

Our Ref:[2768]

Mr Scott Jeffries  
Director Major Infrastructure Assessment  
Department of Planning  
GPO Box  
Sydney NSW 2000

Dear Scott,

**RE: MODIFICATION TO PROJECT APPROVAL S07/00079**

As discussed with your Mr Ben Holmes on 25 July 2007, Macquarie Generation seeks to obtain approval for several modifications to the above project under Section 75W of the Environmental Assessment and Planning Act 1979. The modifications requested and the reasons for the changes are described below.

**1 REVISION OF PIPELINE**

Macquarie Generation requests a modification to Condition 1.1a), Terms of Approval, of the Consent Conditions, in line with a number of changes to the approved pipeline, which are:

- Location of the pipeline below ground;
- A new outlet position, leading to a reduced pipeline length; and
- Inclusion of a pair of additional surge mitigation tanks.

Further information on these changes is provided below.

**1.1 Location of the Pipeline below Ground**

Macquarie Generation now proposes to lay the pipes under the ground. The decision to change the position of the pipe was based on being able to procure pipe suitable for underground use more quickly than that for above ground use. This is seen as advantageous to the project. This change will provide positive environmental effects, including reduced visual impact and reduced area of long term disturbance. Construction time will also be shorter as the need to install footings for the above ground pipelines requires more time than for trenching & installation of the pipelines below ground.

However, in the short term there may be increased ground disturbance, resulting in:

- Potential for uncovering artefacts of archaeological significance. The pipeline route was previously assessed during the preparation of the Environmental Assessment. All mitigation

measures recommended by the Archaeologist have been incorporated into the Construction Environment Management Plans (CEMPs); and

- Erosion and sedimentation. Of particular concern will be trenching on slopes and the need for additional short term stockpiles from trenches. This will require the implementation of stringent erosion and sedimentation measures with standards similar to those previously approved. These issues are addressed in the Outline CEMP, provided in **Appendix D**. Detailed erosion and sedimentation controls are required from contractors in their contractor specific CEMPs and reviewed by Macquarie Generation's project management staff and the project's appointed Environmental Representative. All measures will be implemented prior to works commencing.

## 1.2 Change in Pipeline Length

Following a design review, Macquarie Generation proposes to shorten the pipeline by one kilometre, by terminating the pipeline at the point at which it meets the shore of Plashett Dam. This last section of the pipeline was to run along the shore of the dam to the existing outlet point for discharge. The change in the pipeline route is shown in **Appendix A**.

To ensure that the operation of the Plashett Dam would not be affected by the proposed change to the location of the outlet structure, Macquarie Generation consulted Ian Forster from Connell Wagner, who specialises in dams and dam safety. Ian's advice is quoted below:

*"Based on the latest proposal, the location and concept design of the discharge pipeline and inlet structure should pose no problems for the normal operation of Plashett Dam. The structure will be located at a sufficient distance from the dam wall that it will not influence the stability of the wall, and the design of the structure will minimise the potential for any erosion on the left abutment. Since the structure has no impact on the overall safety of the dam, there will be no need to seek the approval of the NSW Dams Safety Committee".*

While the new outlet is to be located on largely disturbed land, potential effects on ecological and indigenous heritage issues were considered.

The Ecological assessment that was undertaken by Connell Wagner relied on earlier work undertaken by Bishop (1996), habitat assessment and database searches. Bishop concluded that threatened fish species listed on then FM Act have not been found at the study area, nor are any expected to occur.

In relation to threatened aquatic fauna (primarily frogs) the ecological assessment identifies that suitable habitat for frogs is generally absent from the Plashett Dam study area and therefore it could be concluded that the discharge structure would be unlikely to have a significant impact.

Measures outlined in the CEMP for flora and fauna management for the original pipeline and outlet structure locations will be equally applied to the revised locations.

The Heritage Assessment in the EA identified that many studies have been conducted in the past, which have included the new outlet location (refer to figures 4.1 and 4.2 of the Archaeological Assessment in the EA). No artifacts were identified in the area surrounding the proposed outlet. Most artifacts found in previous studies were located in close proximity to watercourses, and it



was recommended that the artifacts be removed from the sites. Artifacts are most commonly found in the topsoil, and as the area has been previously disturbed it is unlikely that it would now contain any archeological material.

### **1.3 Inclusion of a Pair of Additional Surge Mitigation Tanks**

Following the design review, Macquarie Generation's designers determined that the construction of additional surge mitigation infrastructure is necessary to prevent large pressures being generated due to the effects of water hammer. Therefore, two surge mitigation tanks are to be constructed up gradient of the inlet at the Hunter River. The locations of the additional surge tanks are shown in **Appendix A**.

As the surge tanks are to be constructed wholly within the previously assessed corridor and adjacent to the proposed pipeline the reduction in visual amenity is the only environmental aspect that could potentially be impacted. To assess this aspect, four (4) photomontages were developed showing the proposed works from various vantage points. The photomontages and the viewing points are shown in **Appendix B**.

## **2 REWORDING OF PROJECT APPROVAL**

### **2.1 Compliance Reports**

Under Condition 4.1 of the Consent Conditions (Compliance Tracking Program), the Proponent is required to develop and implement a Compliance Tracking Program to track compliance of the project. The Program was to include periodic review and reporting, plus independent auditing and mechanisms to correct non-compliance. Macquarie Generation has prepared a Construction Environmental Management Plan that provides for these requirements.

The Statement of Commitments included in the Environmental Assessment specified the compliance reports to be submitted to the Director-General. These include a Pre-Construction and a Pre-Operational Compliance Report to be submitted at least two weeks before the commencement of construction and operation of the facility respectively, and Construction Compliance Reports to be submitted every six months to the Director-General and to Singleton Council.

Macquarie Generation seek to consolidate the reporting requirements to the relevant authorities such that details regarding the Environmental Representative's audits, Macquarie Generation's internal audits and contractor inspections are compiled and submitted to the Director-General and Singleton Council every six months during the construction period. Compliance during operation will be reported in the form of environmental auditing reports, which will be submitted annually.

### **2.2 Platypus Management**

Following consultation with the Platypus Biologist (Dr Tom Grant), the actions specified in the Statement of Commitment in relation to Platypus management were able to be improved. As such, the proposed actions have been modified in consultation with Dr Grant and incorporated into the Construction Environmental Management Plan prepared for the site (**Appendix C**).


---

Macquarie Generation now seeks a modification to Condition 2.3 of the Consent (Flora and Fauna Management) in line with this modification.

The Department of Environment and Climate Change have been consulted (telephone conversation with Mitchell Bennett on 10 September 2007) in relation to these changes. They advised that they were satisfied with the proposed changes.

### 3 CONCLUSION

In summary, the proposed modifications are unlikely to adversely affect the environment, rather represent an improvement over the approved development in terms of system performance and visual amenity. Should you require any further information about the proposed changes, please contact Gavin Heydon on (04) 2770-2204. We look forward to receiving your response.

  
JOHN NEELY  
MANAGER BAYSWATER

Enclosures: Appendices A – D  
Application to modify development consent

**Appendix A: Pipeline Study Area Showing New Location of the Discharge  
Structure and Location of Surge Tanks (Figure 2.2)**



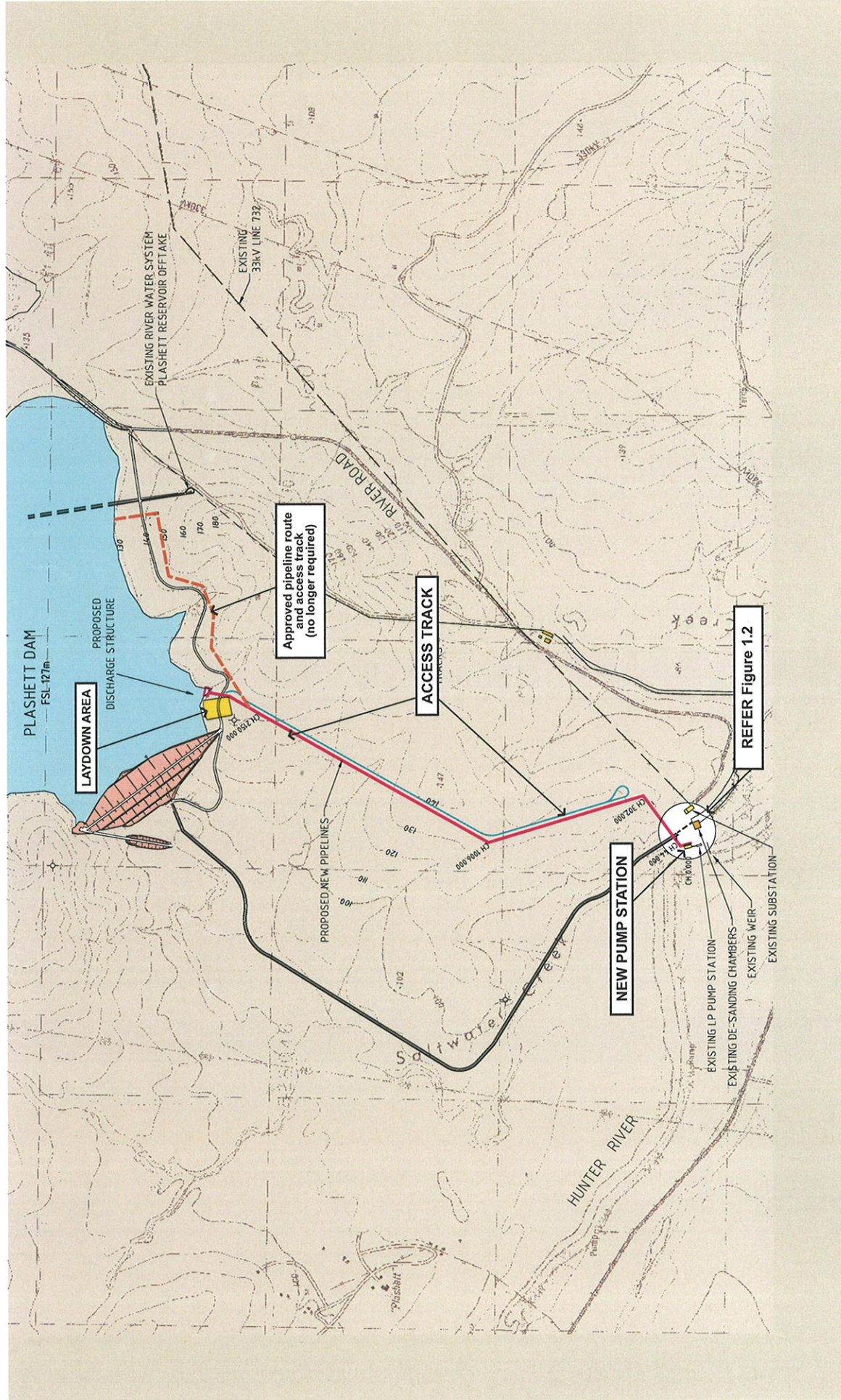
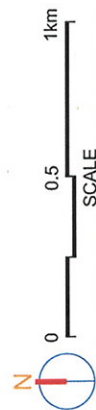


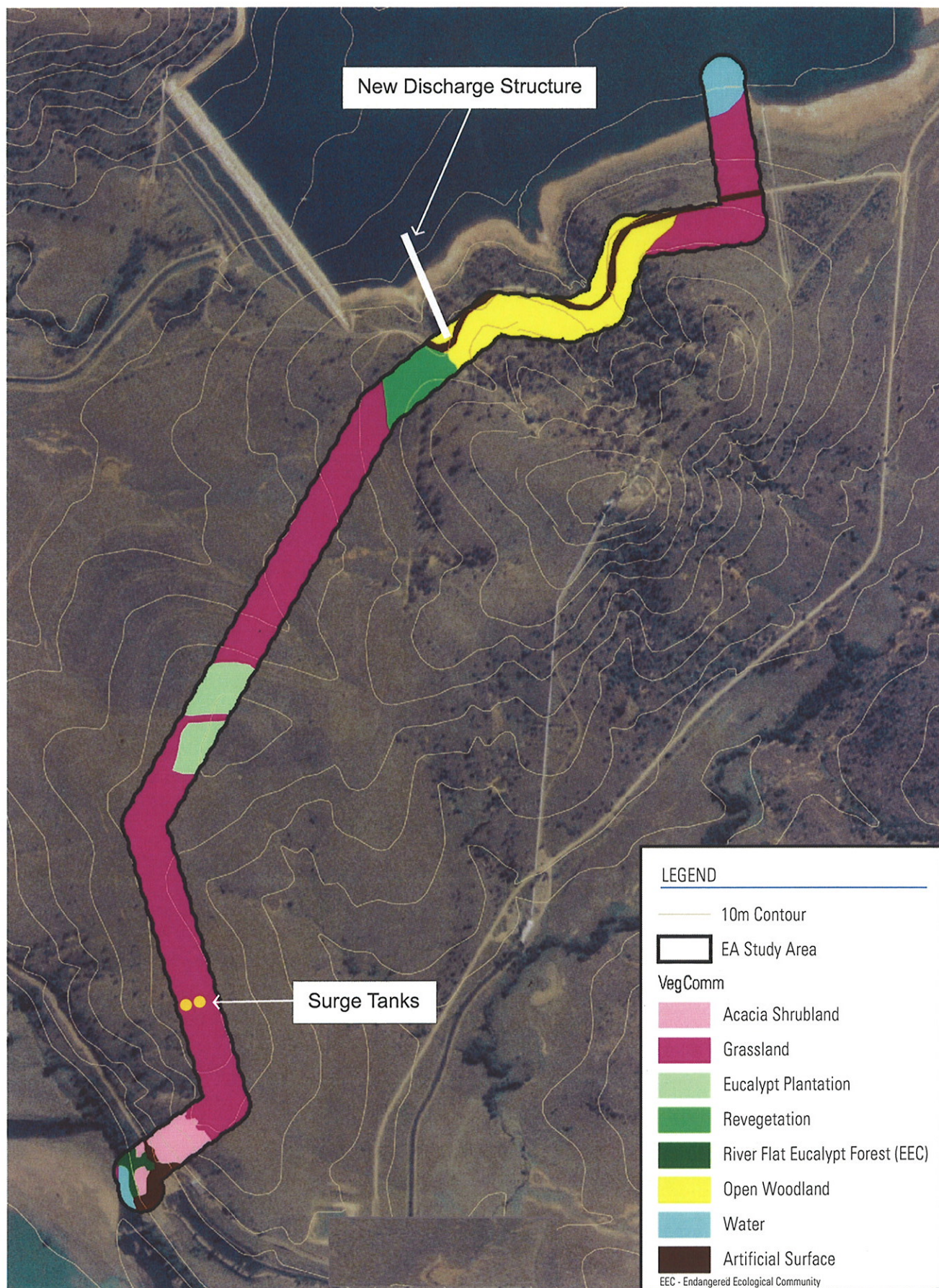
Figure 1.3

Overall Site Plan - Construction Sites and Access

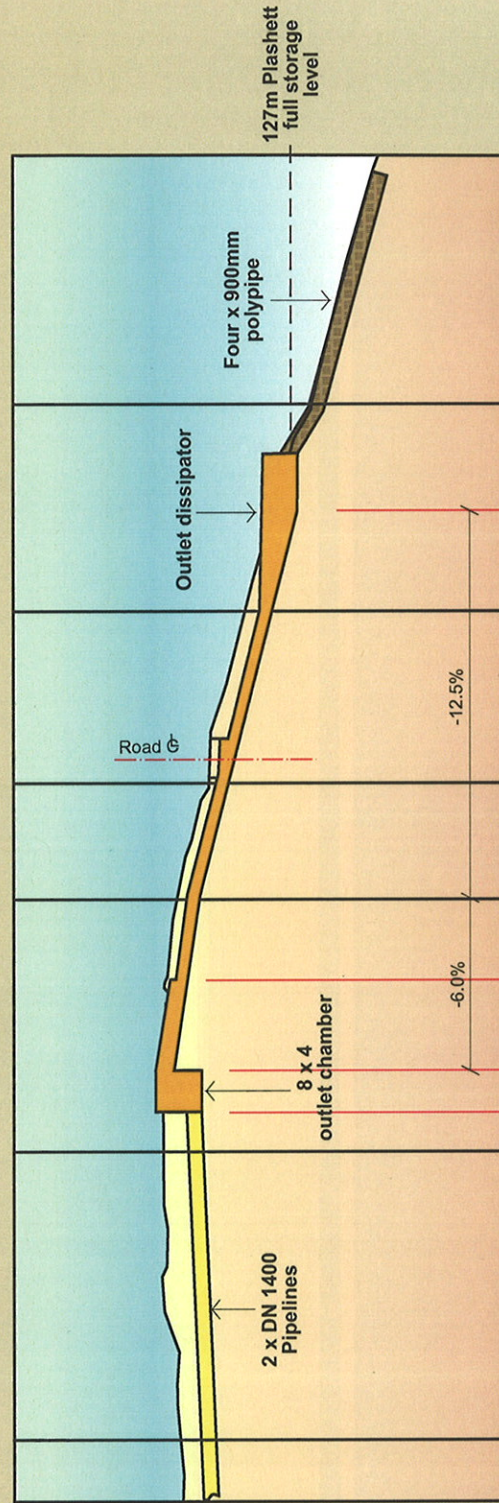
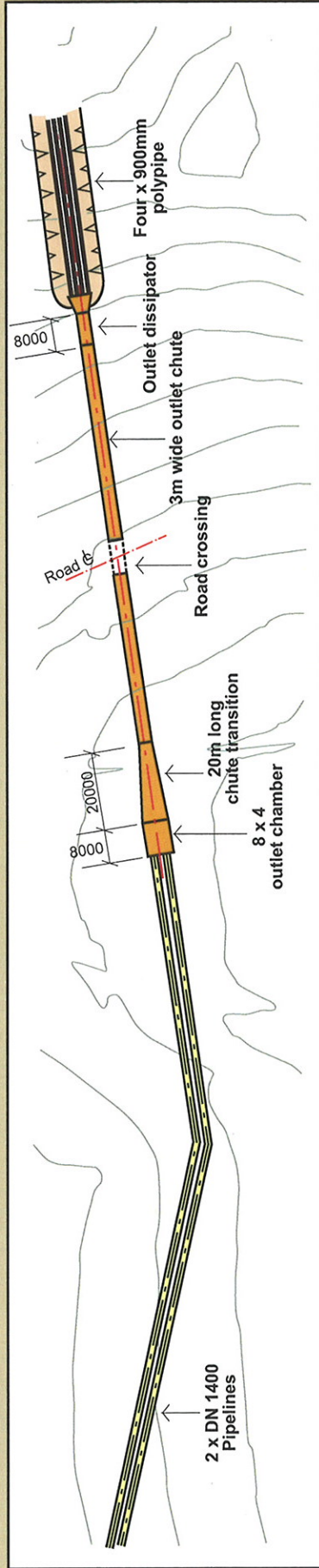


Source: Macquarie Generation









**Figure**  
Plashett - Revised Outlet Arrangement