



TABLE 1 – MINIMUM ENVIRONMENTAL BARRIER FOUNDATION REQUIREMENTS

FOUNDATION	DISTANCE TO END OF ENVIRONMENTAL BARRIER			
	ZONE A ≤3.0m	ZONE B 3.0m - 12.0m	ZONE C 12.0m - 21.0m	ZONE D ≥21m
DEPTH	3.00m	2.50m	2.50m	2.25m
DIAMETER	0.60m	0.60m	0.45m	0.45m

NOTE: ZONES AS DEFINED IN SECTION 7.4.1 AND FIGURE 7.19 OF BS EN 1991-1-4

Rev	Date	Details	Chk	App
P01	19/02/2019	FIRST ISSUE	MG	TO
P02	01/04/2019	BARRIER HEIGHT CHANGED	MG	KT
C01	23/04/2019	CONSTRUCTION ISSUE	MG	KT
P03	17/07/2019	BARRIER HEIGHT CHANGED	MG	KT
P04	05/09/2019	POST SPACING CHANGED	MG	MY

- NOTES**
- DO NOT SCALE FROM THE DRAWINGS.
  - ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS NOTED OTHERWISE.
  - ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
  - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FENCING PLAN DRAWINGS 287512A-HHE-300-001 TO 006 AND THE REQUIREMENTS CONTAINED IN APPENDIX 25/4.
  - THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UNDERGROUND SERVICES WITHIN THE VICINITY OF THE ENVIRONMENTAL BARRIER PRIOR TO EXCAVATION AND INSTALLATION OF THE FOUNDATIONS.
  - THE ENVIRONMENTAL BARRIER SUB-CONTRACTOR SHALL UNDERTAKE THE STRUCTURAL DESIGN OF THE TIMBER PANELS, STEEL POSTS AND ASSOCIATED FIXINGS IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN APPENDIX 1/11.
  - THE ENVIRONMENTAL BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
  - THE DIAMETER AND DEPTH OF THE BARRIER FOUNDATIONS SHALL BE SELECTED BASED ON THE DISTANCE OF THE POST FROM THE END OF THE BARRIER IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN TABLE 1.
  - POSTS SHALL BE EMBEDDED INTO WELL COMPACTED MATERIAL.
  - THE ENVIRONMENTAL BARRIER FOUNDATION SHALL NOT BE LOCATED CLOSER THAN 1m TO THE CREST OF A SLOPE MEASURED FROM THE CENTRELINE OF THE FOUNDATION.
  - THE DESIGN SHOWN IN TABLE 1 HAS INCLUDED AN ALLOWANCE FOR THE REDUCED SUPPORT PROVIDED FROM 300mm DEPTH OF TOPSOIL OR UN-COMPACTED GROUND WHERE THE DEPTH EXCEEDS THIS AMOUNT. MATERIAL GREATER THAN 300mm DEPTH SHALL BE REMOVED AND REPLACED WITH WELL COMPACTED MATERIAL OR THE DESIGNER CONSULTED FOR REVISED EMBEDMENT DEPTHS.
  - WHERE THERE IS DOUBT ABOUT THE RESISTANCE OF THE EMBEDMENT MATERIAL, TESTING SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE REQUIREMENTS IN APPENDIX 25/4.
  - CONCRETE FOR THE ENVIRONMENTAL BARRIER FOUNDATION SHALL BE STANDARDISED PRESCRIBED CONCRETE MIX STS TO BS8900-1 AND SHW CLAUSE 2602.
  - A MINIMUM 50mm COVER TO THE STEEL POST SHALL BE PROVIDED BY THE FOUNDATION.
  - STEEL POSTS SHALL BE EMBEDDED A MINIMUM 75% OF THE DEPTH OF THE FOUNDATION.

**HEALTH AND SAFETY INFORMATION**

SIGNIFICANT OR EXCEPTIONAL RISKS ARE IDENTIFIED BELOW

**CONSTRUCTION PHASE**

- PLEASE REFER TO THE HAZARD RISK REGISTER AND THE WORKS INFORMATION FOR DETAILS OF THE RISKS ASSOCIATED WITH THIS WORK.
- IN PREPARATION OF CONSTRUCTION METHOD STATEMENTS CONSIDERATION SHOULD BE GIVEN TO THE CLOSE PROXIMITY OF ANY STRUCTURES THAT MAY BE AFFECTED BY CONSTRUCTION.
- RESIDUAL HAZARDS ARE LISTED HERE AND REFERENCED ON THE DRAWINGS.
  - FALLING FROM HEIGHT DURING ERECTION OF ENVIRONMENTAL BARRIER. PROVIDE WORKING PLATFORM WITH SAFE ACCESS AND EGRESS FOR PANEL ERECTION AT HEIGHT.
  - HANDLING HEAVY POSTS AND ASSEMBLED PANELS. USE LIFTING AND HANDLING EQUIPMENT TO MINIMISE MANUAL HANDLING REQUIREMENTS.
  - WIND DURING ERECTION OF ENVIRONMENTAL BARRIER POSTS. RESTRICTION ON HANDLING, LIFTING AND INSTALLATION OF POSTS UNDERTAKEN WHEN WIND SPEED IS PREDICTED TO POSE A RISK TO SAFETY.
  - STABILITY OF ENVIRONMENTAL BARRIER POSTS. PROVIDE SUPPORT TO POST DURING THE TEMPORARY WORKS WHILE THE POST FOUNDATION CONCRETE GAINS STRENGTH TO BE SELF SUPPORTING.
  - WORKING ON BATTERS. ESTABLISH WORKING METHODS APPROPRIATE TO THE SITUATION. PROVIDE GUARDING OR OTHER RESTRAINTS WHERE REQUIRED.
- THE CONTRACTOR SHALL REFER TO STATUTORY UNDERTAKERS LAYOUT DRAWINGS AND IDENTIFY LOCATIONS OF EXISTING UNDERGROUND SERVICES PRIOR TO CARRYING OUT EXCAVATION WORKS.

**MAINTENANCE / OPERATION / DECOMMISSIONING / DEMOLITION PHASES**

- PLEASE REFER TO THE HAZARD RISK REGISTER AND THE MAINTENANCE AND REPAIR STRATEGY FOR DETAILS OF THE RISKS ASSOCIATED WITH THE MAINTENANCE, OPERATION, DECOMMISSIONING AND DEMOLITION PHASES.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE HEALTH AND SAFETY FILE(S) PRODUCED AND HANDED OVER ON COMPLETION OF THIS PROJECT.
- RESIDUAL HAZARDS ARE LISTED HERE AND REFERENCED ON THE AS-BUILT DRAWING.

1. NOTHING SIGNIFICANT OR UNUSUAL

**FOR INFORMATION**

Client: **Northamptonshire Highways**

Site/Project: **A43 MOULTON BYPASS PHASE 1B**

Title: **FENCE TYPE 4 - NOISE (ENVIRONMENTAL) BARRIER STANDARD DETAILS**

Drawn: SK  
 Checked: MG  
 Designed: MG  
 Approved: TO  
 Date: 05/09/2019  
 Scale: NTS  
 A1  
 Sheet: 1 of 1  
 Drawing Number: **287512A-HHE-300-102**  
 Revision: **P04**

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