping Station > | |
| PS-GE-CC-01 | Location Map | - | PS-KP-CC-01 | PS-13 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 |
| | | | PS-KP-CC-02 | PS-13 Pump Well Plan and Section | 1/100 |
| | < KANUDI Pumping Station > | | PS-KP-CC-03 | PS-13 Pump Well Reinforcement Details | 1/100 |
| PS-KN-CC-01 | PS-01 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | | < KONEBADA Pumping Station > | |
| PS-KN-CC-02 | PS-01 Pump Well Plan and Section | 1/100 | PS-KB-CC-01 | PS-14 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 |
| PS-KN-CC-03 | PS-01 Pump Well Reinforcement Details | 1/100 | PS-KB-CC-02 | PS-14 Pump Well Plan and Section | 1/100 |
| | < IDUBADA Pumping Station > | | PS-KB-CC-03 | PS-14 Pump Well Reinforcement Details | 1/100 |
| PS-IB-CC-01 | PS-02 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | | < GABUTU Pumping Station > | |
| PS-IB-CC-02 | PS-02 Pump Well Plan and Section | 1/100 | PS-GB-CC-01 | PS-15 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 |
| PS-IB-CC-03 | PS-02 Pump Well Reinforcement Details | 1/100 | PS-GB-CC-02 | PS-15 Pump Well Plan and Section | 1/100 |
| | < HAGARA Pumping Station > | | PS-GB-CC-03 | PS-15 Pump Well Reinforcement Details | 1/100 |
| PS-HG-CC-01 | PS-03 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | | < HORSECAMP Pumping Station > | |
| PS-HG-CC-02 | PS-03 Pump Well Plan and Section | 1/100 | PS-HC-CC-01 | PS-16 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 |
| PS-HC-CC-03 | PS-03 Pump Well Reinforcement Details | 1/100 | PS-HC-CC-02 | PS-16 Pump Well Plan and Section | 1/100 |
| | < HANUABADA Pumping Station > | | PS-HC-CC-03 | PS-16 Pump Well Reinforcement Details | 1/100 |
| PS-HB-CC-01 | PS-04 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | PS-HC-CC-04 | PS-16 Tenporary Works | 1/100 |
| PS-HB-CC-02 | PS-04 Pump Well Plan and Section | 1/100 | | < KAUGERE Pumping Station > | |
| PS-HB-CC-03 | PS-04 Pump Well Reinforcement Details | 1/100 | PS-KG-CC-01 | PS-17 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 |
| | < KONEDOBU Pumping Station > | | PS-KG-CC-02 | PS-17 Pump Well Plan and Section | 1/100 |
| PS-KD-CC-01 | PS-05 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | PS-KG-CC-03 | PS-17 Pump Well Reinforcement Details | 1/100 |
| PS-KD-CC-02 | PS-05 Land Reclamation | 1/200 | | | |
| PS-KD-CC-03 | PS-05 Pump Well Plan and Section | 1/100 | PS-GE-CC-02 | Valve Pit Details | 1/100 |
| PS-KD-CC-04 | PS-05 Pump Well Reinforcement Details | 1/100 | PS-GE-CC-03 | Miscelenious Details | 1/100 |
| | < OLD YACHT CLUB Pumping Station > | | | | |
| PS-OY-CC-01 | PS-06 Gneral Layout, Plan & Section | 1/100 | PS-GH-A001 | Generator House (20 kVA) - Floor Plan, Section & Elevations | 1/50, 1/100 |
| | < STANLEY ESPLANADE Pumping Station > | | PS-GH-A002 | Generator House (37.5 kVA) - Plan, Elevations & Sections | 1/50, 1/100 |
| PS-SE-CC-01 | PS-07 Gneral Layout, Plan & Section | 1/150 | PS-GH-A003 | Generator House (50/75 kVA) - Plan, Elevations & Sections | 1/50, 1/100 |
| | < SEA PARK Pumping Station > | | PS-GH-A004 | Generator House (200 kVA) - Plan, Elevations & Sections | 1/50, 1/100 |
| PS-SP-CC-01 | PS-08 Gneral Layout, Plan & Section | 1/100 | PS-GH-A005 | Generator House (250 kVA) - Plan, Elevations & Sections | 1/50, 1/100 |
| | < DAVARA Pumping Station > | | | | |
| PS-DV-CC-01 | PS-09 Gneral Layout, Plan & Section | 1/100 | PS-GH-AME001 | Generator House - Building Services Layout | 1/150 |
| | < LAWES ROAD Pumping Station > | | | | |
| PS-LR-CC-01 | PS-10 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | PS-GH-S001 | Generator House - Structural Plan and Section | |
| PS-LR-CC-02 | PS-10 Pump Well Plan and Section | 1/100 | PS-GH-S002 | Generator House - Footing Details | |
| PS-LR-CC-03 | PS-10 Pump Well Reinforcement Details | 1/100 | PS-GH-S003 | Generator House - Blockwall and Roof Details | |
| | < KOKI Pumping Station > | | | | |
| PS-KK-CC-01 | PS-11 Gneral Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | 1/400 | | | |
| PS-KK-CC-02 | PS-11 Pump Well Plan and Section | 1/100 | | | |
| PS-KK-CC-03 | PS-11 Pump Well Reinforcement Details | 1/100 | | | |
| | < BADILI Pumping Station > | | | | |
| PS-BD-CC-01 | PS-12 Gneral Layout, Plan & Section | 1/100 | | | |



| PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP) | | TITLE: Pumping Station Location Map | | | | | | | | | | | |
|--|---|---|---|------|-----------------------|--|--|--|--|--|--|--|--|
| CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION JAPAN INTERNATIONAL COOPERATION AGENCY | CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN | NOTES: | APPROVED by PMU: Project Director Lot G.Zauya | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>REVISIONS DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> | REV. | DATE | REVISIONS DESCRIPTION | | | | | | | | |
| REV. | DATE | REVISIONS DESCRIPTION | | | | | | | | | | | |
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LAYOUT POINT COORDINATES

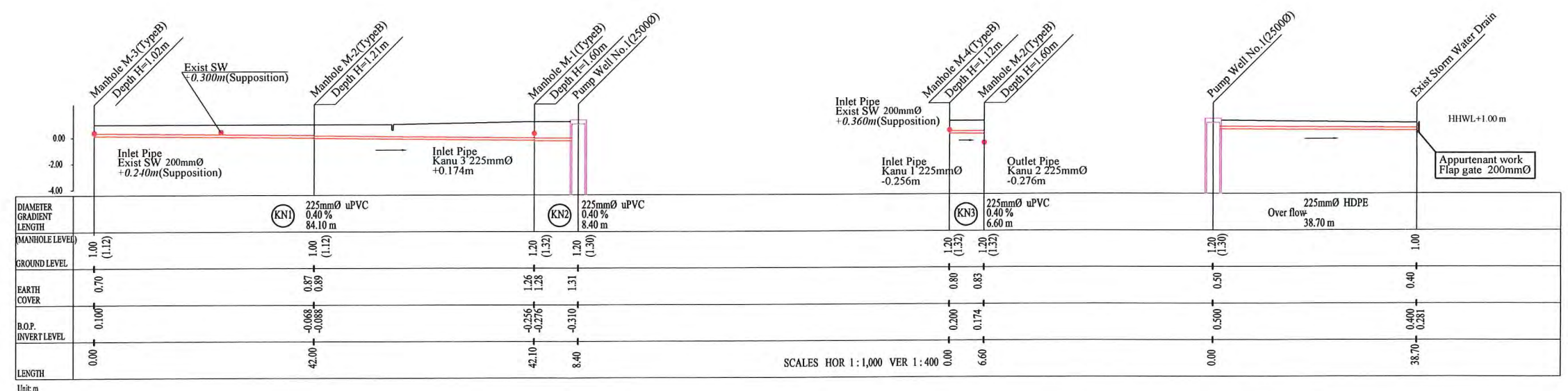
| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| A | 103777.798 | 109201.366 |
| B | 103790.335 | 109195.134 |
| C | 103787.219 | 109188.866 |
| D | 103774.682 | 109195.097 |

LEGEND

- PROPOSED SEWER
- NEW MANHOLE
- EXISTING MANHOLE TO BE MODIFIED
- POWER POLE WITH OVERHEAD POWER LINES
- POWER POLE WITH LIGHT
- ELECTRICITY TRANSMISSION TOWER
- ELECTRICITY PIT
- UNDER GROUND POWER CABLE
- TELECOM PIT
- TELECOM MARKER POST
- TELECOM LINE
- WATER VALVE BOX
- STOP VALVE
- WATER TAP
- FIRE HYDRANT
- WATER METER
- EXISTING SEWER PIPE
- TREE
- WATER LINE
- FENCE LINE WITH GATE
- BITUMEN SEALED ROAD

PLAN VIEW
Scale : 1:500

- NOTE: CADASTRAL BOUNDARIES TAKEN FROM DCDB
- LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL EXISTING UTILITIES IN OPERATION.
 - UNDERGROUND UTILITY SERVICES TO RESIDENTIAL, PUBLIC AND COMMERCIAL BUILDINGS OR OTHER FACILITIES HAVE NOT BEEN SHOWN BUT SHALL BE LOCATED AND PROTECTED IN A SIMILAR MANNER AS DESCRIBED ABOVE BY THE CONTRACTOR
 - INVERT MODIFICATION IS INCLUDED IN THE CONTRACT
INVERT LEVEL OF NEW PIPE \geq EXISTING PIPE BOTTOM LEVEL +20mm
INVERT LEVEL OF NEW PIPE - EXISTING PIPE BOTTOM LEVEL \geq +600mm
DROP PIPE IS REQUIRED
 - MINIMUM COVER IS 60cm FOR UNPAVED ROAD
90cm FOR ASPHALT/CONCRETE PAVED ROAD IF NOT DESCRIBED ON THE DRAWING
Type A - Soil/others
Type B - Asphalt(Road)
Type C - Walkway (Concrete)
 - THE CONTRACTOR SHALL EXTEND THE LENGTH OF THE STORM WATER DRAIN TO THE SEA SAME LENGTH AS EXISTING OUTFALL TO PREVENT ACCUMULATION OF SLUDGE AROUND SHORE LINE.



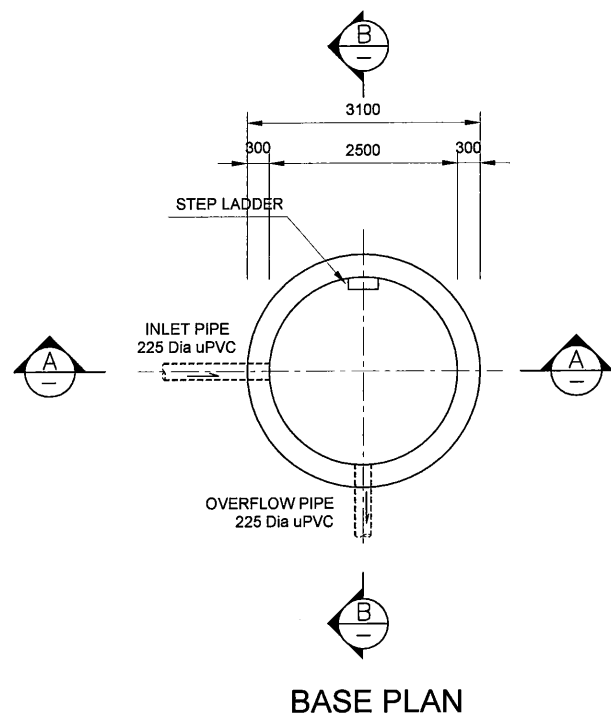
PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP) TITLE: PS-01 Kanudi Pumping Station, General Layout, Inlet Pipe & Over Flow Pipe Plan and Profile

CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION
PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
PROJECT MANAGEMENT UNIT (PMU)
JICA JAPAN INTERNATIONAL COOPERATION AGENCY

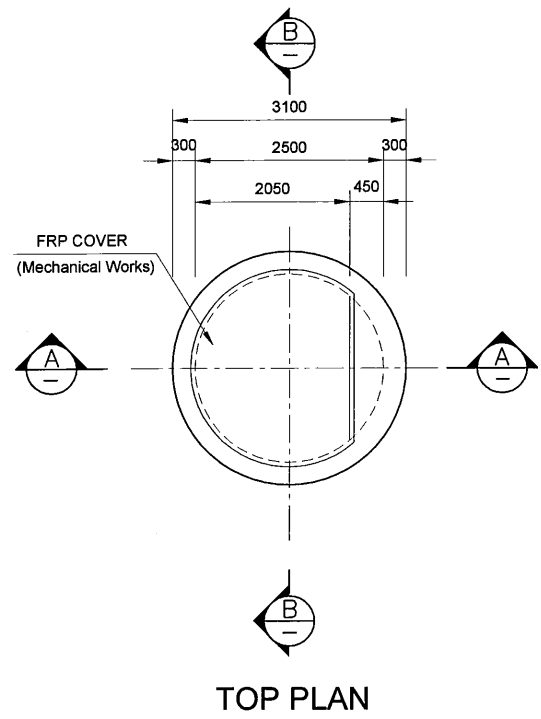
CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN

NOTES:

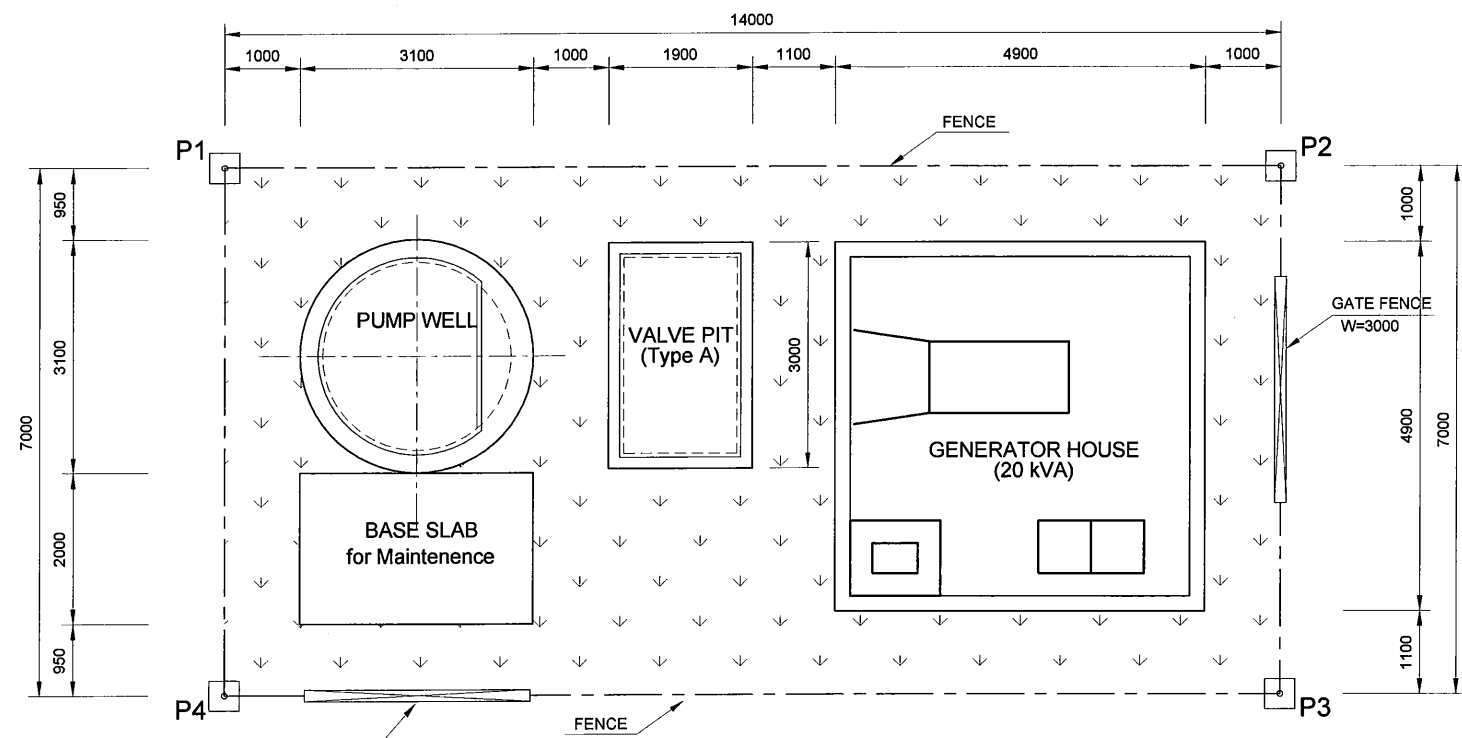
| REVISIONS | | | APPROVED by PMU: Project Director Lot G.Zauya | DATE: 1. Dec 2011 | SCALE: AS SHOWN |
|-----------|------|-------------|---|----------------------|-----------------------------|
| REV. | DATE | DESCRIPTION | | | |
| | | | CHECKED by CONSULTANT Project Manager T.Fuji | DATE: 1. Dec 2011 | DRAWING NO.: PS-KN-CC-01 |
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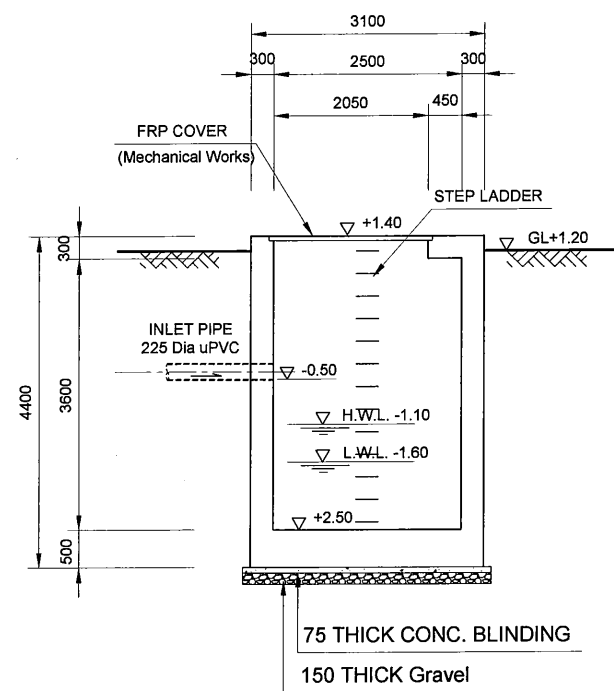
BASE PLAN



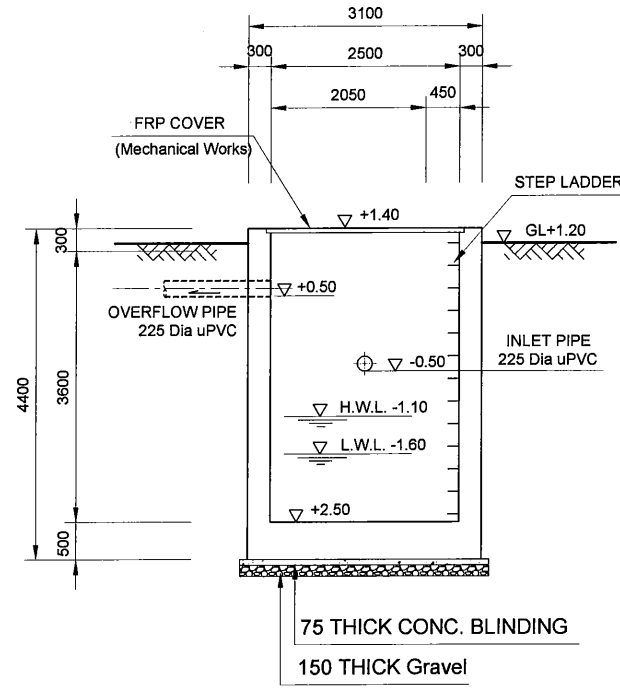
TOP PLAN



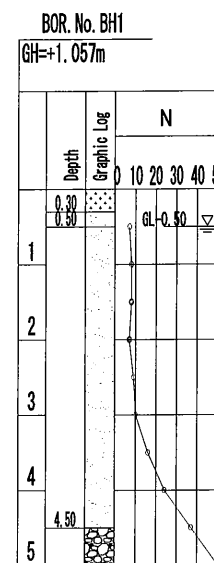
LAYOUT PLAN



SECTION A-A



SECTION B-B



LAYOUT POINT COORDINATES

| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| P1 | 103777.798 | 109201.366 |
| P2 | 103790.335 | 109195.134 |
| P3 | 103787.219 | 109188.866 |
| P4 | 103774.682 | 109195.097 |

NOTES

- ALL INSIDE CONCRETE SURFACE OF TOP AND SIDE WALL IN PUMP WELL SHALL BE PAINTED BY VINYL ESTER RESIN OR EQUIVALENT WITH 1mm THICKNESS AFTER HARDENING
- REFER TO STD DRAWINGS FOR MISCELLANEOUS WORKS SUCH AS HANDRAIL, COVER, STEP LADDER, STAIR, STOP LOG AND EXPANTION JOINT

PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)

TITLE: PS-1 Kanudi Pumping Station - Layout, Pump Well Plan and Section

CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION
PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
PROJECT MANAGEMENT UNIT (PMU)
jica JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN

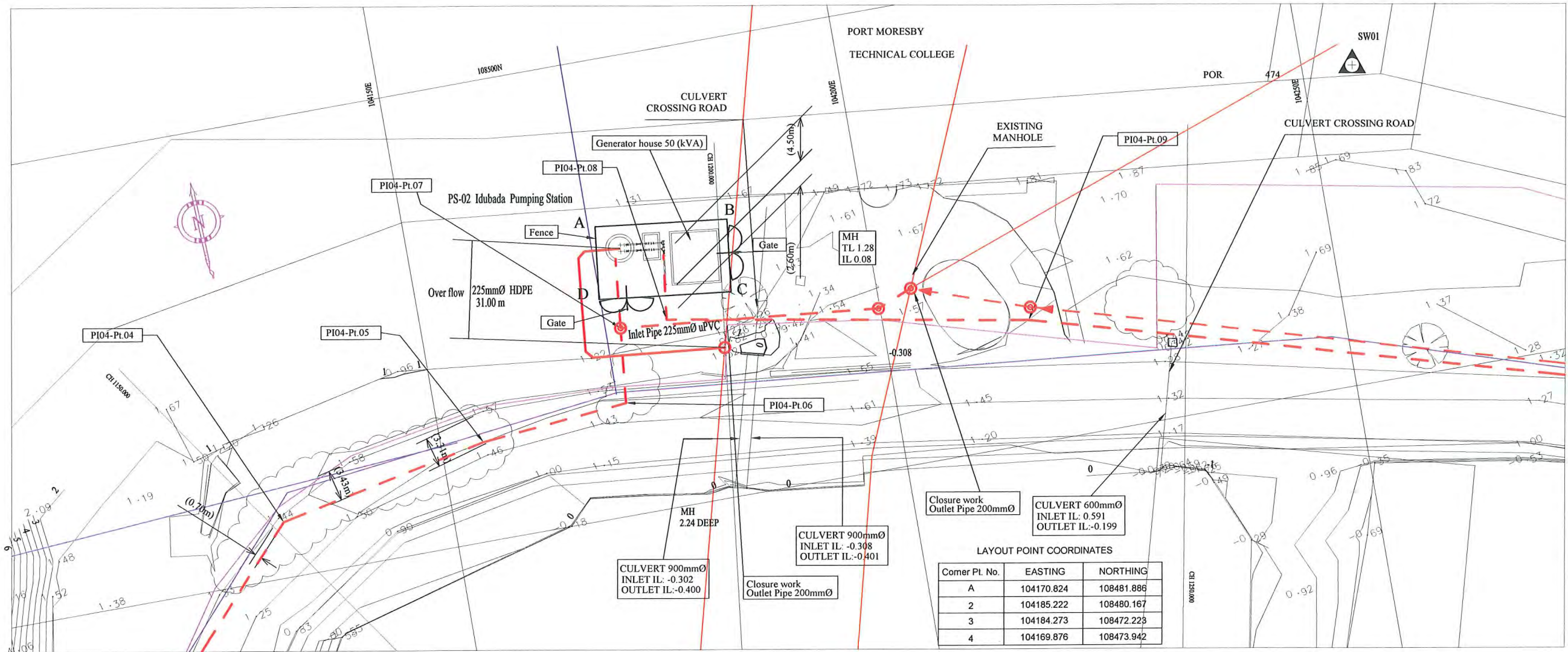
NOTES:

| REVISIONS | | |
|-----------|------|-------------|
| REV. | DATE | DESCRIPTION |
| | | |
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APPROVED by PMU:
Project Director
Lot G.Zauya
CHECKED by CONSULTANT
Project Manager
T.Fuji

DATE: 1. Dec 2011
DATE: 1. Dec 2011

SCALE: 1/100
DRAWING NO.: PS-KN-CC-02



Closure work
Outlet Pipe 200mmØ

CULVERT 600mmØ
INLET IL: 0.591
OUTLET IL: -0.199

LAYOUT POINT COORDINATES

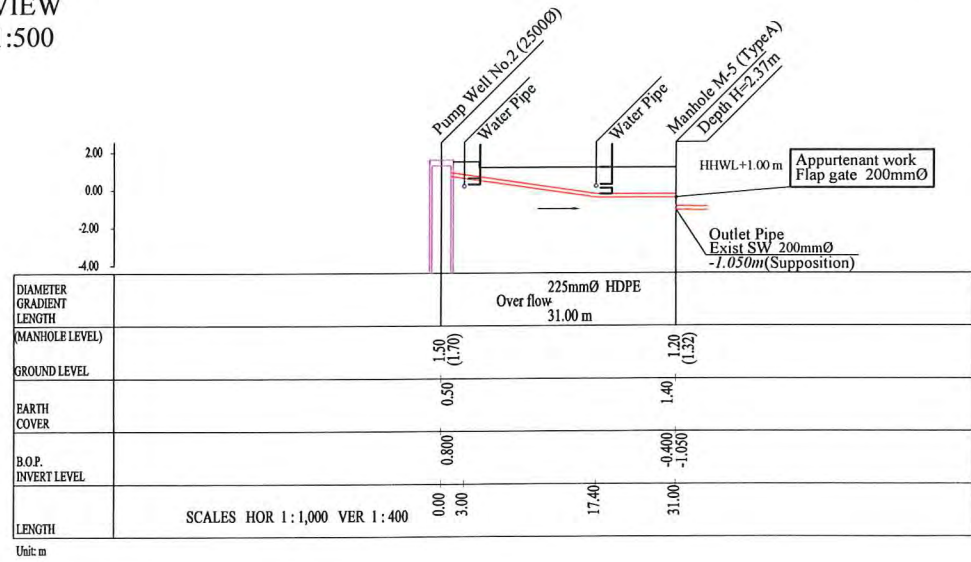
| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| A | 104170.824 | 108481.886 |
| 2 | 104185.222 | 108480.167 |
| 3 | 104184.273 | 108472.223 |
| 4 | 104169.876 | 108473.942 |

PLAN VIEW
Scale : 1:500

LEGEND

- PROPOSED SEWER
- NEW MANHOLE
- EXISTING MANHOLE TO BE MODIFIED
- POWER POLE WITH OVERHEAD POWER LINES
- POWER POLE WITH LIGHT
- ELECTRICITY TRANSMISSION TOWER
- ELECTRICITY PIT
- UNDER GROUND POWER CABLE
- TELECOM PIT
- TELECOM MARKER POST
- TELECOM LINE
- WATER VALVE BOX
- STOP VALVE
- WATER TAP
- FIRE HYDRANT
- WATER METER
- EXISTING SEWER PIPE
- TREE
- WATER LINE
- FENCE LINE WITH GATE
- BITUMEN SEALED ROAD

- NOTE: CADASTRAL BOUNDARIES TAKEN FROM DCDB
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 - INVERT MODIFICATION IS INCLUDED IN THE CONTRACT
 INVERT LEVEL OF NEW PIPE \geq EXISTING PIPE BOTTOM LEVEL +20mm
 INVERT LEVEL OF NEW PIPE - EXISTING PIPE BOTTOM LEVEL \geq +600mm
 DROP PIPE IS REQUIRED
 - MINIMUM COVER IS 60cm FOR UNPAVED ROAD
 90cm FOR ASPHALT/CONCRETE PAVED ROAD IF NOT DESCRIBED ON THE DRAWING
 Type A - Soil/others
 Type B - Asphalt(Road)
 Type C - Walkway (Concrete)
 - INLET PIPE IS BRANCH SEWER SCOPE



PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)

TITLE: PS-02 Idubada Pumping Station, General Layout, Inlet Pipe & Over Flow Pipe Plan and Profile

CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION
 PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
 PROJECT MANAGEMENT UNIT (PMU)

CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN

NOTES:

| REVISIONS | | |
|-----------|------|-------------|
| REV. | DATE | DESCRIPTION |
| | | |
| | | |
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APPROVED by PMU:
 Project Director
 Lot G.Zauya

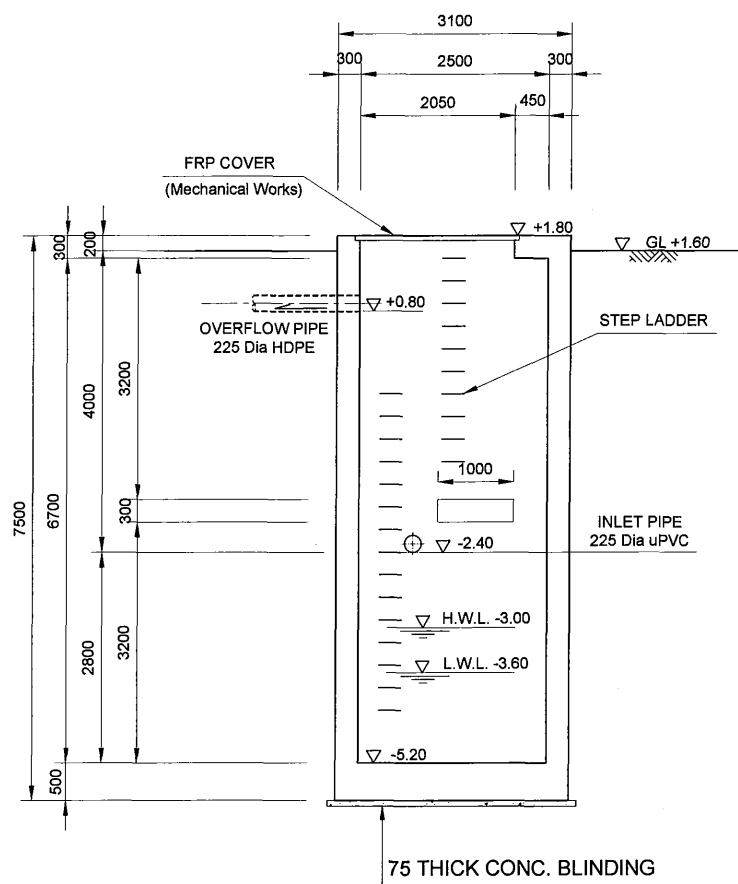
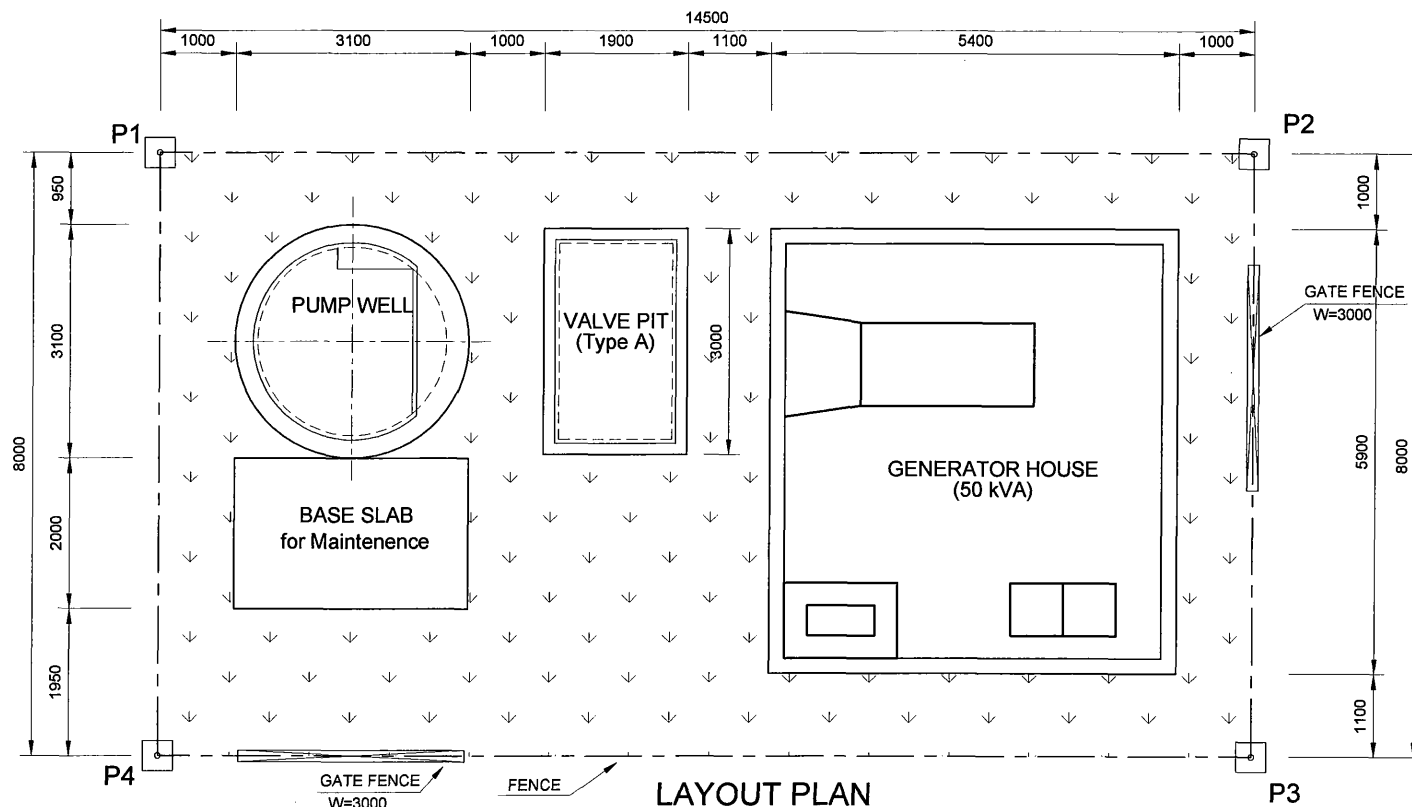
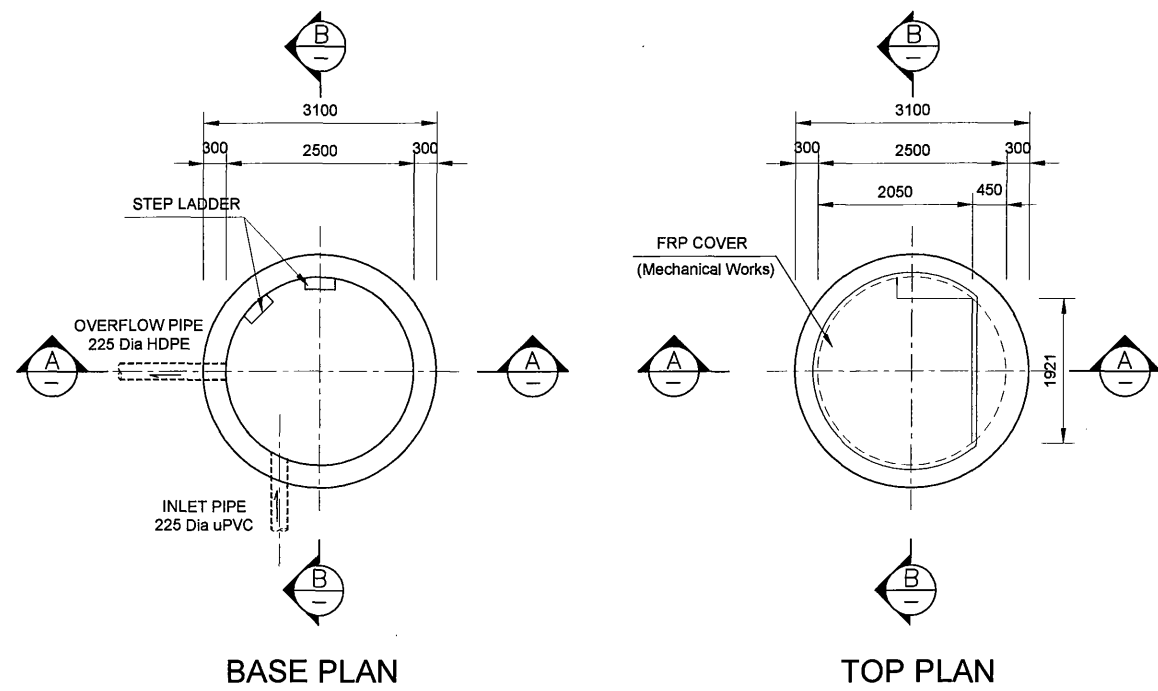
CHECKED by CONSULTANT
 Project Manager
 T.Fuji

DATE: 1. Dec 2011

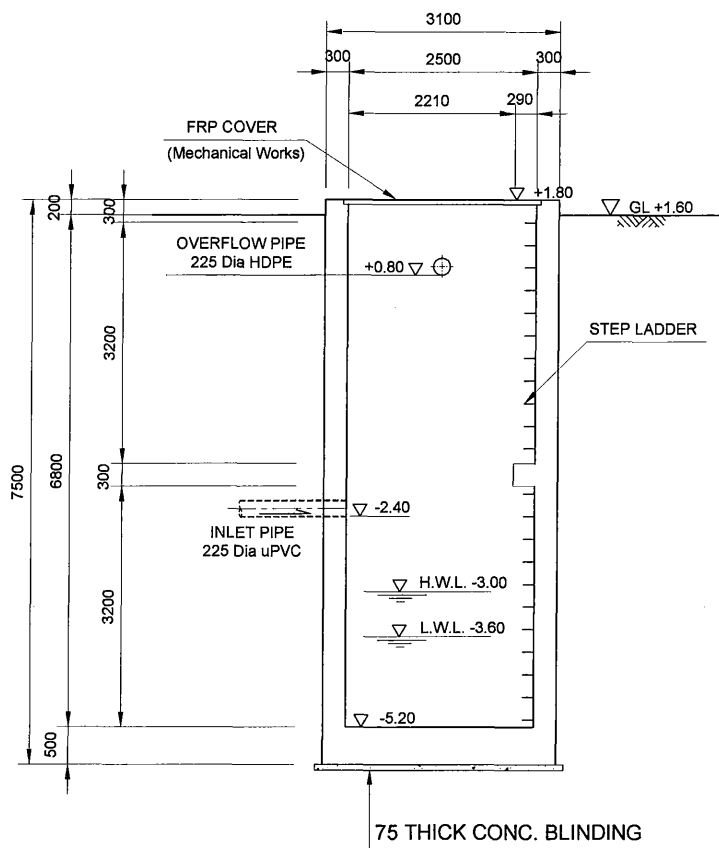
SCALE: AS SHOWN

DATE: 1. Dec 2011

DRAWING NO.: PS-IB-CC-01

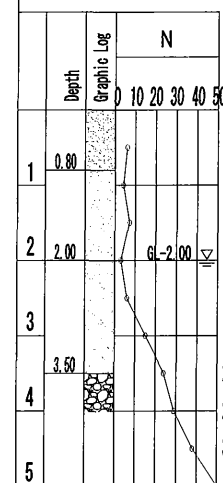


SECTION A-A



SECTION B-B

BOR. No. DCP/TP2
GH=+1.325m



LAYOUT POINT COORDINATES

| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| P1 | 104170.824 | 108481.886 |
| P2 | 104185.222 | 108480.167 |
| P3 | 104184.273 | 108472.223 |
| P4 | 104169.876 | 108473.942 |

NOTES

- ALL INSIDE CONCRETE SURFACE OF TOP AND SIDE WALL IN PUMP WELL SHALL BE PAINTED BY VINYL ESTER RESIN OR EQUIVALENT WITH 1mm THICKNESS AFTER HARDENING
- REFER TO STD DRAWINGS FOR MISCELLANEOUS WORKS SUCH AS HANDRAIL, COVER, STEP LADDER, STAIR, STOP LOG AND EXPANTION JOINT

PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)

TITLE: PS-2 Idubada Pumping Station - Layout, Pump Well Plan and Section

CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION
PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
PROJECT MANAGEMENT UNIT (PMU)
jica JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN

NOTES:

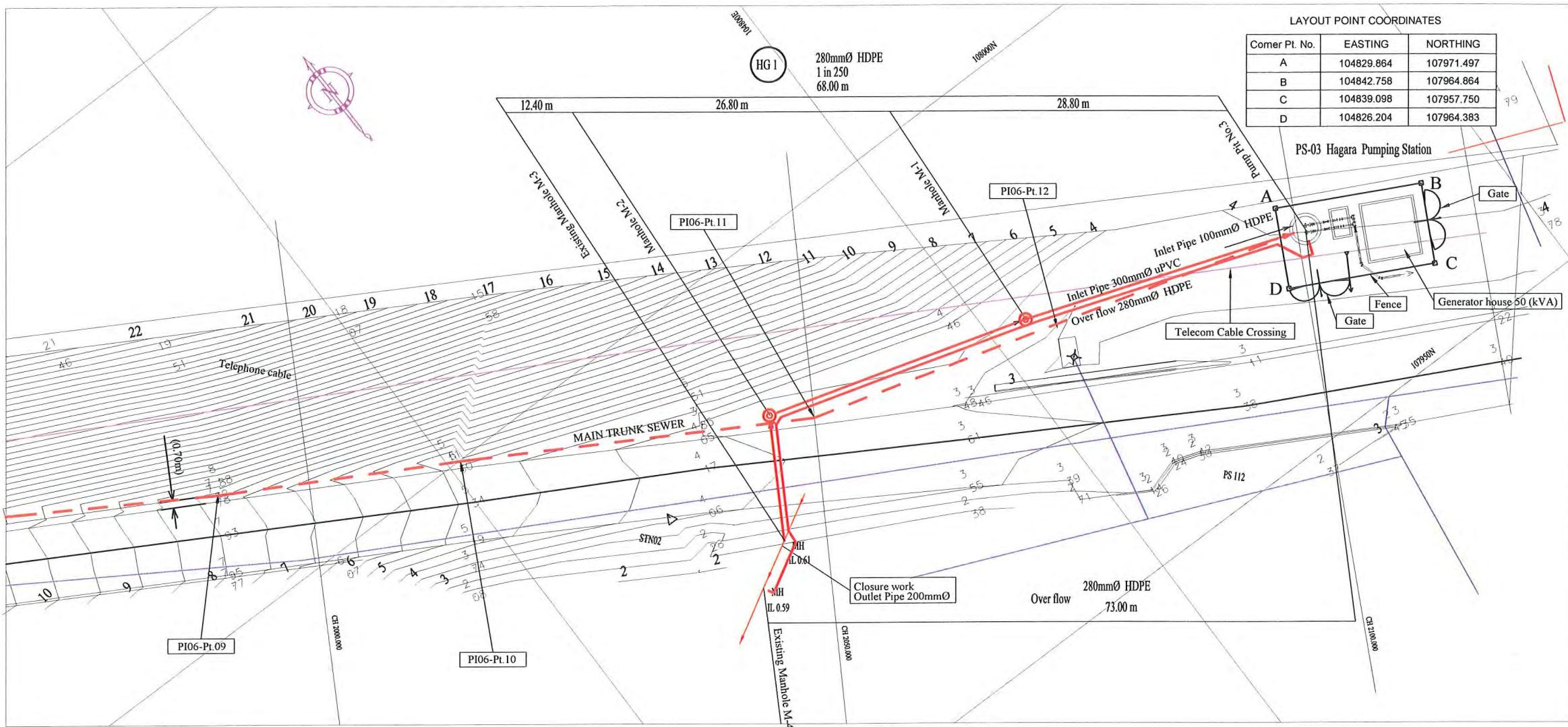
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| REV. | DATE | DESCRIPTION |
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| | | |

APPROVED BY PMU:
Project Director
Lot G.Zauya
CHECKED BY CONSULTANT
Project Manager
T.Fuji

DATE: 1. Dec 2011
SCALE: 1/100
DATE: 1. Dec 2011
DRAWING NO.: PS-IB-CC-02

LEGEND

| | |
|--|--------------------------------------|
| | PROPOSED SEWER |
| | NEW MANHOLE |
| | EXISTING MANHOLE TO BE MODIFIED |
| | POWER POLE WITH OVERHEAD POWER LINES |
| | POWER POLE WITH LIGHT |
| | ELECTRICITY TRANSMISSION TOWER |
| | ELECTRICITY PIT |
| | UNDER GROUND POWER CABLE |
| | TELECOM PIT |
| | TELECOM MARKER POST |
| | TELECOM LINE |
| | WATER VALVE BOX |
| | STOP VALVE |
| | WATER TAP |
| | FIRE HYDRANT |
| | WATER METER |
| | EXISTING SEWER PIPE |
| | TREE |
| | WATER LINE |
| | FENCE LINE WITH GATE |
| | BITUMEN SEALED ROAD |



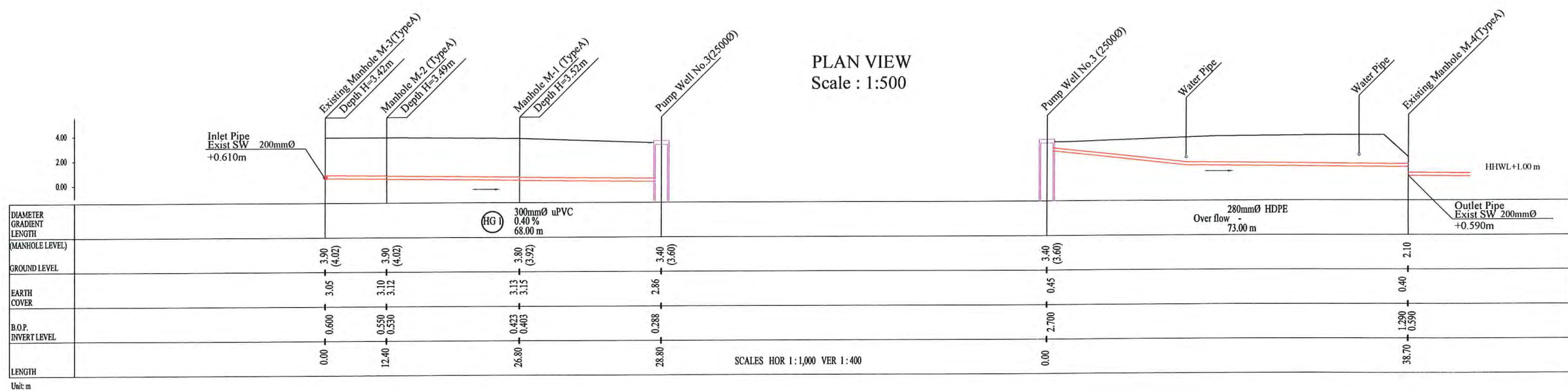
LAYOUT POINT COORDINATES

| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| A | 104829.864 | 107971.497 |
| B | 104842.758 | 107964.864 |
| C | 104839.098 | 107957.750 |
| D | 104826.204 | 107964.383 |

NOTE: CADASTRAL BOUNDARIES TAKEN FROM DCDB

- 1) LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL EXISTING UTILITIES IN OPERATION.
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- 3) INVERT MODIFICATION IS INCLUDED IN THE CONTRACT
 INVERT LEVEL OF NEW PIPE \geq EXISTING PIPE BOTTOM LEVEL +20mm
 INVERT LEVEL OF NEW PIPE - EXISTING PIPE BOTTOM LEVEL \geq +600mm
 DROP PIPE IS REQUIRED
- 4) MINIMUM COVER IS 60cm FOR UNPAVED ROAD
 90cm FOR ASPHALT/CONCRETE PAVED ROAD IF NOT DESCRIBED ON THE DRAWING

- Type A - Soil/others
 Type B - Asphalt(Road)
 Type C - Walkway (Concrete)



PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)

TITLE: PS-03 Hagara Pumping Station, General Layout, Inlet Pipe & Over Flow Pipe Plan and Profile

CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION
 PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
 PROJECT MANAGEMENT UNIT (PMU)
 JICA JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN

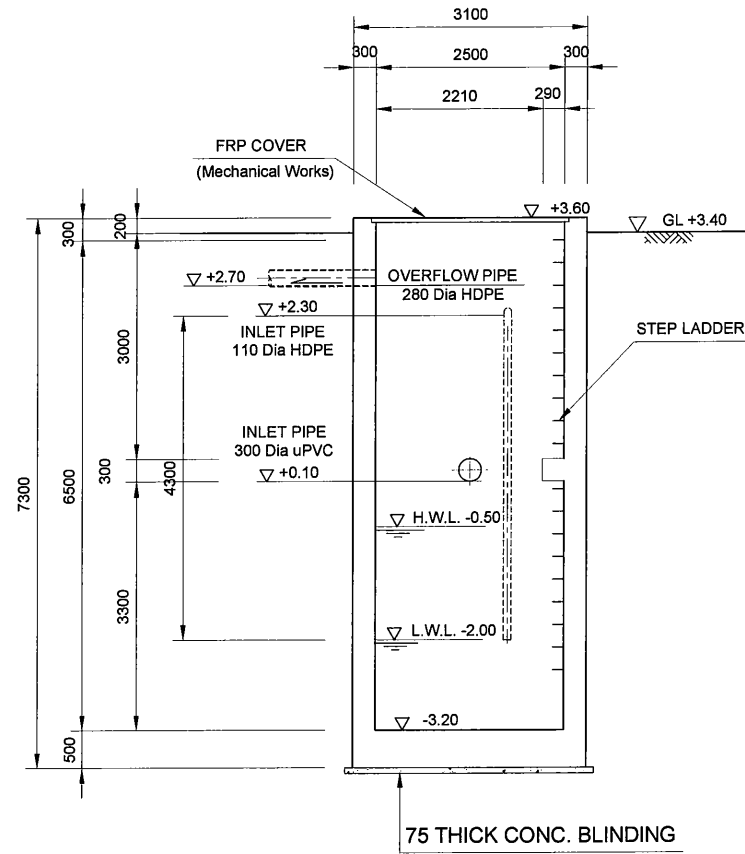
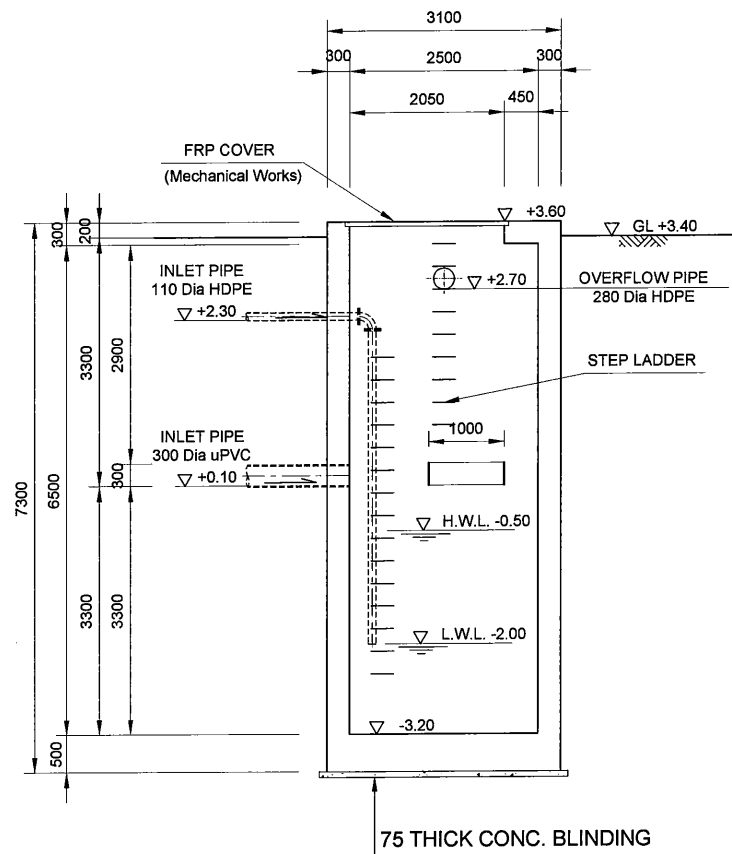
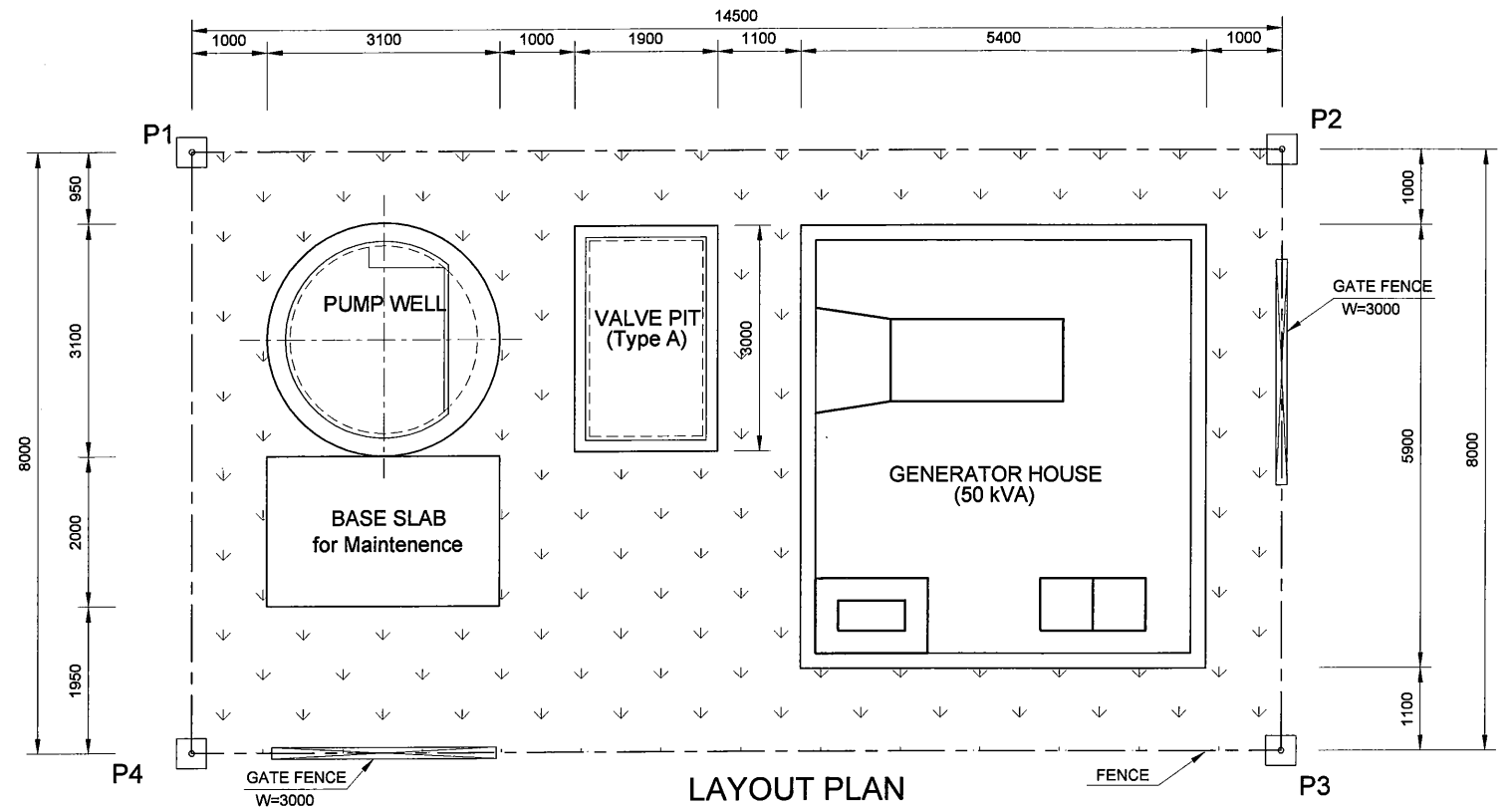
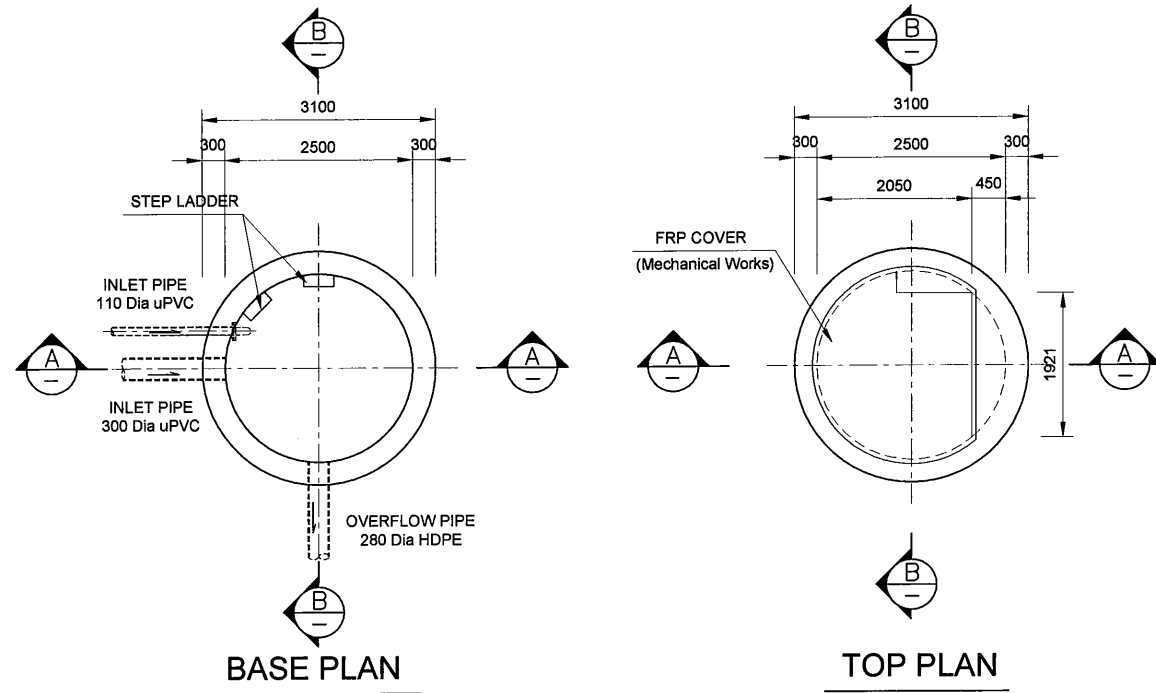
NOTES:

| REVISIONS | | |
|-----------|------|-------------|
| REV. | DATE | DESCRIPTION |
| | | |
| | | |
| | | |

APPROVED by PMU:
 Project Director
 Lot G.Zauya
 CHECKED by CONSULTANT
 Project Manager
 T.Fuji

DATE: 1. Dec 2011
 DATE: 1. Dec 2011

SCALE: AS SHOWN
 DRAWING NO.: PS-HG-CC-01



BOR. No. BH3
GH=+6.007m

| Depth | Graphic Log | N |
|-------|-------------|----|
| 0.40 | | 12 |
| 0.80 | | 21 |
| 1.50 | | 12 |
| 2.50 | | 35 |
| 3.00 | | |
| 3.30 | | |
| 3.60 | | |

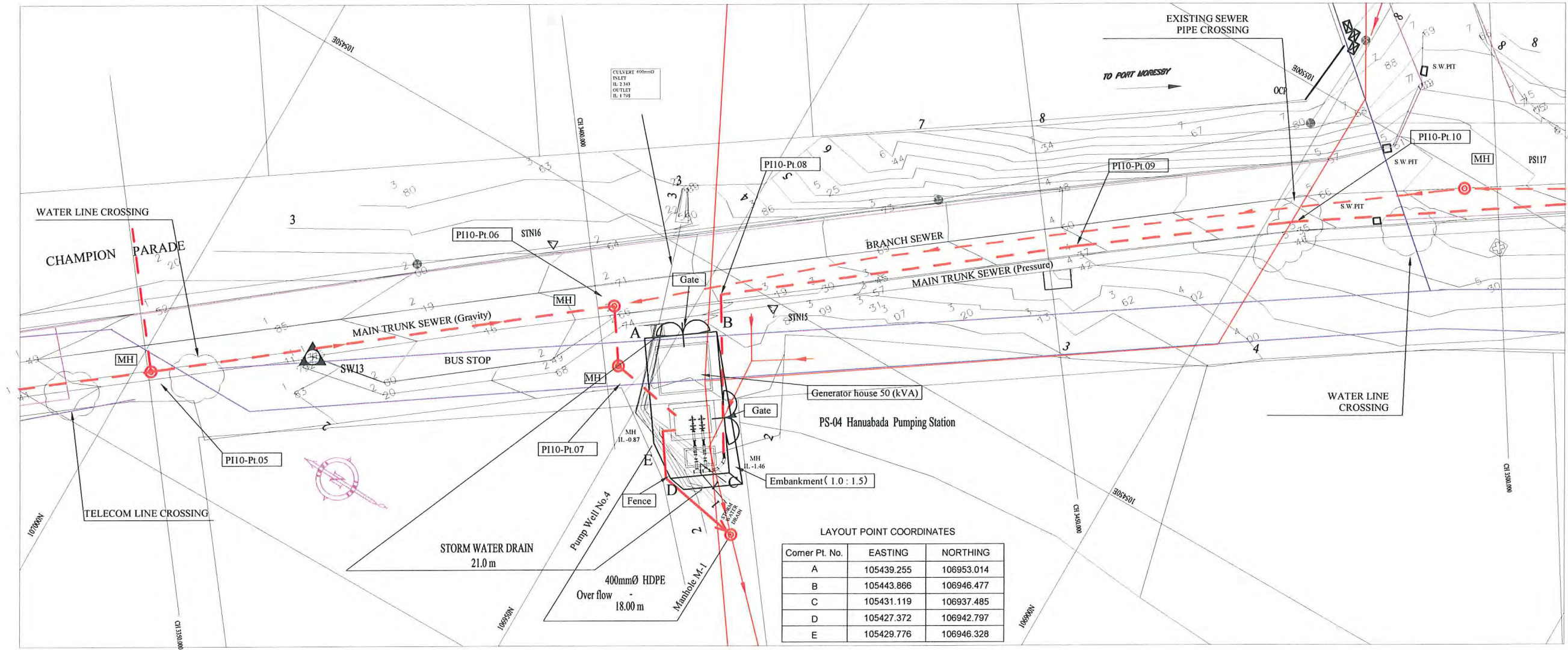
LAYOUT POINT COORDINATES

| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| P1 | 104829.864 | 107971.497 |
| P2 | 104842.758 | 107964.864 |
| P3 | 104839.098 | 107957.750 |
| P4 | 104826.204 | 107964.383 |

NOTES

1. ALL INSIDE CONCRETE SURFACE OF TOP AND SIDE WALL IN PUMP WELL SHALL BE PAINTED BY VINYL ESTER RESIN OR EQUIVALENT WITH 1mm THICKNESS AFTER HARDENING
2. REFER TO STD DRAWINGS FOR MISCELLANEOUS WORKS SUCH AS HANDRAIL, COVER, STEP LADDER, STAIR, STOP LOG AND EXPANTION JOINT

| | | | |
|---|---|---|---|
| PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP) | | TITLE: PS-3 Hagara Pumping Station - Layout, Pump Well Plan and Section | |
| CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT PROJECT MANAGEMENT UNIT (PMU) | CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN | APPROVED by PMU: Project Director Lot G.Zauya | DATE: 1. Dec 2011 SCALE: 1/100 |
| JAPAN INTERNATIONAL COOPERATION AGENCY | NOTES: | CHECKED by CONSULTANT Project Manager T.Fuji | DATE: 1. Dec 2011 DRAWING NO.: PS-HG-CC-02 |

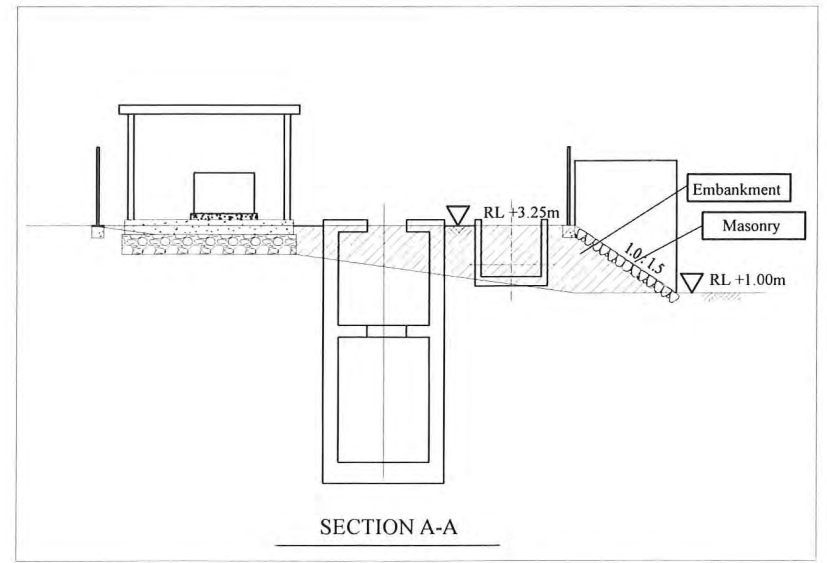
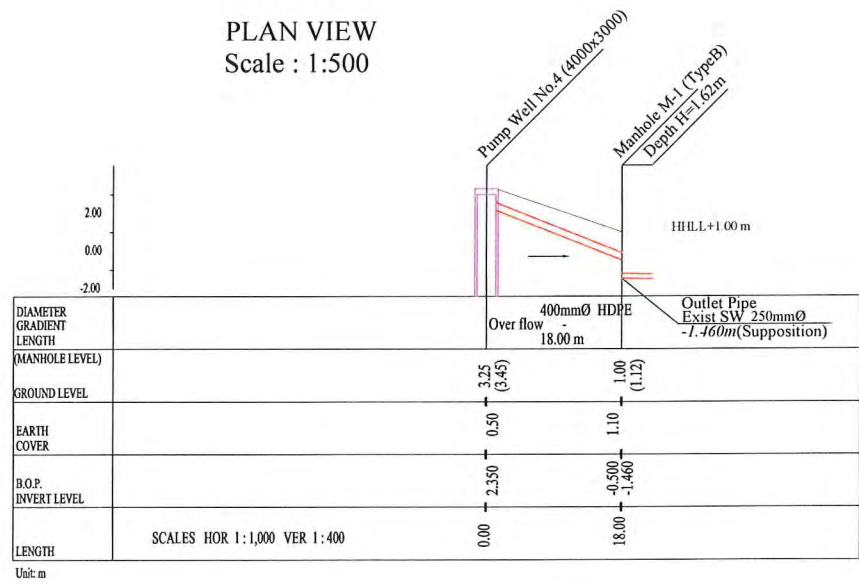


PLAN VIEW
Scale : 1:500

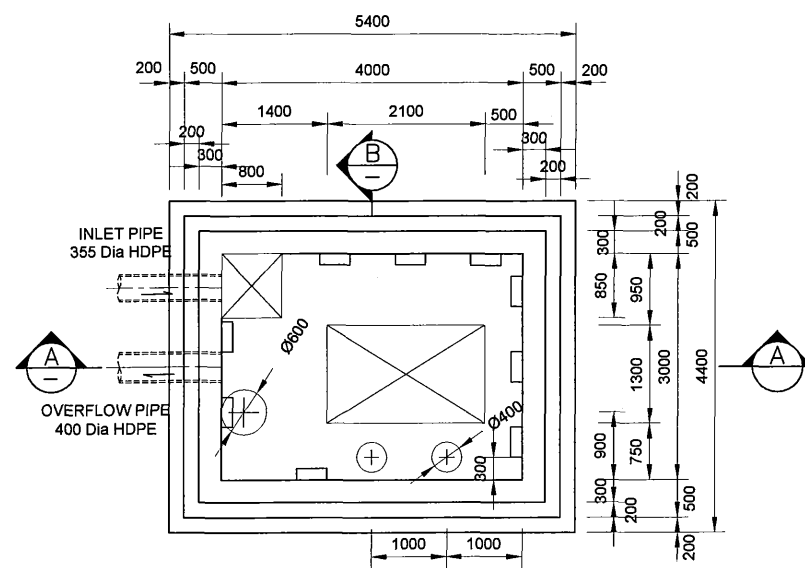
LEGEND

- PROPOSED SEWER
- NEW MANHOLE
- EXISTING MANHOLE TO BE MODIFIED
- POWER POLE WITH OVERHEAD POWER LINES
- POWER POLE WITH LIGHT
- ELECTRICITY TRANSMISSION TOWER
- ELECTRICITY PIT
- UNDER GROUND POWER CABLE
- TELECOM PIT
- TELECOM MARKER POST
- TELECOM LINE
- WATER VALVE BOX
- STOP VALVE
- WATER TAP
- FIRE HYDRANT
- WATER METER
- EXISTING SEWER PIPE
- TREE
- WATER LINE
- FENCE LINE WITH GATE
- BITUMEN SEALED ROAD

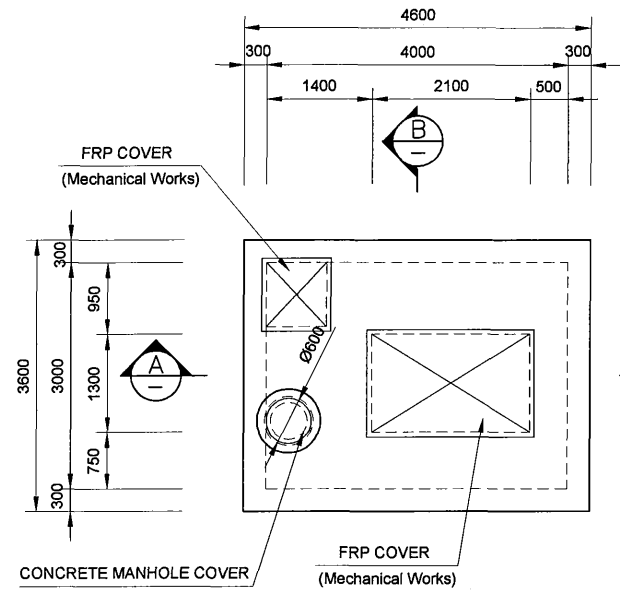
- NOTE: CADASTRAL BOUNDARIES TAKEN FROM DCDB
- LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL EXISTING UTILITIES IN OPERATION.
 - UNDERGROUND UTILITY SERVICES TO RESIDENTIAL, PUBLIC AND COMMERCIAL BUILDINGS OR OTHER FACILITIES HAVE NOT BEEN SHOWN BUT SHALL BE LOCATED AND PROTECTED IN A SIMILAR MANNER AS DESCRIBED ABOVE BY THE CONTRACTOR
 - INVERT MODIFICATION IS INCLUDED IN THE CONTRACT
 INVERT LEVEL OF NEW PIPE \geq EXISTING PIPE BOTTOM LEVEL +20mm
 INVERT LEVEL OF NEW PIPE - EXISTING PIPE BOTTOM LEVEL \geq +600mm
 DROP PIPE IS REQUIRED
 - MINIMUM COVER IS 60cm FOR UNPAVED ROAD
 90cm FOR ASPHALT/CONCRETE PAVED ROAD IF NOT DESCRIBED ON THE DRAWING
 Type A - Soil/others
 Type B - Asphalt(Road)
 Type C - Walkway (Concrete)
 - INLET PIPE IS MAIN TRUNK SEWER SCOPE



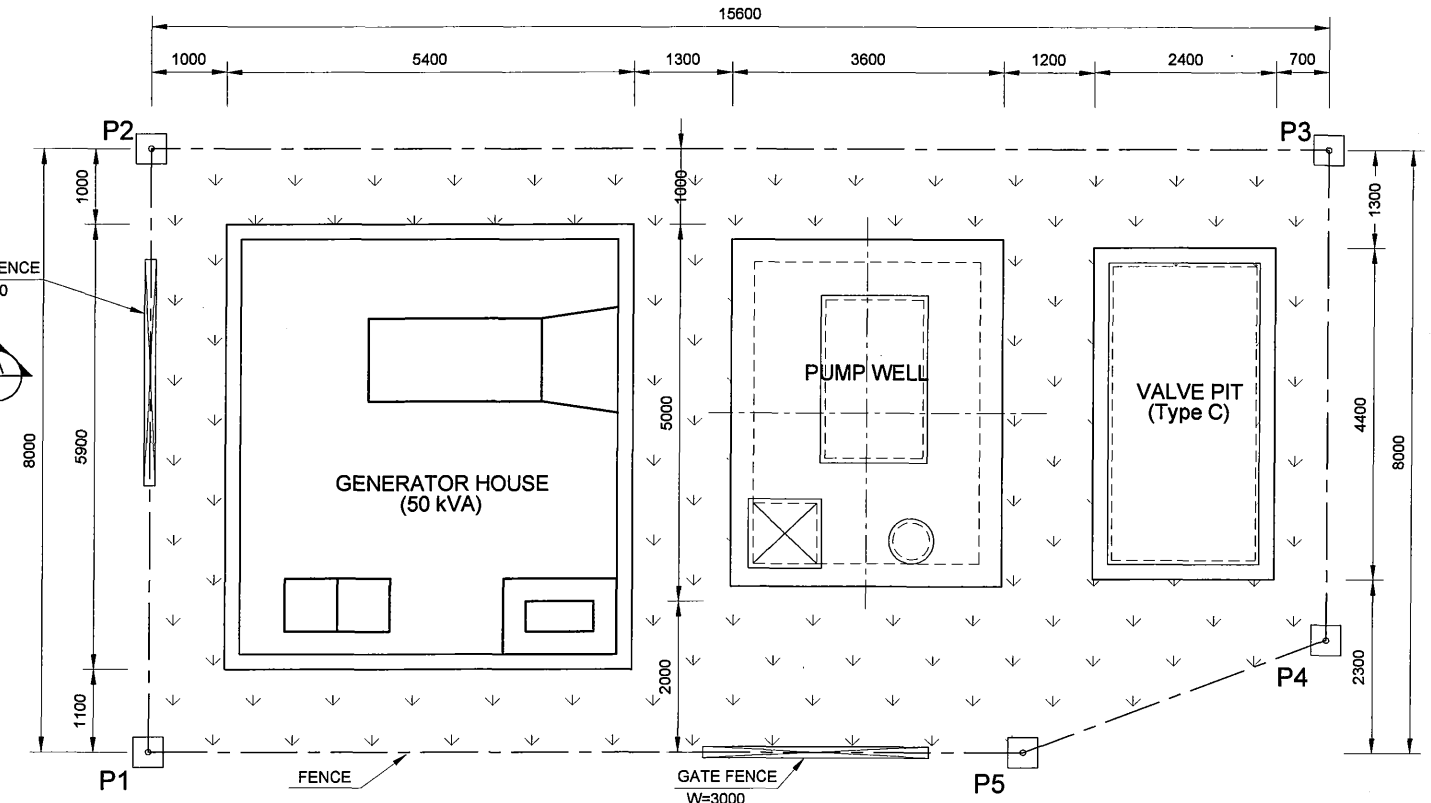
| <p>PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)</p> <p>CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT PROJECT MANAGEMENT UNIT (PMU)</p> <p>CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN</p> | <p>TITLE: PS-04 Hanuabada Pumping Station, General Layout, Inlet Pipe & Over Flow Pipe Plan and Profile</p> <p>NOTES:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>APPROVED by PMU: Project Director Lot G.Zauya</p> <p>CHECKED by CONSULTANT Project Manager T.Fuji</p> <p>DATE: 1. Dec 2011</p> <p>SCALE: AS SHOWN</p> <p>DATE: 1. Dec 2011</p> <p>DRAWING NO.: PS-HB-CC-01</p> | REVISIONS | | | REV. | DATE | DESCRIPTION | | | | | | | | | |
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| REVISIONS | | | | | | | | | | | | | | | | |
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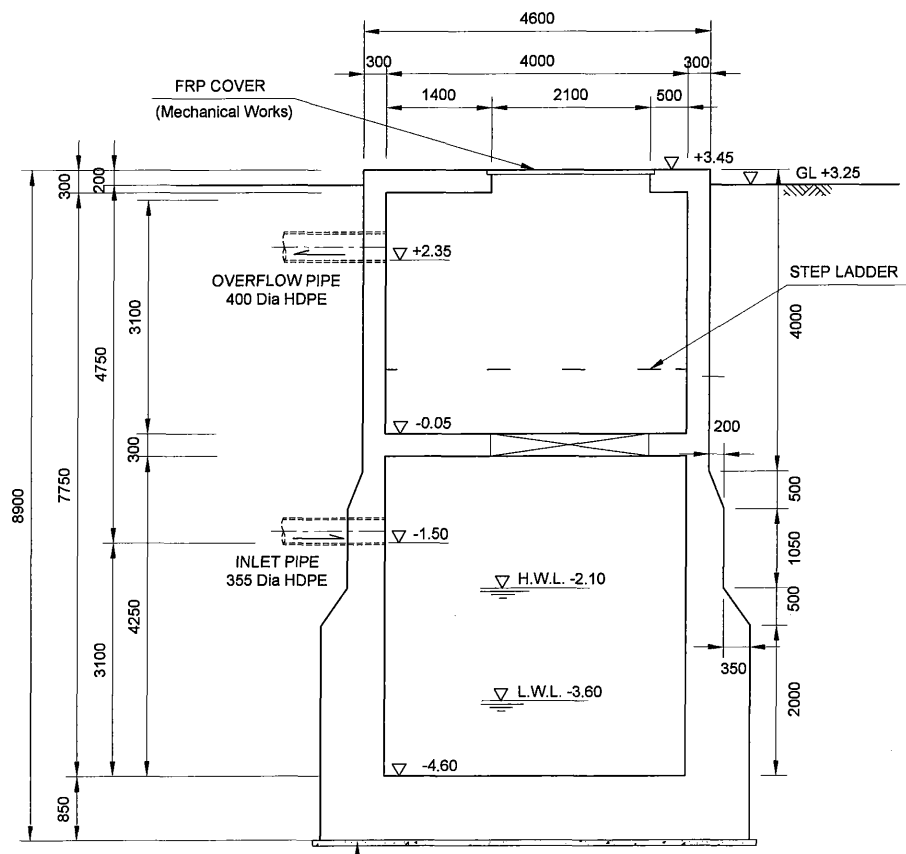
BASE PLAN



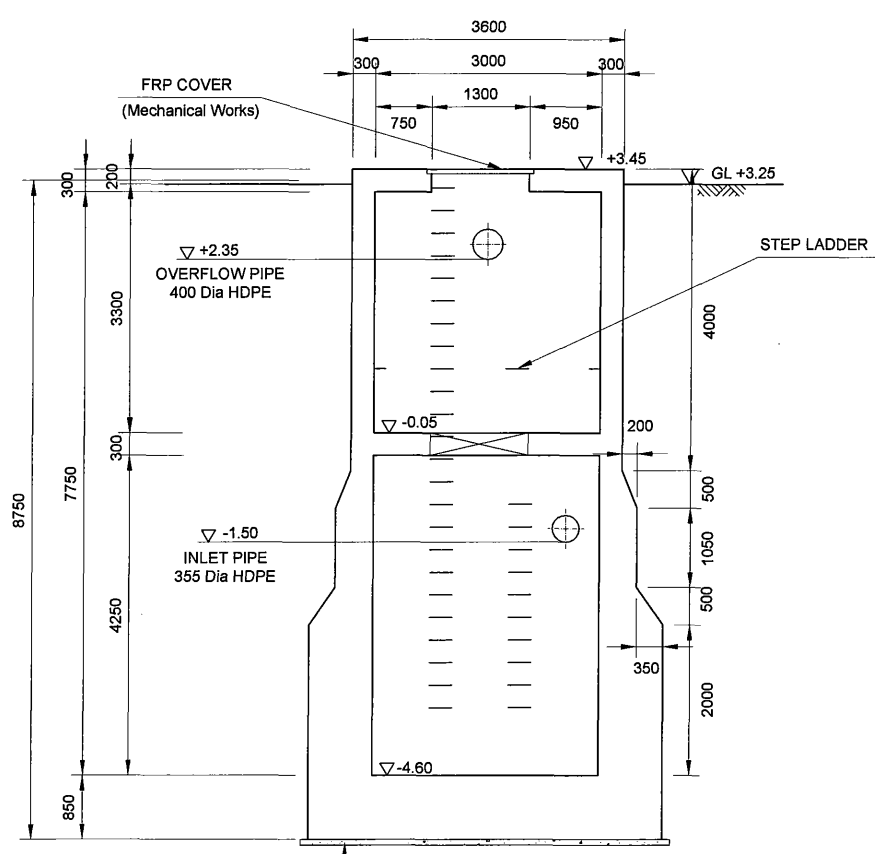
TOP PLAN



LAYOUT PLAN

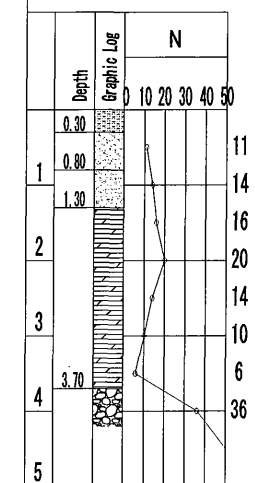


SECTION A-A



SECTION B-B

BOR. No. DCP/TP:4
GH=+3.269m



LAYOUT POINT COORDINATES

| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| P1 | 105439.255 | 106953.014 |
| P2 | 105443.866 | 106946.477 |
| P3 | 105431.119 | 106937.485 |
| P4 | 105427.372 | 106942.797 |
| P5 | 105429.776 | 106946.328 |

NOTES

- ALL INSIDE CONCRETE SURFACE OF TOP AND SIDE WALL IN PUMP WELL SHALL BE PAINTED BY VINYL ESTER RESIN OR EQUIVALENT WITH 1mm THICKNESS AFTER HARDENING
- REFER TO STD DRAWINGS FOR MISCELLANEOUS WORKS SUCH AS HANDRAIL, COVER, STEP LADDER, STAIR, STOP LOG AND EXPANTION JOINT

PROJECT: **PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)**

CLIENT: **INDEPENDENT PUBLIC BUSINESS CORPORATION**
PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
PROJECT MANAGEMENT UNIT (PMU)

CONSULTANTS: **NJS CONSULTANTS CO., LTD. - JAPAN**

PROJECT MANAGEMENT UNIT (PMU)
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE: **PS-4 Hanuabada Pumping Station - Layout, Pump Well Plan and Section**

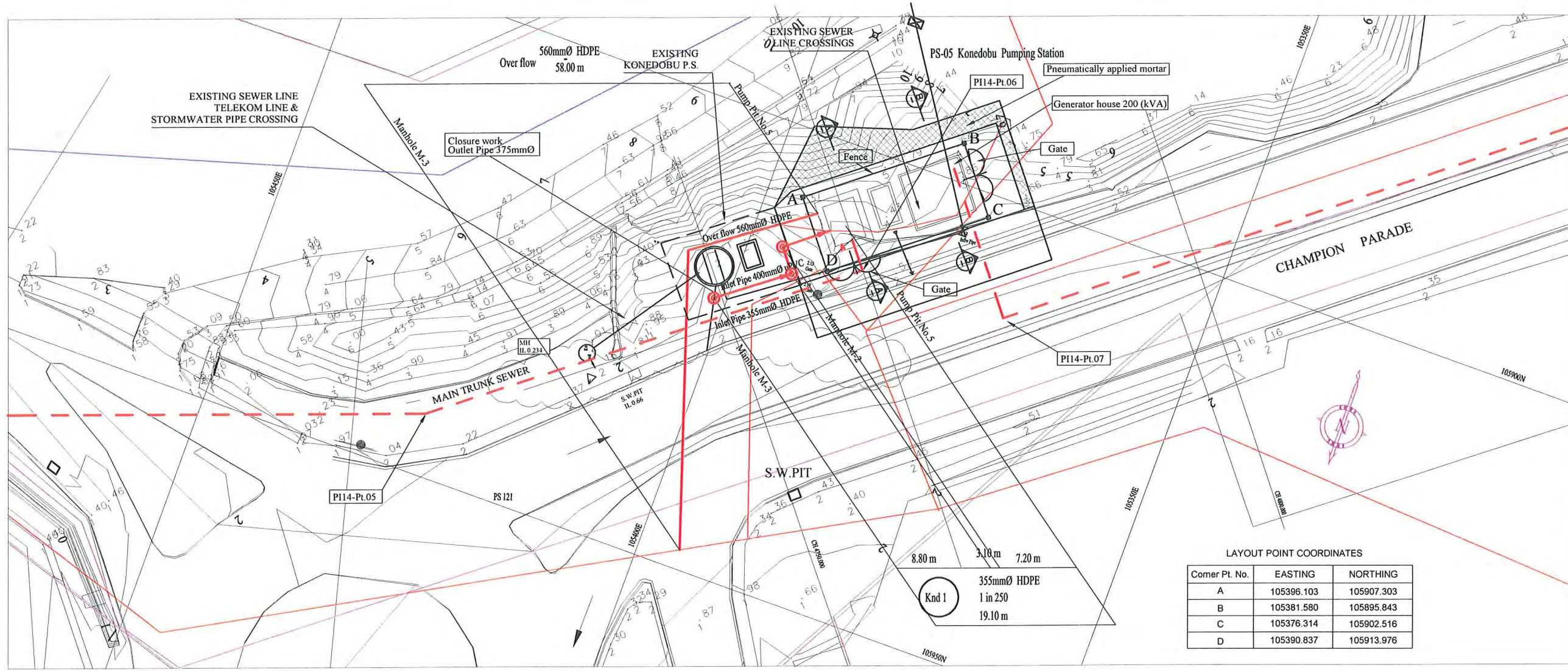
NOTES:

| REVISIONS | | | APPROVED BY PMU: Project Director Lot G.Zauya | DATE: 1. Dec 2011 | SCALE: 1/100 |
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| REV. | DATE | DESCRIPTION | | | |
| | | | | | |

CHECKED BY CONSULTANT
Project Manager
T.Fuji

DATE: 1. Dec 2011

DRAWING NO.: **PS-HB-CC-02**



PLAN VIEW
Scale : 1:500

LAYOUT POINT COORDINATES

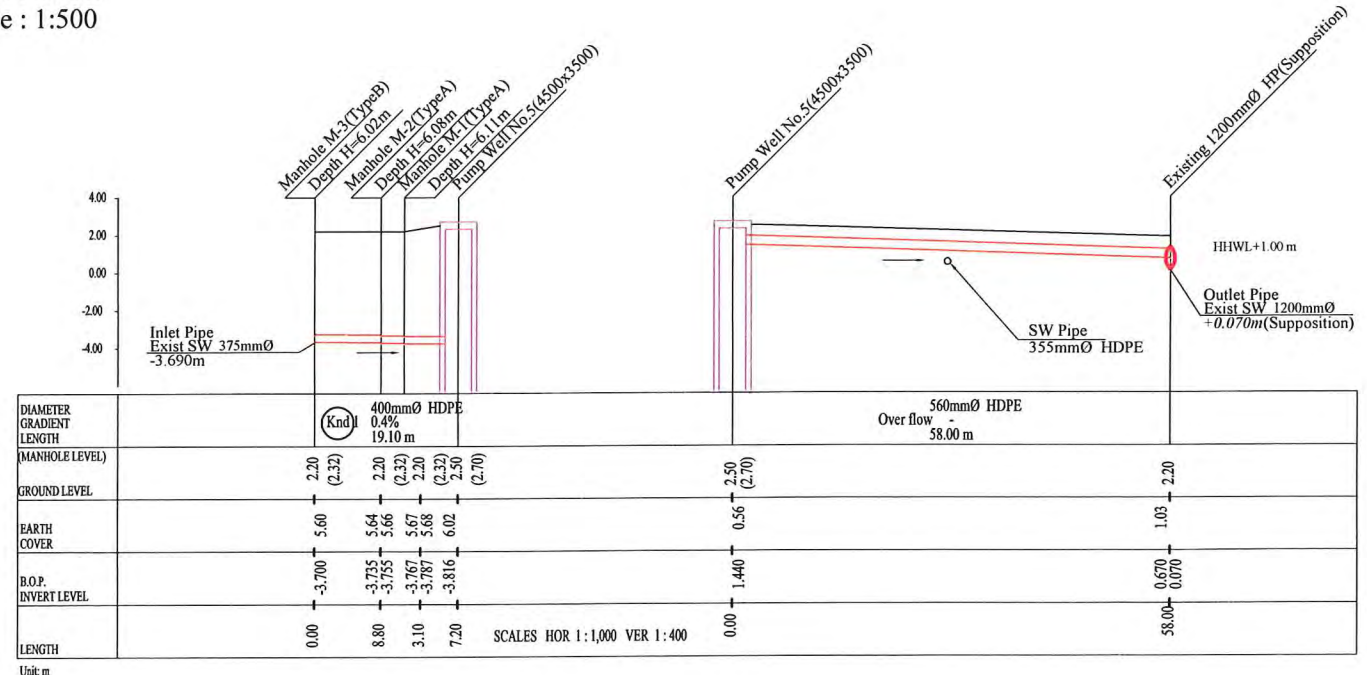
| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| A | 105396.103 | 105907.303 |
| B | 105381.580 | 105895.843 |
| C | 105376.314 | 105902.516 |
| D | 105390.837 | 105913.976 |

LEGEND

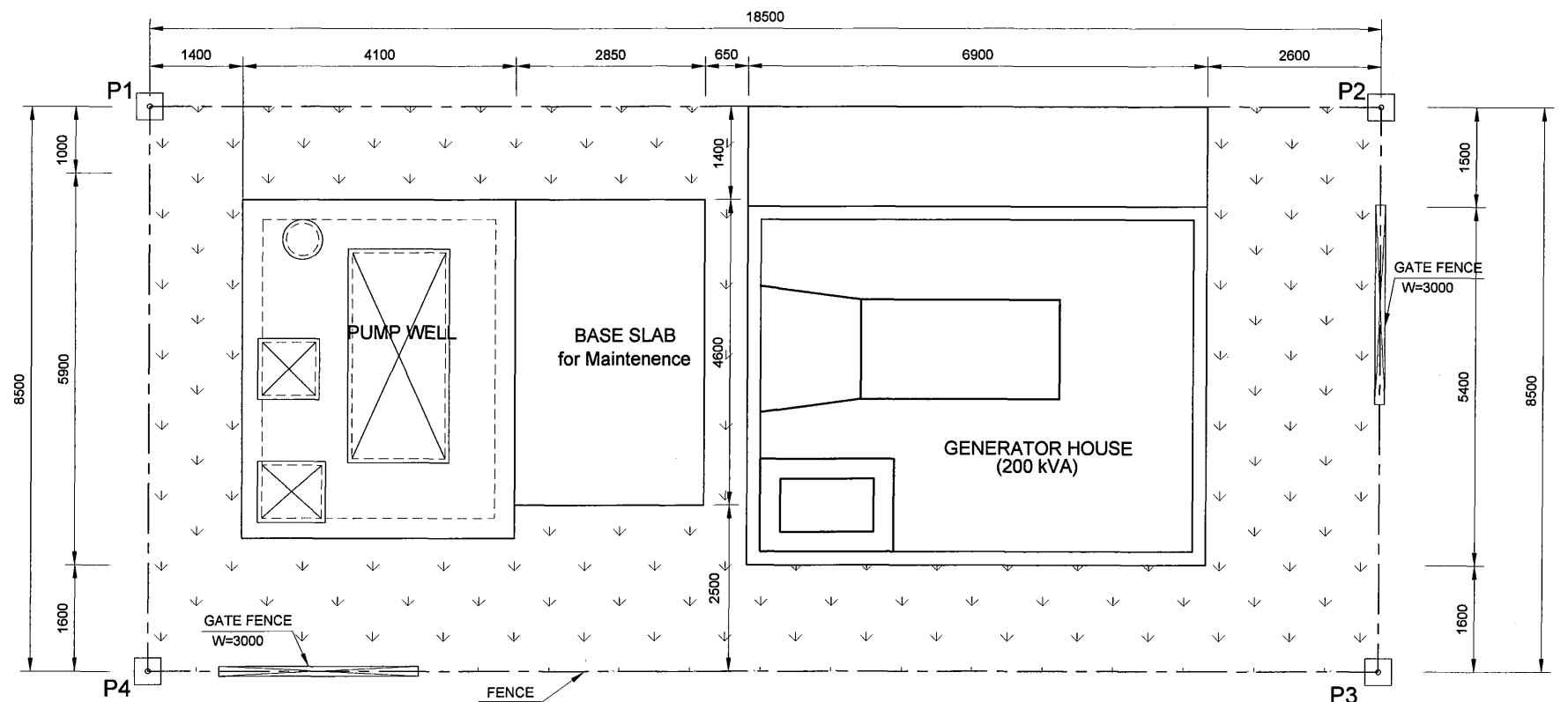
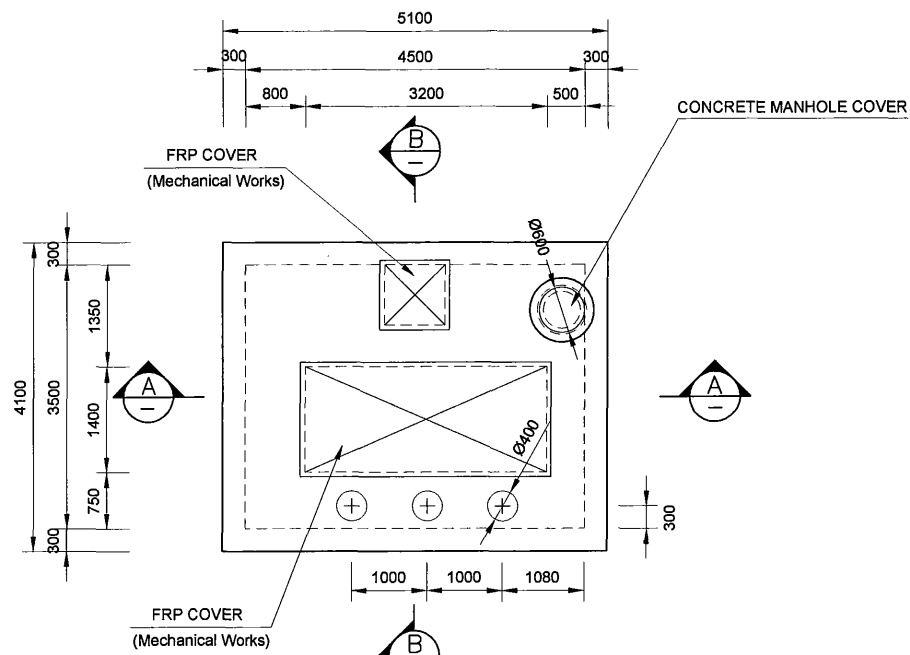
| | |
|--|--------------------------------------|
| | PROPOSED SEWER |
| | NEW MANHOLE |
| | EXISTING MANHOLE TO BE MODIFIED |
| | POWER POLE WITH OVERHEAD POWER LINES |
| | POWER POLE WITH LIGHT |
| | ELECTRICITY TRANSMISSION TOWER |
| | ELECTRICITY PIT |
| | UNDER GROUND POWER CABLE |
| | TELECOM PIT |
| | TELECOM MARKER POST |
| | TELECOM LINE |
| | WATER VALVE BOX |
| | STOP VALVE |
| | WATER TAP |
| | FIRE HYDRANT |
| | WATER METER |
| | EXISTING SEWER PIPE |
| | TREE |
| | WATER LINE |
| | FENCE LINE WITH GATE |
| | BITUMEN SEALED ROAD |

NOTE: CADASTRAL BOUNDARIES TAKEN FROM DCDB

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 90cm FOR ASPHALT/CONCRETE PAVED ROAD IF NOT DESCRIBED ON THE DRAWING
 Type A - Soil/others
 Type B - Asphalt(Road)
 Type C - Walkway (Concrete)



| PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP) | | TITLE: PS-05 Konedobu Pumping Station, General Layout, Inlet Pipe & Over Flow Pipe Plan and Profile | | | | | | | | | | | | | | | | |
|---|--|---|---|-----------|--|--|------|------|-------------|--|--|--|--|--|--|--|--|--|
| CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT PROJECT MANAGEMENT UNIT (PMU) jica JAPAN INTERNATIONAL COOPERATION AGENCY | CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN | NOTES: | <table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | REVISIONS | | | REV. | DATE | DESCRIPTION | | | | | | | | | |
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| APPROVED by PMU: Project Director Lot G.Zauya | | CHECKED by CONSULTANT Project Manager T.Fuji | DATE: 1. Dec 2011 SCALE: AS SHOWN DATE: 1. Dec 2011 DRAWING NO.: PS-KD-CC-01 | | | | | | | | | | | | | | | |

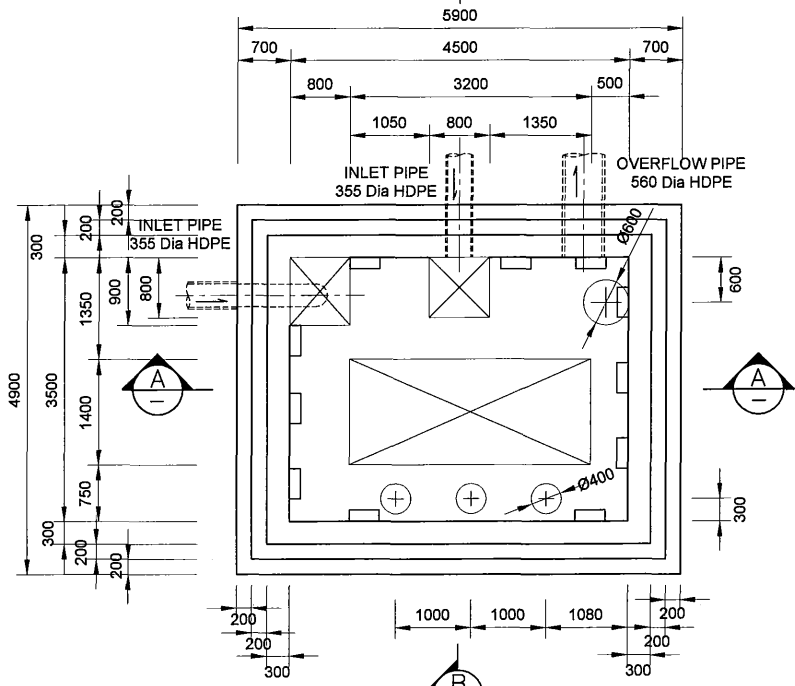


LAYOUT POINT COORDINATES

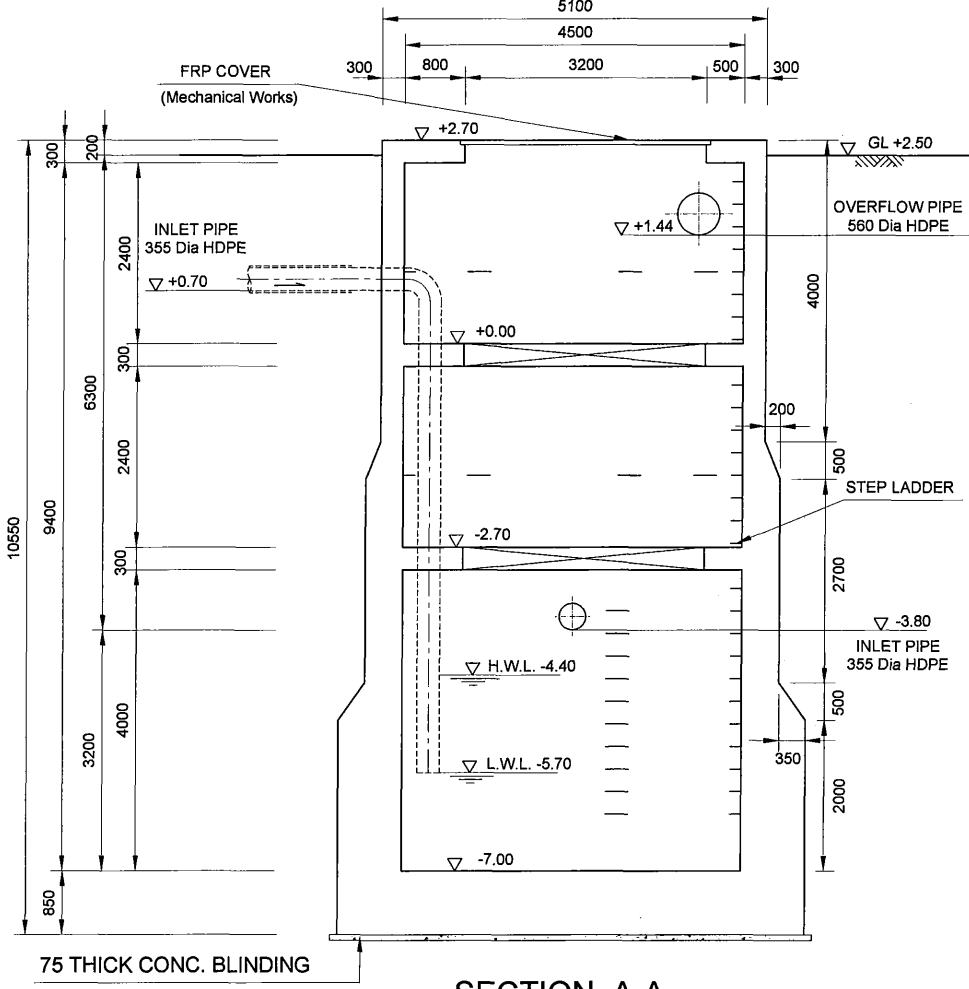
| Corner Pt. No. | EASTING | NORTHING |
|----------------|------------|------------|
| P1 | 105396.103 | 105907.303 |
| P2 | 105381.580 | 105895.843 |
| P3 | 105376.314 | 105902.516 |
| P4 | 105390.837 | 105913.976 |

TOP PLAN

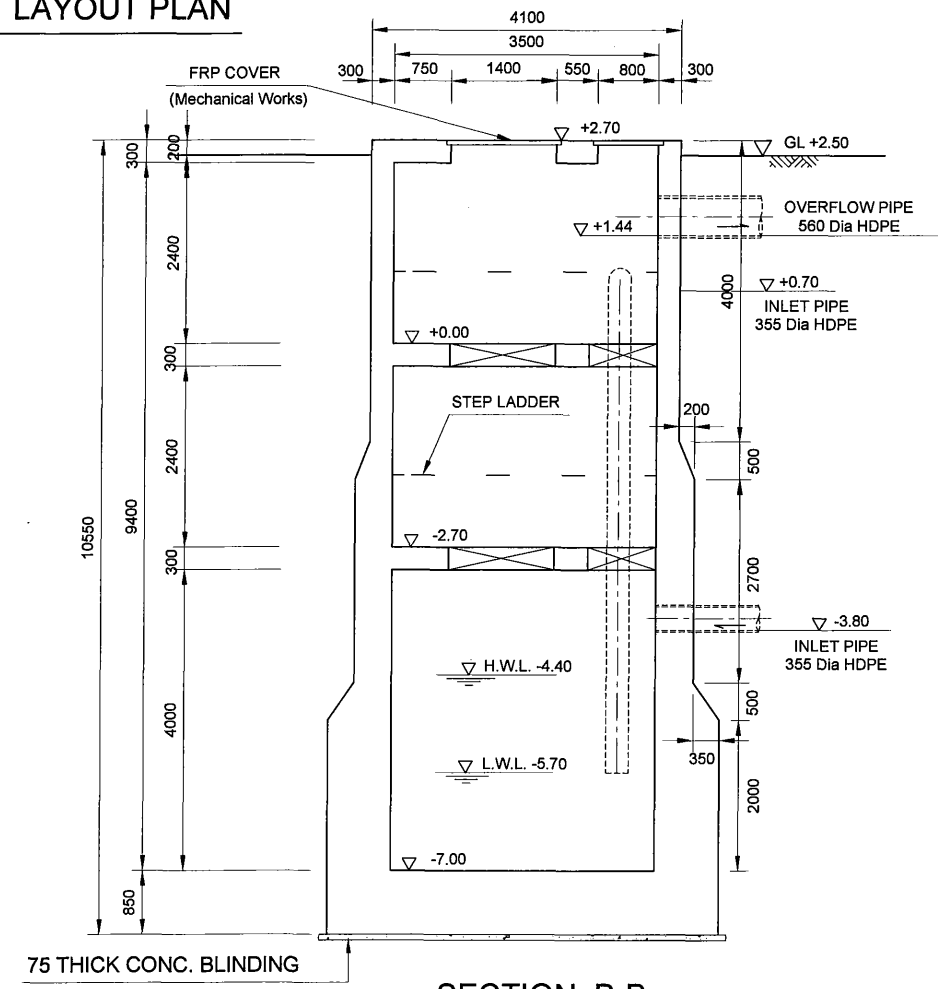
LAYOUT PLAN



BASE PLAN



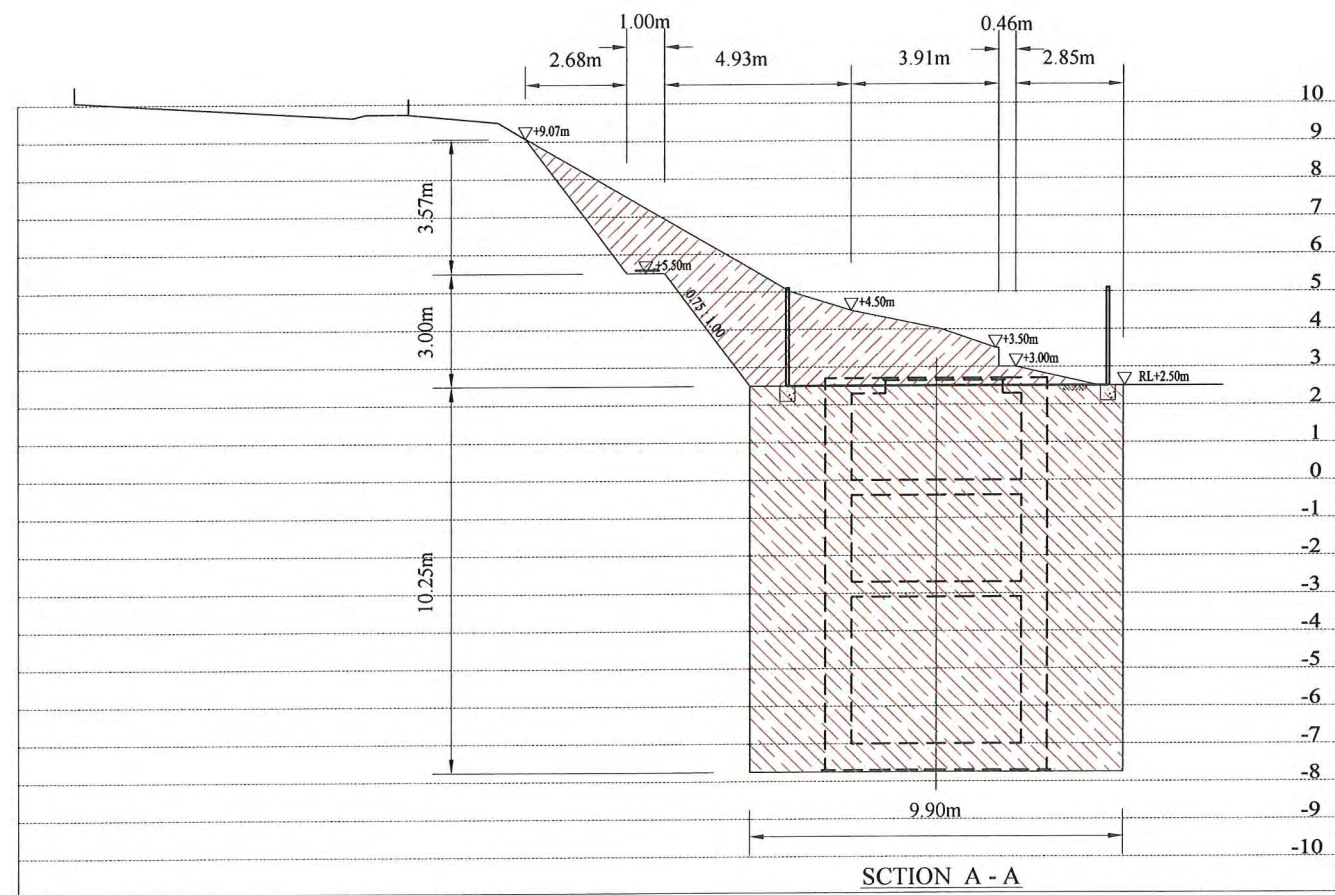
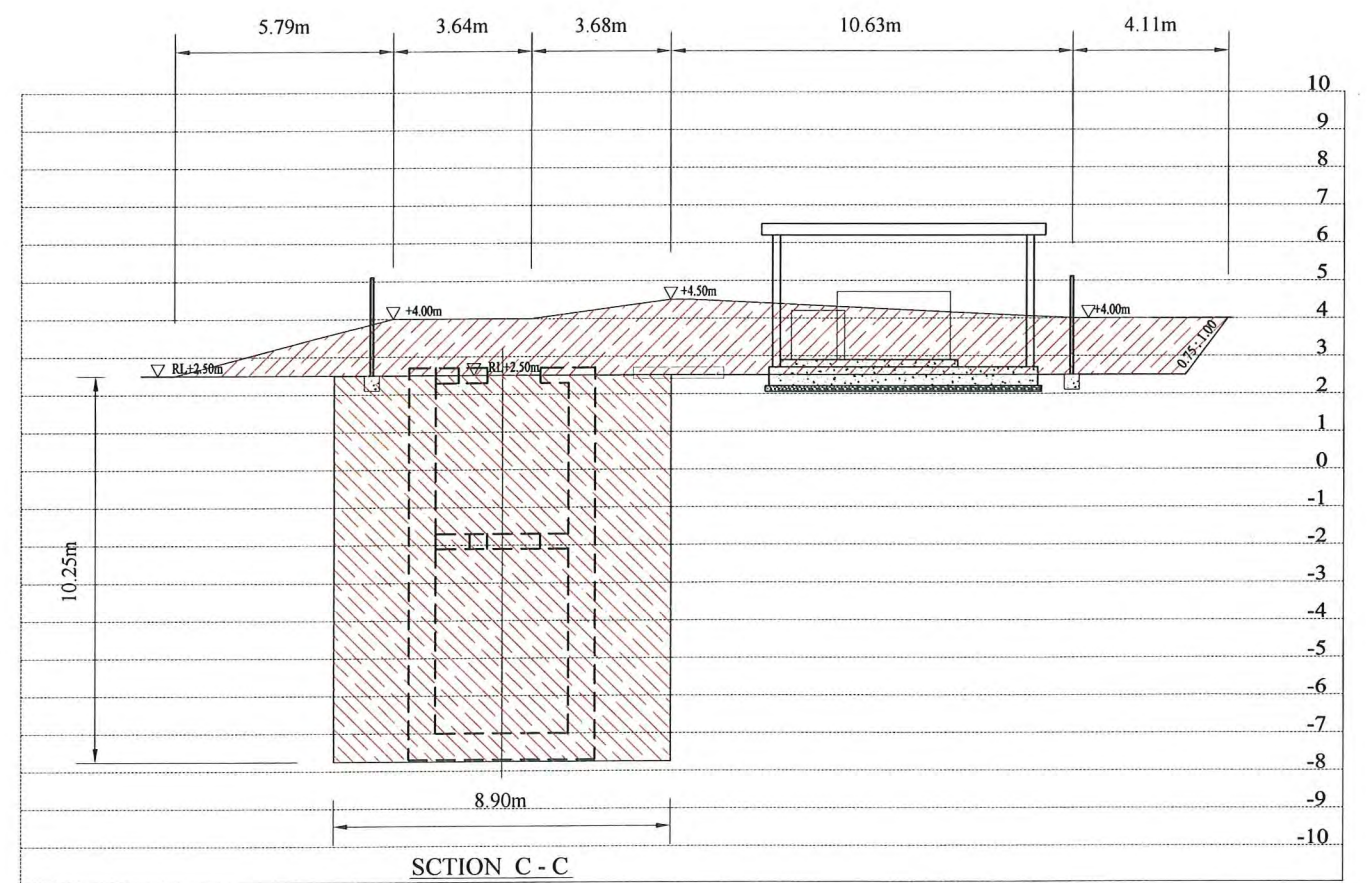
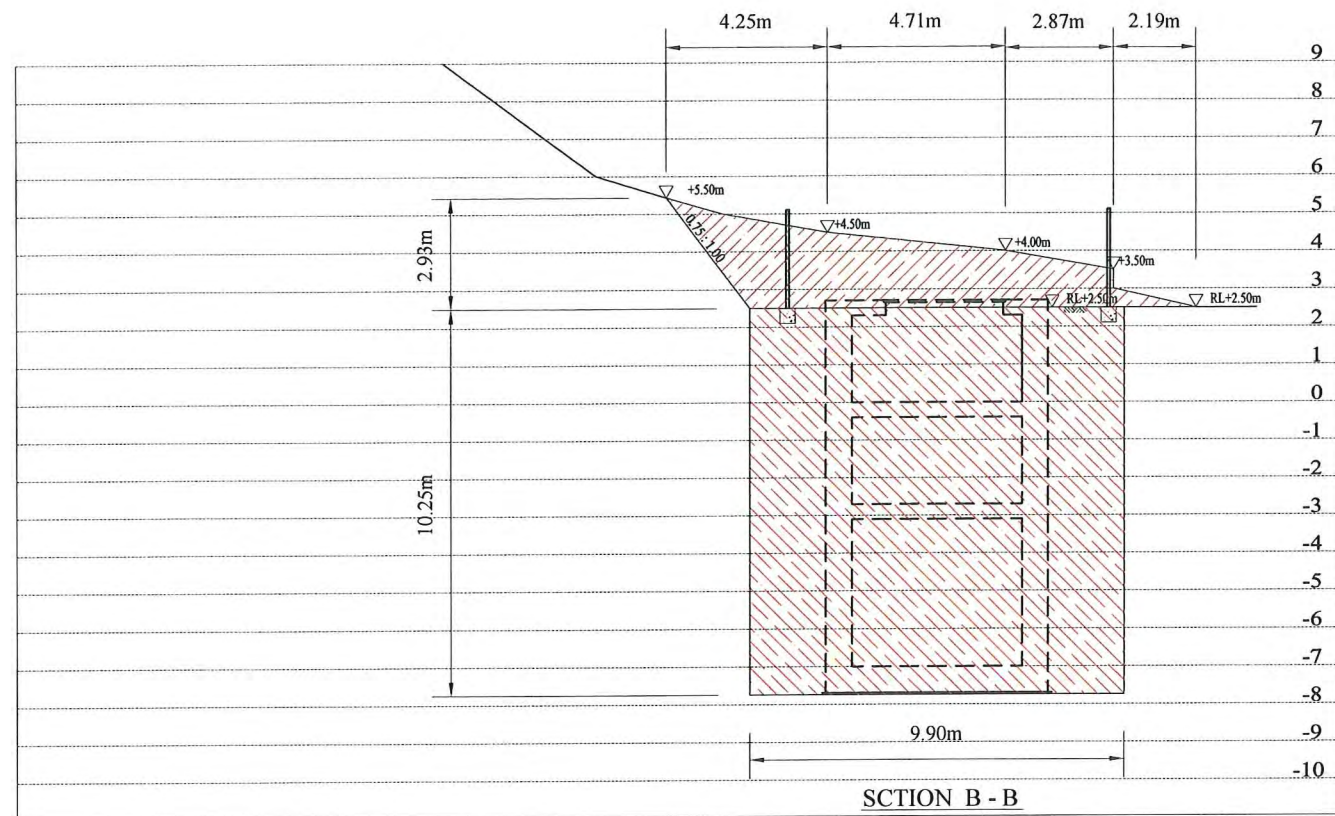
SECTION A-A



SECTION B-B



- NOTES
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 - REFER TO STD DRAWINGS FOR MISCELLANEOUS WORKS SUCH AS HANDRAIL, COVER, STEP LADDER, STAIR, STOP LOG AND EXPANTION JOINT


| PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP) | | TITLE: PS-5 Konedobu Pumping Station - Layout, Pump Well Plan and Section | | | | | | | | | | | | | | | | |
|---|---|--|---|-----------|--|--|------|------|-------------|--|--|--|--|--|--|--|--|--|
| CLIENT: INDEPENDENT PUBLIC BUSINESS CORPORATION PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT PROJECT MANAGEMENT UNIT (PMU) | CONSULTANTS: NJS CONSULTANTS CO., LTD. - JAPAN | APPROVED BY PMU: Project Director Lot G.Zaiya | DATE: 1. Dec 2011 SCALE: 1/100 | | | | | | | | | | | | | | | |
| NOTES: | | CHECKED BY CONSULTANT: Project Manager T.Fuji | DATE: 1. Dec 2011 DRAWING NO.: PS-KD-CC-02 | | | | | | | | | | | | | | | |
| JAPAN INTERNATIONAL COOPERATION AGENCY | | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | | REVISIONS | | | REV. | DATE | DESCRIPTION | | | | | | | | | |
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PROJECT: PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT (POMSSUP)

TITLE: PS-05 Konedobu Pumping Station Land Reclamation

CLIENT:  INDEPENDENT PUBLIC BUSINESS CORPORATION
 PORT MORESBY SEWERAGE SYSTEM UPGRADING PROJECT
 PROJECT MANAGEMENT UNIT (PMU)
 JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS:  NJS CONSULTANTS CO., LTD. - JAPAN

NOTES:

| REVISIONS | | |
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| REV. | DATE | DESCRIPTION |
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APPROVED by PMU:
 Project Director
 Lot G Zauya

CHECKED by CONSULTANT
 Project Manager
 T. Fuji

DATE: 1. Dec 2011
 SCALE: AS SHOWN

DATE: 1. Dec 2011
 DRAWING NO.: PS-KD-CC-02