4 Doolittle Mill
Froghall Road
Ampthill
Bedfordshire
MK45 2ND

Tel: 01525 307060

Email: richard.earl@tgms.co.uk
Web: www.tgms.co.uk

BURGESS HILL TOWN COUNCIL

A specification for an extension to Burgess Hill Burial Ground, Jane Murray Way, Burgess Hill RH15 9TT.

21 APRIL 2024

TGMS1233.6

STATUS: FOR ISSUE

REVISION RECORD					
Rev	**Date**	**Description**	**Prepared**	**Checked**	**Approved**
0	21-04-24	Document Creation.	RE	MY	MY

TABLE OF CONTENTS

Appendices

1. Drawing TGMS1352.1-1 Burgess Hill Burial Ground Extension - Site Layout
2. TGMS1352.1 Burgess Hill Burial Ground Extension Work Schedules 30 04 24.xlsx

Please note: Quantities have been provided in the Work Schedules referred to above however these are indicative only and must be verified by the Contractor. TGMS accepts no liability for these quantities, which must not be relied upon.

1. PART I: JCT 2016 MINOR WORKS BUILDING CONTRACT - PRELIMINARIES SUMMARY

1.1 PROJECT PARTICULARS

1.1.1 The Project

- Name: Burgess Hill Burial Ground Extension.
- Nature: Burial ground construction works.
- Location: Burgess Hill Burial Ground, Jane Murray Way, Burgess Hill RH15 9TT.
- Length of contract: 12 Weeks.

1.1.2 Employer (Client)

- Name: Burgess Hill Town Council.
- Address: 96 Church Walk, Burgess Hill RH15 9AS.
- Contact: Ramize Easter, Senior Corporate Services Officer.
- Telephone: 01444 238217
- Email: Ramize@burgesshill.gov.uk

1.1.3 Principal Contractor (CDM)

- Name: TBC
- Address:
- Contact:
- Telephone:
- E-mail:

1.1.4 Architect / Contract Administrator

- Name: Dr Richard Earl.
- Address: TGMS, 4 Doolittle Mill, Froghall Road, Ampthill, Bedfordshire, MK45 2ND.
- Telephone: 01525 307060 / 07736 476300
- Email: richard.earl@tgms.co.uk

1.1.5 CDM Administrator

- Name: N/A
- Address:
- Contact:
- Telephone:
- Email:

1.2 FORM OF CONTRACT

The form of contract will be the Joint Contracts Tribunal Ltd Minor Works Building Contract 2016 Edition incorporating all current published amendments.

The Clauses are scheduled within this document, but the Contractor must inspect the draft form for the full details of these Clauses and is to allow such sum/s as may deem necessary for carrying out the obligations and services required by the Contract. Payment terms are amended to 30 days.

All information contained within this document is subject to the conditions of the above stated contract.

1.3 THE RECITALS

1.3.1 First Recital

The work comprises cemetery construction works.

1.3.2 Second Recital

All construction information is found in the specification section (**REF: TGMS1352.1**) and on the drawings scheduled in Table 1 below.

1.3.3 Third Recital

The Contractor is to supply the Employer with a copy of the priced Work Schedules.

1.3.4 Forth Recital

Is the Employer a 'contractor' for the purposes of CIS? **No.**

1.3.5 Sixth Recital

The Contract is not supplemented by a Framework Agreement.

1.4 THE ARTICLES

Article 2: Contract Sum: **TBC**

Article 3: ~~Architect~~/Contract Administrator: **TGMS**.

Article 4 The Principal Designer for the purposes of the CDM Regulations is the ~~Architect~~/Contract Administrator

Article 5 The Principal Contractor for the purposes of the CDM Regulations is the Contractor.

Article 7: Is dispute resolution to be by arbitration? **Yes**

1.5 CONTRACT PARTICULARS

Fourth Recital & Schedule 2

Base Date: **10 days before tender return date**

Fifth Recital

CDM Regulations **The project is not notifiable.**

Section 2.2

Works commencement date **TBC.**

Date for completion: **TBC.**

Section 2.8

Liquidated damages: **£50 per day or part thereof.**

Section 2.10

Rectification period: **12 months from the date of practical completion.**

Section 4.3 Date of first interim payments

30 days from start date.

Section 4.3 Interim payments

95% of total work value up to practical completion.

Percentage of the total amount to be paid to the contractor on or after practical completion: **97.5%.**

Section 4.8.1 Final certificate and final payment

Supply of documentation for computation of amount to be finally certified: **3 months.**

Section 4.3 and 4.8 Fluctuations provision

Schedule 2 (Fluctuations Option): **Does not apply.**

Section 5.3

Contractor's Public Liability insurance: injury to persons or property – the required level of cover is not less than **£1 million.**

Section 5.4A, 5.4B and 5.4C Insurance of the Works.

Insurance of the works: **Option A Applies**.

Percentage to cover professional fees: **15%**

Section 7.2 Settlement of Disputes – Adjudication

The Adjudicator is: **Chartered Institute of Arbitrators**

Nominating body: **Chartered Institute of Arbitrators**

Appointor of Arbitrator (and of any replacement**): President or a Vice-President of the Chartered Institute of Arbitrators.**

Attestation

Method of execution: **By Deed.**

1.6 FORM OF TENDER

PROJECT TITLE: Cemetery extension construction works at Burgess Hill Burial Ground.

We ..... (Tenderer's name to be entered) hereby tender and undertake to perform the whole of the works/services required in and associated with the Project for **Burgess Hill Town Council** according to the Specification, Work Schedules, Preliminaries and Drawings examined by us for the firm price sum of:

.....(pounds)

.....(pence)

(£ : p) excluding VAT.

Further we are prepared, when called upon to do so, to enter into and sign a contract, the full terms of which we have read, for the due and proper completion of the works/services.

We understand that we are tendering at our own expense and that the Client is not bound to accept the lowest or any tender and that the client reserves the right to award the contract phase by phase.

We declare that we are not party to any scheme or agreement under which:

- we inform any other person the amount of our tender; and/or
- we have fixed the amount of any tender in accordance with a price fixing arrangement.

We accept that the Client is entitled to cancel the contract and to recover from us the amount of any loss resulting from such cancellation if it is discovered that there has been any corrupt or fraudulent act or omission by us which in any way induced the Client to enter into the contract.

We declare that all goods materials and workmanship will meet the appropriate British Standard Specification or British Standard Code of Practice issued by the British Standards Institution or equivalent European standard current at the date of the contract.

We undertake in respect of all persons employed by us or with whom we sub-contract to comply with the Disability Discrimination Act 1995 and the Commission for Racial Equality's Code of Practice issued under the Race Relations Act 1976 aimed at eliminating discrimination and promoting equality of opportunity.

We undertake not to transfer, assign, or sub-let any portion of the contract nor create any lien or charge on premises, goods or equipment connected with or forming part of the contract, without the written consent of the Client or its duly authorised officer.

We agree that if, before acceptance of this tender, an error in computation of the tender is detected in the priced document submitted by us we will be given details of the error and the opportunity of confirming the total tender sum or withdrawing the tender.

We agree that the insertion by us of any qualifications to this tender or any unauthorised alterations to any of the tender documents will not affect the original text but will cause the tender to be liable to rejection.

We agree that this tender will remain open for acceptance by the Client and will not be withdrawn by us for a period of 90 days from the last date fixed for the receipt of tenders or any notified extension thereof.

We certify that this is a bona fide tender.

Tenderer's Name

.....

Address

.....

.....

.....

Telephone

.....

Facsimile

.....

Signature*

.....

Name

.....

Date

.....

Witness

.....

Name

.....

Date

.....

* Where the Tenderer is an incorporated association the Company Secretary or a duly authorised Director should sign. In the case of a partnership a Partner should sign. In the case of an individual the Proprietor should sign.

2. PART II: DESIGN SPECIFICATION

2.1 INTRODUCTION AND SITE INFORMATION

The northern half of Burgess Hill Burial Ground was constructed in 2001 however this is now nearing capacity and to there is now a requirement to extend southwards. The land designated for development currently comprises a ~0.93 ha plot of grassland immediately to the south of the existing burial ground (Figure 1).

Figure 1. Burgess Hill Burial Ground and the proposed extension plot (dashed red line).

2.1.1 Site location and access

The site comprises an approximately rectangular plot of mown grassland which can be accessed through the existing burial ground entrance and car park off Jane Murray Way (A273). The plot is bounded by the existing burial ground to the north, agricultural land to the west, and Burgess Hill Green Circular Route to the south and east. The nearest postcode is RH15 9TT.

2.1.2 Arrangements to visit the site

To arrange a site visit, please contact:

- Contact: Ramize Easter, Senior Corporate Services Officer
- Telephone: 01444 238217
- Email: Ramize@burgesshill.gov.uk

2.2 GENERAL SCOPE

The work proposed in this specification shall be as follows:

- Site clearance and enabling works.
  - Removal of vegetation using a total herbicide.
  - Removal of a section of bird's mouth fencing near the car park perpendicular to the boundary hedge.
  - Removal of a section of evergreen hedge adjacent to the compound and perpendicular to the boundary hedge.
  - Removal of the "L" shaped section of close board fencing demarcating the southern and western perimeter of the existing compound.
  - Removal of two 5-bar gates at the entrance to the existing compound (these are in line with the hedge that is to be removed).
  - Create a 5 m gap in the wire stock fencing running parallel to the ditch that bisects the northern and southern areas to accommodate the new central road.
  - Installation of a culvert in a 6 m section of the ditch that runs west-east bisecting the existing and new cemetery areas to accommodate a new central road running southwards (from the existing central spur).
- Installation of a water supply and standpipes from a spur from the existing supply that enters the site from the west with a stopcock in Malthouse Lane.
- Casting of a concrete pad for a new storage compound to be located immediately south of the existing compound.
- Installation of drainage infrastructure for the car park extension and pedestrian paths.
- Construction of an extension to the existing car park (self-binding gravel).
- Construction of pedestrian paths (self-binding gravel).
- The installation of dense macadam roads.
- Targeted topsoil strip in the grave plot area.
- Placement of subsoil arisings from the construction of the car park and roads.
- Placement and spreading of topsoil arisings from construction of the car park, roads, paths and concrete pad.
- Cultivation and levelling of the site to create an even surface.
- Grass establishment (fertilising, seeding and mowing).
- Hedgerow planting around the compound and Muslim burial area.
- Installation of post and rail fencing around the new compound.
- Extension of the bird's mouth fencing parallel with the eastern boundary along the new car park area.
- Installation of a gate for the new compound area.
- Installation of telescopic drop-down bollards.
- Reinstatement of traffic routes and storage areas after completion of works.
- Initial agronomic maintenance.

Please refer to the Schedule of Drawings (Table 1) for earthworks, pipe sizes and layout. Please consult the Drawing Register to ensure that the latest revision versions of the drawings are used.

Table 1. Schedule of Drawings

Drawing No.	Title
TGMS1352.1-1	Burgess Hill Burial Ground Extension – Site Layout

General Notes

- All drainage and earthworks to be carried out using equipment fully equipped with laser grade control.
- All ancillary equipment to be fitted with low ground pressure tyres.
- Diesel or any other deleterious matter shall be prevented from contaminating the site etc. Any such matter allowed to pollute the site shall be removed together with all affected soil and/or plant material and carted to tip at the Contractor's own expense. Any material necessary to make good the soil formation or plant material will be provided by the Contractor and will be of the type and quality of the original material prior to damage, and must be approved by the Contract Administrator.
- It is the Contractor's responsibility to conduct searches to determine the presence of any services and utilities running through, over and/or around the working area. Contractors should conduct site investigations to determine the location of any service or utilities as per good health and safety practice prior to commencement of any work on site.
- Prior to start on site, the Contractor shall prepare a photographic Schedule of Condition and agree same with the Contract Administrator.
- The works listed below are not necessarily to be conducted in chronological order. It is the responsibility of the contractor to implement all items specified to the desired standards irrespective of the order that they are presented in this document.

2.3 DETAILED SPECIFICATION

ITEM OPERATION

Transport and preliminaries

P1 The Contractor shall allow for all necessary fencing and signage in order to secure the working and site compound areas and haulage routes in order to protect members of the public from the works. It is anticipated that Heras fencing shall be used to demarcate the working areas and site compound. Footpath crossing points shall be marked appropriately. The location for deep excavations (e.g., inspection chamber construction) shall be protected with Heras (or similar) fencing.

P2 The Contractor shall allow for compliance with all relevant Health and Safety regulations including the Construction Design and Management regulations (CDM) 2015.

P3 The Contractor shall allow for the provision of all welfare facilities for staff.

P4 The Contractor shall allow for the mobilisation and demobilisation of all necessary plant to complete the project.

P5 The contractor shall allow for compliance with all Conditions of Contract.

1 Setting out

1.1 The development area shall be set out according to the details provided on **Drawing TGMS1352.1-1.**

2 Site clearance and enabling works

2.1 Spray off the existing vegetation in the grave plot working area with an approved, systemic, non-residual total herbicide in accordance with the manufacturer's instructions and an appropriate COSHH assessment by qualified personnel. A period of 14 days shall elapse between spraying and undertaking cultivations to allow sufficient time for the vegetation to senesce. A second application of total herbicide may be required just prior to cultivation to ensure complete vegetation control. Extreme care should be taken to avoid spraying trees/hedges on site.

2.2 Any remaining vegetation and stubble on the site shall be flail-mowed and the clippings removed to disposal off-site.

2.3 A 5 m section of bird's mouth fencing near the car park perpendicular to the boundary hedge shall be removed and disposed of off-site.

2.4 A 10 m section of evergreen hedge adjacent to the compound and perpendicular to the boundary hedge shall be removed, including grubbing out of roots (arising to be disposed of off-site). Hedge removal must not be carried out between the 1st of March and the 1st of September in order to comply with DEFRA regulations.

2.5 The "L" shaped section of close board fencing demarcating the southern and western perimeter of the existing compound shall be removed. The fencing panels and posts are to be retained on-site whilst their potential for re-use is assessed by the Client.

2.6 The double 5-bar gates at the entrance to the existing shall be removed and retained on-site whilst their potential for re-use is assessed by the Client.

2.7 With reference to **Drawing TGMS1352.1-1**, a 5 m gap in the wire stock fencing running parallel to the ditch that bisects the northern and southern areas shall be created to accommodate the new central road. It is anticipated that this will require two new end-posts and bracing struts to ensure that the posts remain vertical and the fencing remains taught.

2.8 Supply and install a 225 mm diameter twin-walled culvert in a 5 m section of the ditch that runs west-east bisecting the existing and new cemetery areas to accommodate a new central road running southwards from the existing central spur.

2.8.1 Excavation operations shall be carried out when subsoil is below its plastic limit water content.

2.8.2 Excavate a footprint of 6 m x 2 m down to 955 mm below the proposed finished road level (disposal of arisings on-site).

2.8.3 The formation shall be free from tree roots, mud or slurry and will have no areas of freestanding water. Any loose, fragmented or soft materials shall be excavated and re-packed with crushed rock, free from detritus material, in accordance with the Department of Transport Specification for Highway Works (Class 6F2).

2.8.4 The formation shall be compacted to ensure full compaction to ensure no future settlement or subsidence, and to achieve a CBR of >5%.

2.8.5 The formation surface shall be treated with a residual herbicide to minimise the risk of future weed growth. This to be applied by competent personnel in strict accordance with the Manufacturer's instructions and relevant legislation/regulations.

2.8.6 Supply and lay a permeable geotextile membrane over the formation surface. The geotextile membrane shall be a non-woven type and have a minimum tensile strength of 20 kN m^{-1} when tested in accordance with BS EN ISO 10319 and a static puncture strength of at least 2.0 kN when tested in accordance with BS EN ISO 12236. Joints shall overlap by at least 300 mm.

2.8.7 Supply and place 300 mm compacted depth of a non-frost susceptible DOT Type 1 granular sub-base to SHW Clause 803 or **4/40 mm, 4/20 mm** graded crushed concrete aggregate to **EN12620** or locally available secondary or recycled aggregates which comply with **2/6.3** graded crushed concrete aggregate to **EN12620.**

2.8.8 The sub-base shall be compacted using smooth drum rollers or a plate compactor to ensure full compaction and consolidation to ensure no future settlement or subsidence. The installed sub-base shall have a compacted density of 95% of the maximum dry density when tested in accordance with BS5835 (there shall be no detectable movement under the compactor used to compact the surface) and have a target stiffness of 60 MPa (min 40 MPa) when tested with a lightweight deflectometer.

2.8.9 Supply and install a 6 m long 225 mm twin-walled culvert, bedded on a 30 mm sand layer, and surround and cover with further compacted Dot Type 1 stone to within 90 mm of the proposed finished road level.

2.8.10 The surface level tolerance shall be <10 mm when checked using a 3 m straight edge.

3 Water supply and stand pipes

3.1 Supply and lay 63 mm diameter MDPE water pipe (12 bar pressure rated) including all necessary trenching and connect to the supply in the existing cemetery (connection point is understood to be on the western boundary, with a stopcock in Malthouse Lane).

3.2 Supply and install Edwards Standpipe Model ED2012 with bib tap (or similar) including connection to the water supply via a ½" BSP brass female socket. Include a 600 x 300 mm concrete slab, set into the ground beneath the taps to dissipate water spillage energy. The location of the standpipes is to be agreed with the Client.

4 Concrete slab for a storage shed

4.1 Excavate to a depth of 250 mm below finished level at the location as shown on Drawing **TGMS1352.1-1**.

4.2 Supply & install tanalised timber wooden edgings (22 mm x 150 mm) anchored with tantalised wooden stakes (35 mm x 35 mm x 600 mm depth). The stakes shall be installed at 1000 mm centres and the edging board fixed with a 50 mm annular nail. Where the stake is at the junction of separate lengths of edging, each shall be anchored to the stake.

4.3 Supply and place 1 layer of PIFA 1200 Damp Proof Membrane, or similar, to base. Lap joints to be taped with min. 350 mm overlap.

4.4 Supply and place 150 mm compacted depth of a non-frost susceptible DOT Type 1 granular sub-base to SHW Clause 803 or **4/40 mm, 4/20 mm** graded crushed concrete aggregate to **EN12620** or locally available secondary or recycled aggregates which comply with **2/6.3** graded crushed concrete aggregate to **EN12620.**

4.5 Supply and place steel reinforcement mesh, A252 (8 mm wires). Where sheets are overlapped, the lap should be at least 350 mm and the two layers should be joined with tie wires. There shall be a minimum of 50 mm cover below and above the steel reinforcement.

4.6 Supply, place and finish 100 mm of Class C30 mass concrete in bays as required. Include expansion joints as required, comprising full depth flexible filler board with 30 mm suitable sealant to top of joint. Surface to be brush and trowel finish.

5 Drainage installation (car park extension and pedestrian paths)

5.1 Trench excavation

5.1.1 Please refer to **Drawing TGMS1352.1-1** for the layout of the drainage scheme. Drain cross sections are also presented.

5.1.2 The trenches shall be clean cut, with a level base, to the dimensions given in **Item 5.2**.

5.1.3 All trenches shall be excavated with machinery fitted with laser grade control.

5.1.4 Excavation shall begin at the outfall, the profile to be established at the outfall, and carried upstream with adjustments for grade and depth as work proceeds.

5.1.5 Any under drains encountered are to be marked so they can be renovated and connected into the new system if considered viable.

5.1.6 All spoil from this operation shall be disposed of on-site.

5.2 Trench dimensions (please refer to **Drawing TGMS1352.1-1** for cross-sections)

5.2.1 Collector drains under the self-binding stone car park (160 mm ∅ plastic perforated pipe).

- Depth ≥ 0.300 m below formation surface.
- Grade at not less than 0.50% (1:200).
- Not more than 0.200 m wide.

5.2.2 Collector drains under the self-binding stone pedestrian paths (160 mm ∅ plastic perforated pipe).

- Depth ≥ 0.300 m below formation surface.
- Grade at not less than 0.50% (1:200).
- Not more than 0.200 m wide.

5.2.3 Carrier drain (150 mm ∅ non-perforated twin-walled pipe).

- Depth varies.
- Grade not less than 0.50% (1:200).
- Not more than 0.200 m wide.
- To be back-filled with site won subsoil and topsoil.

5.3 Gravel backfill for collector drains

5.3.1 The material shall be clean, hard, gravel or chippings (e.g. quartz or quartzite) with dimensions not greater than 6 mm and not less than 2 mm. The calcium carbonate content shall not exceed 10%.

5.3.2 The material shall be free of fines.

5.3.3 The gravel backfill shall be placed immediately and carefully over the pipe and backfilled flush with the formation surface. Any damage to the pipe shall be made good at the Contractor's expense.

5.4 Pipe laying

5.4.1 Pipes shall be laid to the correct depth stipulated above and to an even grade.

5.4.2 Drainage depth is to be measured from finished ground levels (unless indicated otherwise).

5.4.3 The pipe for collector drains shall be perforated corrugated plastic corresponding to EN1401-1:2019. The pipe for carrier drain shall be non-perforated twin-walled pipe corresponding to EN1401-1:2019. There should be no damage to the pipe. Upper ends of the lateral drain runs shall be plugged to prevent ingress of soil or animals.

5.5 Junctions and connections

5.5.1 The drains shall be let into inspection chambers and caulked with a sand/cement mix concrete to make good the pipe/wall seal.

5.6 Inspection chambers

5.6.1 The inspection chambers are to be positioned as indicated on the accompanying plans and detailed in the work schedules.

5.6.2 Chambers can be constructed of brick, concrete or plastic (conforming to BS EN 13598-2:2020).

5.6.3 They shall be large enough to permit access for cleaning, jetting and rodding.

5.6.4 A sump of at least 150 mm below the lowest pipe shall be incorporated to act as a silt trap.

5.6.5 The top of the chambers shall be set level with the ground surface.

5.6.6 The cover loading (to BS EN 124:2015) for the inspection chambers shall be Class B125.

5.7 Outfall

5.7.1 Proprietary headwalls shall be installed in the perimeter ditches at the locations indicated on **Drawing TGMS1352.1-1**.

5.8 Disposal of arisings

5.8.1 Drain trenching arisings shall be disposed of on-site.

6 Self-binding stone car park and pedestrian paths

6.1 A self-binding car park and pedestrian paths shall be constructed as indicated on **Drawing TGMS1352.1-1**. Excavate and dispose (on-site) material to achieve a uniform sub-grade of 380 mm and 230 mm below finished levels for the car park and paths respectively. Ensure that topsoil is separated from subsoil.

6.2 Excavation operations shall be carried out when subsoil is below its plastic limit water content.

6.3 The formation shall be free from tree roots, mud or slurry and will have no areas of freestanding water. Any loose, fragmented, or soft materials shall be excavated and re-packed with crushed rock, free from detritus material, in accordance with the Department of Transport Specification for Highway Works (Class 6F2).

6.4 The formation shall be compacted using smooth drum rollers to ensure full compaction to achieve a CBR of >5% to reduce the risk of future settlement or subsidence.

6.5 The formation surface shall be treated with a residual herbicide to minimise the risk of future weed growth. This to be applied by competent personnel in strict accordance with the Manufacturer's instructions and relevant legislation/regulations.

6.6 Kerbs around the car park shall be precast concrete pin kerbs (e.g. 50 mm x 150 mm x 915 mm) to BS 7263:2001, well haunched in concrete on mass concrete foundations. Movement joints shall be installed at appropriate spacings. Kerbs shall be laid to a true line and level with the proposed finished macadam surface.

6.7 Supply and install tanalised timber edgings (22 mm x 150 mm) anchored with tantalised wooden stakes (35 mm x 35 mm x 600 mm depth) around the perimeter of the paths. The stakes shall be installed at 1000 mm centres and the edging board fixed with a 50 mm annular nail. Where the stake is at the junction of separate lengths of edging, each shall be anchored to the stake.

6.8 Supply and lay a permeable geotextile membrane over the formation surface. The geotextile membrane shall be a non-woven type and have a minimum tensile strength of 20 kN m-1 when tested in accordance with BS EN ISO 10319 and a static puncture strength of at least 2.0 kN when tested in accordance with BS EN ISO 12236. Joints shall overlap by at least 300 mm.

6.9 Supply and place 300 mm and 150 mm compacted depth of stone sub-base comprising Aggregate Industries 'Suds Aggregate' 20/4 product (or equivalent) for the car park and paths respectively. All aggregates shall be non-porous and frost resistant; test certificates to be provided by the aggregate supplier.

6.10 The sub-base shall be compacted using smooth drum rollers to ensure full compaction and consolidation to reduce the risk of future settlement or subsidence. The installed sub-base shall have a compacted density of 95% of the maximum dry density when tested in accordance with BS5835 (there shall be no detectable movement under the roller used to compact the surface).

6.11 The sub-base for the self-binding stone surfacing shall have a permeability of >500 mm/hour when compact (as per BS EN 12626).

6.12 The surface level tolerance shall be <10 mm when checked using a 3 m straight edge.

6.13 Supply and lay 80 mm consolidated thickness layer of self-binding Cotswold stone chippings (sample to be approved by the Client).

6.14 The surface shall be compacted using smooth drum rollers to ensure full compaction and consolidation to reduce the risk of future settlement or movement.

6.15 When checked using a 3 m straight edge, there should be no deviation >20 mm..

7 Dense macadam roads

7.1 Dense macadam roads shall be constructed as indicated on Drawing **TGMS1352.1-1**. Excavate material to achieve a uniform sub-grade of 0.390 mm below finished levels inclusive of a 1:40 cross-fall.

7.2 Excavation operations shall be carried out when subsoil is below its plastic limit water content.

7.3 The formation shall be free from tree roots, mud or slurry and will have no areas of freestanding water. Any loose, fragmented or soft materials shall be excavated and re-

packed with crushed rock, free from detritus material, in accordance with the Department of Transport Specification for Highway Works (Class 6F2).

7.4 The formation shall be compacted using smooth drum rollers to ensure full compaction to ensure no future settlement or subsidence; to achieve a CBR of >5%.

7.5 The formation surface shall be treated with a residual herbicide to minimise the risk of future weed growth. This to be applied by competent personnel in strict accordance with the Manufacturer's instructions and relevant legislation/regulations.

7.6 Carry out California Bearing Ratio (CBR) plate testing to six (6 no.) different areas of the prepared formation and provide published results upon completion for approval by TGMS prior to installation of the stone sub-base.

7.7 Supply and lay precast concrete pin kerbs (e.g. 50 mm x 150 mm x 915 mm) to BS 7263:2001, well haunched in concrete on mass concrete foundations. Movement joints shall be installed at appropriate spacings. Kerbs shall be laid to a true line and level with the proposed finished tarmac surface.

7.8 Supply and lay a permeable geotextile membrane over the formation surface. The geotextile membrane shall be a non-woven type and have a minimum tensile strength of 20 kN m^{-1} when tested in accordance with BS EN ISO 10319 and a static puncture strength of at least 2.0 kN when tested in accordance with BS EN ISO 12236. Joints shall overlap by at least 300 mm.

7.9 Supply and place 300 mm compacted depth of a non-frost susceptible DOT Type 1 granular sub-base to SHW Clause 803 or **4/40 mm, 4/20 mm** graded crushed concrete aggregate to **EN12620** or locally available secondary or recycled aggregates which comply with **2/6.3** graded crushed concrete aggregate to **EN12620.**

7.10 The sub-base shall be compacted using smooth drum rollers to ensure full compaction and consolidation to ensure no future settlement or subsidence. The installed sub-base shall have a compacted density of 95% of the maximum dry density when tested in accordance with BS5835 (there shall be no detectable movement under the roller used to compact the surface) and have a target stiffness of 60 MPa (min 40 MPa) when tested with a lightweight deflectometer.

7.11 The surface level tolerance shall be <10 mm when checked using a 3 m straight edge.

7.12 Conduct surface stiffness testing with a lightweight deflectometer (300 mm plate, contact stress of 100 kPa (7.1 kN impact force)) at 20 m intervals along the path sub-base. Results from the testing shall be provided to TGMS for approval prior to the application of the macadam course.

7.13 Supply and lay a 60 mm consolidated thickness layer of 14 mm sized granite / hard limestone aggregate dense bitumen macadam base course conforming to BS 4987:Part 1:2005.

7.14 Supply and lay a 30 mm consolidated thickness layer of 6 mm sized granite / hard limestone aggregate Stone Mastic Asphalt (SMA) dense bitumen macadam wearing course conforming to BS 4987:Part 1:2005.

7.15 The surface level tolerance shall be <8 mm when checked using a 3 m straight edge.

8 Topsoil cultivation (grave plot areas)

8.1 Once vegetation has senesced, the development area shall be ploughed to a depth of 200 mm.

8.2 Following ploughing, the area shall be cultivated with a power harrow prior to re-grading.

9 Disposal of arisings (roads)

9.1 All arisings from excavations shall be disposed of by temporarily scraping off topsoil from proposed grave plot areas, placing and grading the surplus soil before returning the topsoil.

10 Re-grading

10.1 Once the topsoil is friable it should be carefully graded to provide a surface that is level to a tolerance of <30 mm under a 2 m straight edge.

10.2 The graded surface must form a smooth transition with the surrounding land. There shall be no slopes greater than 1:3.

11 Final grading, seedbed preparations, fertilisation & seeding

11.1 Following re-grading, the development area shall undergo final surface grading to produce a finished surface to the tolerances stated in **Item 10.1.**

11.2 The development area shall then be fertilised with a pre-germination fertiliser of 10:15:10 formulation at a rate of 70 g m^{-2} at least 5 days prior to seeding.

11.3 Any stones/debris greater than 20 mm in any dimension shall be removed from the top 50 mm of the topsoil by stone picking/stone burying.

11.4 The surface shall be lightly cultivated in order to incorporate the fertiliser and to produce a seedbed suitable for the cultivation of grass.

11.5 The following seed mix (or similar) shall be drilled using multiple passes, to achieve an overall seedrate of @ 35 g m^{-2}:

- 40% Perennial ryegrass
- 40% Creeping red fescue
- 20% Browntop Bent

These particular grasses have been selected because they exhibit slow growth under a low maintenance regime.

11.6 The seed shall have a certified germination of not less than 80% and a certified purity of not less than 90%. Total weed seed content shall not be more than 0.5% and the total content of other crop seeds shall not exceed 1%.

11.7 Following seeding, the areas shall be lightly rolled with a set of Cambridge rolls in order to firm the seedbed and ensure good soil/seed contact.

11.8 The contractor shall undertake the first three grass cuts following establishment.

12 Hedgerows

12.1 A new hedge is to be established around part of the perimeter of the compound and Muslim burial area.

12.2 With reference to **Drawing TGMS1352.1-1**, excavate a 300 mm x 450 mm trench for the new hedge, deposit spoil alongside, supply and plant 2 rows of Common Hawthorn hedging plants (600 to 900 mm whips with clear plastic perforated spiral guards) at 300 mm centres

in staggered rows, backfilled with excavated material incorporating organic manure at a rate of 1 m^3 per 5 m^3. Carry out initial cut.

13 Fencing

13.1 A new fence is to be erected around the new compound. Supply and erect a 1.2 m high post and rail fence around the perimeter of the compound. The fence shall be Oak or Chestnut, comprising 3 horizontal rails 100 x 38, fixed with galvanised nails to 100 x 100 posts driven into firm ground. Fencing samples to be provided for approval by the Client prior to installation. Dispose of arisings on-site.

13.2 Supply and install a hardwood double gate inclusive of furniture, to secure the compound area at the location indicated on **Drawing TGMS1352.1-1**. Gate style to be approved by the Client prior to installation.

13.3 The bird's mouth timber fencing adjacent to the existing car park shall be extended along the new car park section.

13.3.1 Supply and install bird's mouth fencing set ~0.5 m back from the edge of the eastern edge of the new car park.

13.3.2 The posts and rails shall match the dimensions of the existing fence.

13.3.3 The straps shall be fabricated from ~2 mm galvanised steel plate and match the existing straps.

14 Telescopic drop-down bollards

14.1 Supply and install seven telescopic drop-down bollards at the locations indicated on **Drawing TGMS1352.1-1**. Product to be approved by the Client prior to installation.

15 Reinstatement of damage

15.1 All damage caused by plant and vehicle movement is to be reinstated. Cultivate any damaged areas to below the depth of damage using a rotary cultivator or similar equipment. Care must be taken with the timing of this operation to avoid smearing on the base of the cultivation. Any weeds or rubbish over 20 mm gauge must be removed and disposed of on site as directed by the Contract Administrator. Grade the topsoil to provide a surface that is level to a tolerance of ± 20 mm under a 2 m straight edge.

15.2 Any stones greater than 20 mm in any dimension should be removed from the top 50 mm of the topsoil by stone burying.

15.3 Fertilise with an appropriate pre-germination fertiliser of 10:15:10 formulation at a rate of 70 g m^{-2} at least 5 days prior to seeding. This should be lightly worked into the seedbed.

15.4 Undertake final cultivations to produce a seedbed suitable for the establishment of grass.

15.5 The area shall be drilled with the following seed mix (or similar), possibly with multiple passes, to achieve an overall seedrate of @ 35 g m^{-2}:

- 40% Perennial ryegrass
- 40% Creeping red fescue
- 20% Browntop Bent

These particular grasses have been selected because they exhibit slow growth under a low maintenance regime.

15.6 The seed shall have a certified germination of not less than 80% and a certified purity of not less than 90%. Total weed seed content shall not be more than 0.5% and the total content of other crop seeds shall not exceed 1%.

15.7 The seeded area shall be lightly rolled using a set of Cambridge rolls to settle and firm the surface.

16 As-built survey, O&M Manual and H&S File

16.1 An as-built/laid survey of the construction shall be carried out and provided to the Client in both pdf and dwg formats. The survey should indicate the location and type of all materials used including the water supply infrastructure along with the relevant diameters and depths of the installation.

16.2 Information on materials and methods used, and the operation and maintenance of all systems shall be provided to the Contract Administrator for inclusion in the O&M manual and H&S files as per the requirements of CDM 2015.

2.4 WORK SCHEDULES

Please refer to the accompanying MS Excel spreadsheet:

TGMS1352.1 Burgess Hill Burial Ground Extension Work Schedules 30 04 24.xlsx

Please note: Quantities have been provided in the Work Schedules referred to above however these are indicative only and must be verified by the Contractor. TGMS accepts no liability for these quantities, which must not be relied upon.

2.5 DESIGNERS ASSESSMENT OF RESIDUAL RISK

2.5.1 The Project

- Name: Burgess Hill Burial Ground Extension.
- Nature: Burial ground construction works.
- Location: Burgess Hill Burial Ground, Jane Murray Way, Burgess Hill RH15 9TT.

2.5.2 Nature of work:

- Site clearance and enabling works.
  - Removal of vegetation using a total herbicide.
  - Removal of a section of bird's mouth fencing near the car park perpendicular to the boundary hedge.
  - Removal of a section of evergreen hedge adjacent to the compound and perpendicular to the boundary hedge.
  - Removal of the "L" shaped section of close board fencing demarcating the southern and western perimeter of the existing compound.
  - Removal of two 5-bar gates at the entrance to the existing compound (these are in line with the hedge that is to be removed).
  - Create a 5 m gap in the wire stock fencing running parallel to the ditch that bisects the northern and southern areas to accommodate the new central road.
  - Installation of a culvert in a 6 m section of the ditch that runs west-east bisecting the existing and new cemetery areas to accommodate a new central road running southwards (from the existing central spur).
- Installation of a water supply and standpipes from a spur from the existing supply that enters the site from the west with a stopcock in Malthouse Lane.
- Casting of a concrete pad for a new storage compound to be located immediately south of the existing compound.
- Installation of drainage infrastructure for the car park extension and pedestrian paths.
- Construction of an extension to the existing car park (self-binding gravel).
- Construction of pedestrian paths (self-binding gravel).
- The installation of dense macadam roads.
- Targeted topsoil strip in the grave plot area.
- Placement of subsoil arisings from the construction of the car park and roads.
- Placement and spreading of topsoil arisings from construction of the car park, roads, paths and concrete pad.
- Cultivation and levelling of the site to create an even surface.
- Grass establishment (fertilising, seeding and mowing).
- Hedgerow planting around the compound and Muslim burial area.
- Installation of post and rail fencing around the new compound.
- Extension of the bird's mouth fencing parallel with the eastern boundary along the new car park area.
- Installation of a gate for the new compound area.
- Installation of telescopic drop-down bollards.
- Reinstatement of traffic routes and storage areas after completion of works.
- Initial agronomic maintenance.

2.5.3 Timescale for works:

12 weeks.

2.5.4 Existing drawings:

Table 2. Schedule of Drawings

Drawing No.	Title
TGMS1352.1-1	Burgess Hill Burial Ground Extension – Site Layout

2.5.5 Existing environment:

1. The site comprises an approximately rectangular plot of mown grassland which can be accessed through the existing burial ground entrance and car park off Jane Murray Way (A273).
2. The plot is bounded by the existing burial ground to the north, agricultural land to the west, and Burgess Hill Green Circular Route to the south and east.

2.5.6 Residual risk to construction workers:

1. Tetanus.
2. Injury from vehicle movements in and around site.
3. Potential fall hazard from exposed excavations prior to backfilling.
4. Fertiliser application.
5. Herbicide application.
6. Materials handling.

2.5.7 Residual maintenance risks:

1. Tetanus.
2. Injury from vehicle movements in and around site.
3. Fertiliser application.
4. Pesticide application.
5. Materials handling.

2.5.8 Residual operator risks

1. Deep excavations (open graves).

2.5.9 Construction materials that are hazardous to health:

1. Herbicide.
2. Fertiliser.
3. Soil.
4. Cement.
5. Macadam.

2.5.10 Site wide elements:

The working areas and haul routes shall be fenced with Heras fencing, or similar, to delineate these areas. This fencing shall be maintained until handover to the Client.

2.5.11 Method statements & risk assessments to be provided by contractor:

1. Earthworks.
2. Herbicide applications.
3. Land drainage installation.
4. Fertiliser applications.
5. Macadam surfacing.
6. Construction of concrete pads.

2.6 METHOD STATEMENTS

ITEM	Brief method statement (Continue on additional sheets if required)	Type/ name of equipment you intend to use	Is equipment owned by the contractor?	Is equipment rented?	Will work be sub-contracted?	How many staff will be on site?
Earthworks						
Herbicide application						
Land drainage installation						
Fertiliser application Macadam surfacing						
Concrete pads						

2.7 SUBCONTRACTORS

Please specify the names and contact details for any subcontractors that you intend to use during the project (please continue on a separate sheet if necessary):

Name:	Contact Details:	Role:

2.8 REFERENCES

Please provide references from three recent (last 2 years) schemes where you have carried out work of a similar nature and value. Please give name, postal address, email address and telephone number for the referees.

Name:	Contact Details:	Nature of work / project value (£):

2.9 CONFIDENTIALITY

This presentation is confidential and is only for the use of officers of Burgess Hill Town Council. Without the specific consent in writing of TGMS, no copies of this presentation are to be made and information contained herein should not be communicated to any third party. At the request of TGMS all copies of this document, in whatever form, are to be returned.

2.10 CONTACT DETAILS

Dr Richard Earl
Managing Director
Tel: 01525 307060
Mob: 07736 476300
Email: richard.earl@tgms.co.uk

Professional Sportsturf Design (north west) Ltd
Wigan Road
Leyland
Lancashire
PR25 5XW

TGMS
4 Doolittle Mill
Froghall Road
Ampthill, Bedfordshire
MK45 2ND