|  |  |
| --- | --- |
|  |  |
| **Annexure MRTS04.1 (March 2020)** |
| **General Earthworks** |
|  |
| **Specific Contract Requirements** |
|  |
| **Contract Number**  |  |
|  |
| Note: | Clause references within brackets in this Annexure refer to Clauses in the parent Technical Specification MRTS04 unless otherwise noted. |

|  |
| --- |
| Clearing and grubbingAdditional width for clearing and grubbing (Clause 7.2.1) |
|  | The maximum additional width for clearing and grubbing is  |  |

|  |
| --- |
| Areas to be cleared and grubbed (Clause 7.2.1) |
|  | The following areas are to be cleared and grubbed in addition to those specified. |
|  |  |

|  |
| --- |
| Trees required by the Administrator (Clause 7.2.3) |
|  | The following trees are required by the Administrator for use as marketable timber. |
|  |  |

|  |
| --- |
| Additional requirements for clearing and grubbing (Clause 7.2.8) |
|  | The following requirements apply to clearing and grubbing operations additional to those specified in Clause 7. |
|  |  |

|  |
| --- |
| Stripping of topsoil (Clause 8.2)Areas to be stripped (Clause 8.2) |
|  | The following areas are to be stripped of topsoil to the depth stated. |
|  | Location | Average Depth (mm) |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |
| --- |
| Refer to the Soil Management Plan – Planning in the environmental documents and/or the schedule of rates for estimated topsoil volumes and areas and depths for topsoil stripping required.Payment Note: Payment for the stripping and stockpiling of topsoil can be nominated in the schedule of rates of Work Item 32003P. |

|  |
| --- |
| Topsoil stockpile locations (Clause 8.4.1) |
|  | The following areas on the Site are available for the stockpiling of topsoil. |
|  |  |

|  |
| --- |
| Embankment foundations (Clause 9.2) |
|  | The following minimum allowable bearing pressures or minimum CBRs shall apply to foundations for embankments. |
|  | Location | Minimum Allowable Bearing Pressure (kPa) | Minimum CBR |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |
| --- |
| Acid sulphate soilsInitial assessment of acid sulphate soils on the Site (Clause 10.2) |
|  | Acid sulphate soils have been identified on the Site. | Yes |  | No |  |

|  |
| --- |
| Location of acid sulphate soils (Clause 10.2) |
|  | The locations of any acid sulphate soils on the Site are stated below. |
|  |  |

|  |
| --- |
| Likely deposits of acid sulphate soils (Clause 10.2) |
|  | Likely deposits of acid sulphate soils exist on the Site | Yes |  | No |  |
|  |  |
|  |  | No assessment |  |

|  |
| --- |
| Location of likely deposits of acid sulphate soils (Clause 10.2) |
|  | The locations of any likely deposits of acid sulphate soils on the Site are stated below. |
|  |  |

|  |
| --- |
| Site specific requirements (Clause 10.3) |
|  | The following site specific requirements apply to the assessment and treatment of acid sulphate soils. |
|  |  |

|  |
| --- |
| Water treatment (Clause 10.7) |
|  | The standard to be attained prior to discharge of contaminated water is as follows. |
|  |  |

|  |
| --- |
| Areas available for the disposal of excess and unsuitable material on the Site (Clauses 7.2.7 and 11.2) |
|  | The following areas on the Site are available for the disposal of excess and unsuitable material. If no areas are indicated, all such material shall be removed from the Site. |
|  |  |

|  |
| --- |
| Ground surface treatmentAdditional areas for standard ground surface treatment (Clause 12.2.1.1) |
|  | Standard ground surface treatment shall be carried out on the following areas additional to those specified in Clause 12.2.1. |
|  |  |

|  |
| --- |
| Ground surface treatment, special, measured in square metres (Clause 12.2.2) |
|  | The following are the Contract specific requirement for special ground surface treatment.  |
|  | Area | Requirements |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |
| --- |
| Areas to be tyned (Clause 13.3.1) |
|  | The following areas shall be lightly tyned. |
|  |  |

|  |
| --- |
| Excavation – pre-splitting of batters (Clause 13.3.2.3) |
|  | Batters in the following areas are required to be pre-split. |
|  |  |

|  |
| --- |
| EmbankmentsEarth fill materials – additional properties (Clause 14.2.2, Clause 18.2.1 and Clause 18.3.4.2) |
| Earth fill shall have the following properties. Where information is not specified below, earth fill material shall have the properties specified in Clause 14.2.2. |
| Material Description | Depth Below Subgrade Level (if applicable) | Property Requirements |
| MinimumCBR (%) | CBRSoakedCondition | CBR TargetDensity % | CBRTarget Moisture Content | Other |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

|  |
| --- |
| In preparing this annexure, the designer should nominate a CBR requirement for all subgrade fill material that is within 2.0 m of subgrade level, taking into account:* Any assumed 'select fill' layers or allowable reduction in subgrade strength with depth.
* Guidance on the CBR soaked conditions is provided in Transport and Main Roads Pavement Design Supplement.
* The CBR target density should be nominated taking into account the compaction requirements of Clause 15 of MRTS04.
* The CBR target moisture content would typically be nominated as 100% of OMC unless specific conditions dictate otherwise.

These properties also apply to fill material used in subgrade treatments in cuttings up to a depth of 1.5 m.This clause may also be used to specify properties that apply to material other than subgrade fill where applicable. This may include, but is not limited to properties such as CBR, gradings and WPI |

|  |
| --- |
| Special embankment materials (Clause 14.2.8) |
|  | The following are the requirements for special embankment materials.  |
|  | Area | Requirements |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |
| --- |
| Embankment zones (Clause 14.3.1) |
|  | Embankments are to be constructed in zones | Yes |  | No |  |

|  |
| --- |
| Zoned and Homogeneous embankment fill material (Clause 14.3.1) |
|  | The following are the requirements for embankment fill material.  |
|  | Area | Requirements |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |
| --- |
| Rainfall zone (Clause 15.3) |
|  | The rainfall zone which applies to the Contract is: |
|  | High (> 1000) |  |  |  |
|  |  |
|  | Medium (500 – 1000) |  |  |  |
|  |  |
|  | Low (< 500) |  |  |  |

|  |
| --- |
| Borrow on the siteAreas for borrow on the Site (Clause 17.2) |
|  | The following areas on the Site are available for borrow of additional material. If no areas are indicated, no material shall be borrowed from areas on the Site. |
|  |  |

|  |
| --- |
| Requirements for borrow on the site (Clause 17.2) |
|  | The following additional requirements shall apply to borrowing operations on the site. |
|  |  |

|  |
| --- |
| Subgrade |
| Unbound granular material (Clause 18.2.2) |
|  | Unbound pavement material shall be of the following subtype. |
|  | For use in unbound treatments  |  |  |  |
|  |  |
|  | For use in insitu stabilised treatments |  |  |  |
|  |  |
|  | For use in plant-mixed stabilised treatments |  |  |  |

|  |
| --- |
| Stabilising agent (Clause 18.2.5.1) |
|  | The stabilising agent and its rate of application for plant-mixed stabilisation shall be as follows. |
|  |  |

|  |
| --- |
| When filling in this clause refer to the guide notes in Clause 18.2.5.1 of MRTS04 for further information. |

|  |
| --- |
| Subgrade treatment(s) (Clauses 18.3.3.1 to 18.3.3.13 and Table 18.3.3.2) |
|  | The following subgrade treatment(s) shall be applied where stated.  |
|  | Location | Treatment Type | Depth of Treatment (mm) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |
| --- |
| Subgrade treatment type k (Clause 18.3.3.13) |
|  | Subgrade treatment type k shall be in accordance with the following provisions. |
|  |  |

|  |
| --- |
| Existing subgrade testing (Clauses 18.3.4.2 and 18.4) |
|  | Testing of existing subgrade is required by the Contractor |
|  |   | **Yes** |  |  |
|  |  |
|  |  | **No** |  |  |
|  |  |
|  | As directed by the Administrator |  |  |

|  |
| --- |
| For design and construction contracts, testing of existing subgrades is typically required in all circumstances unless specifically nominated by the Principal.For construct only contracts, testing of existing subgrades is often not required as the subgrade has been tested and its strength taken into account during the design process. However where only limited subgrade testing has been undertaken, the Principal may elect for the Contractor to undertake additional verification testing during construction.Where existing subgrade testing is nominated 'as directed by the Administrator', it is intended this activity would be called up for specific activities such as determining subgrade treatment types and so on.This clause is not applicable to testing of subgrade fill material. The requirements for testing subgrade fill material are specified in Appendix A of MRTS04. |

|  |
| --- |
| Transitions from cut to fill (Clause 18.3.4.2) |
|  | Existing foundation material beneath near grade embankments is to be tested by the Contractor | Yes |  | No |  |
|  |  |  |  |  |  |
|  | Transition treatments shall continue for a distance of 10 metres into the cuttings. | Yes |  | No |  |

|  |
| --- |
| Supplementary requirements (Clause 22) |
|  | The following supplementary requirements shall apply. |
|  |  |