

# **Streetscene and Engineering Cabinet Board**

**5<sup>th</sup> November 2021**

## **Report of the Head of Engineering & Transport**

**D.W Griffiths**

### **Matter for Decision**

**Wards affected: Godre'r Graig**

### **Design Options for the Remediation of Cilmaengwyn Tip above Godre'r Graig Primary School**

### **Purpose of Report**

To inform Members of the results of Earth Science Partnership's work to investigate design options and produce budget estimates for works associated with the remediation of Cilmaengwyn Spoil Tip and for Members to agree the option to be pursued.

### **Executive Summary**

The report outlines the remediation options and associated costs for the remediation of Cilmaengwyn Spoil Tip.

### **Background**

Inspection of historic Ordnance Survey plans dating from 1877 indicates the overall site to have initially developed with the formation of two small quarries, one named Cwar Pentwyn and the other unnamed and described as an 'old quarry'. A mine entry (adit) is shown as an 'old coal level' at the southwest corner of Cwar Pentwyn with a small spoil tip immediately adjacent. Mounds of quarry waste are shown to the south and east of both quarries.

The 1898 plan shows Cwar Pentwyn to have expanded slightly, with a corresponding increase in spoil tip mounds to the south and east. Both quarries appear to be disused on the 1918 Edition plan, with Godre'r Graig School having been constructed during the period between surveys.

The spoil tip to the east is the problematic one above the school. The majority of the land on which this tip is on, is in the ownership of Neath Port Talbot CBC and is registered on the same Land Registry Title as the school. The other tips within this complex are on privately owned land.

A report was presented to the Streetscene and Engineering Cabinet Board on 21<sup>st</sup> May 2021 seeking permission to direct award Earth Science Partnership work to investigate design options and produce budget estimates for works associated with the remediation of Cilmaengwyn Spoil Tip. The results of that work are contained within this Cabinet Board Report.

### Remedial Options

In June 2021 ESP were asked to investigate design options and produce budget estimates for works associated to the tip, to include, but not limited to:

Option 1 - The development of a design and production of a budget estimate for the removal of the spoil materials associated with Cilmaengwyn Godre'r Graig tip.

Option 2 - The development of a design and production of a budget estimate for a hard engineering solution in the form of bunds, catch walls etc., to protect Godre'r Graig Primary School from the slip of any spoil material associated with Cilmaengwyn Godre'r Graig Tip; and

Option 3 - The development of a design and production of a budget estimate for demolition of Godre'r Graig Primary School building and reusing the site with a community benefit. This option will have to take into account the effect on properties downhill of the school from the slip of any spoil material associated with Cilmaengwyn Godre'r Graig Tip.

The full Earth Science Partnership Tip Remediation Assessment Report ESP.7234e.04.3564 is attached in Appendix A.

The detailed advice for each of the three options which includes risk and costs is as follows:

#### Option 1 - Removal of Quarry Spoil Tip

This option would involve the design and removal of approximately 90,000m<sup>3</sup> of material. The work would take a year to complete and the budget estimate is £6.1m. NPT would also have to enter into negotiations with a number of private land owners to agree access for the vehicles needed to remove the material, this will remove the risk.

#### Option 2 - Engineered Structure

This option would involve the construction of a retaining structure above the school which is designed to catch any falling material. The work would take an estimated 8-10 months to complete and the budget estimate is £1.4m. NPT would also have to enter into negotiations with a number of private land owners to agree purchase & access rights for construction. This option would not remove the risk which would require on-going monitoring and management.

#### Option 3 - Demolition of School

This option would involve the demolition of the school building, however the site will not be suitable for re-use in terms of a community benefit. As part of this work the area will be remediated and landscaped with a bund formed to protect the properties downhill of the school from any slip materials. The work would take an estimated 3 months to complete and the budget estimate is £245K.

### **Financial Impact**

Option 1 will cost £6.1MTB

Option 2 will cost £1.4M

Option 3 will cost £245K

Dependent upon which option is pursued funding will need to be identified.

## **Integrated Impact Assessment**

A first stage impact assessment has been undertaken to assist the Council in discharging its legislative duties (under the Equality Act 2010, the Welsh Language Standards (No.1) Regulations 2015, the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016.

The first stage assessment, attached at Appendix B, has indicated that a more in-depth assessment is not required. A summary is included below:-

A full impact assessment is not required, as the proposed remediation works will provide a benefit to the Community.

### **Valleys Community Impacts**

Option 1 would remove the risk.

Option 2 the risk and hazard will remain, but mitigation work undertaken as set out in Earth Science Partnership report.

Option 3 the risk would remain, mitigation work undertaken would enhance the local environment and protect properties downhill of the school.

### **Workforce Impacts**

There are '**No Implications**' associated with this report.

### **Legal Impacts**

There are '**No Implications**' associated with this report.

### **Risk Management Impacts**

Option 1 would remove the hazard and the risk.

Options 2 & 3 the hazard would remain but mitigation work undertaken to reduce the risk from tip spoil flow.

It should be noted that the recent monitoring undertaken has recorded movement in the vicinity of the tip which has now been assessed as Actively Unstable.

## **Consultation**

Local Members and the Godre'r Graig Board of Governors and Head Teacher have been briefed on the options report. The report was published on the Councils website and a letter drop undertaken advising the community of the report. In addition an on-line resident engagement briefing was facilitated to explain the options report to the local community.

## **Recommendations**

Having due regard to the Integrated Impact Screening Assessment it is recommended that:

Option 3 - The demolition of Godre'r Graig Primary School building be implemented to manage the risk and improve the local environment.

## **Reason for Proposed Decision**

To manage the risks and liabilities associated with spoil tip debris flow at the site, as this is the only affordable solution available to the council.

## **Implementation of Decision:**

The decision is proposed for implementation after the three day call in period.

## **Appendices**

Appendix A – Earth Science Partnership - Tip Remediation Assessment Report ESP.7234e.04.3564.

Appendix B – Integrated Impact Assessment.

## **Background Papers**

None.

## **Officer Contact**

Mr. Hasan Hasan, Engineering Manager

Tel. No. 01639 686463

Email [h.hasan@npt.gov.uk](mailto:h.hasan@npt.gov.uk)