

Arboricultural Method Statement (AMS)

Report prepared for
Tramell Crow, Heywood.

NAME OF SITE:	Heywood
PROJECT No:	12363
CLIENT NAME:	Tramell Crow
SPECIALIST:	Amenity Tree Care Ltd
DATE PREPARED:	13.12.24
PREPARED BY:	CG
REVIEWED BY:	SB
DATE REVIEWED:	16.12.24
VERSION CONTROL:	V1

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Appendix 1 – Tree Protection Plan

1.0 Introduction

- 1.1 The scope of this report is to provide an arboricultural method statement, specifically in relation to the construction of new surfacing within a tree rooting zone but also for the removal of existing surfacing in the Root Protection Areas (RPA) of retained trees. To demonstrate the methods for working in or adjacent to root protection areas to avoid unacceptable impacts between the proposed design and retained trees and offer a level of protection for those trees that are to be retained on site.
- 1.2 It is important that the guidance in the method statement is followed and understood by all persons involved in the design and construction of the proposed scheme.

2.0 Communication Details, Monitoring and Compliance

- 2.1 It will be the responsibility of the site manager and appointed arboricultural consultant to brief all contractors on site as to the adherence to the arboricultural method statement. A copy of this method statement will be made available to site contractors at all times during the period of development.
- 2.2 A list of site contacts is available to the rear of this document.
- 2.3 Several Special Measure Areas are designated within the Tree Protection Plan and they shall require Arboricultural Clerk of Works (AcOW)
 - 1) The below trees/groups have proposed SMA areas, installation and existing highway removals are required which shall be fully supervised on site by the AcOW and be carried out using air spade techniques where required by the AcOW when any ground is broken for the permanent works in RPA. Further level and design material review is needed for no dig operations.

Access alignments and new surfacing (including existing surface removal) in the vicinity of retained trees.

- A new highways access road is in the RPA of T27, T28, T29, T30, T31, T32, G14, T35, T36, T37, T38, T39, T40, and T41 as shown in Fig1 below.

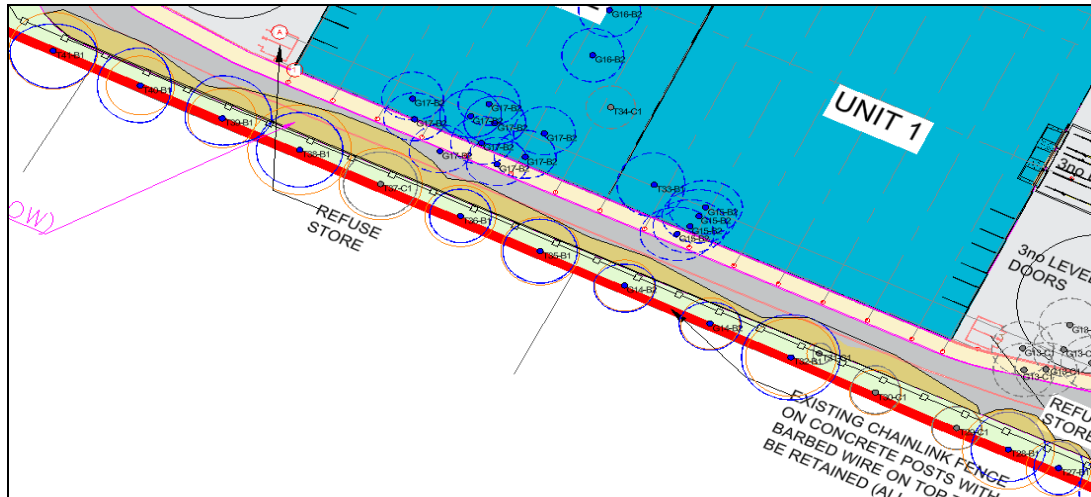


Fig.1

- A 5m high acoustic fence, including level changes and boundary treatment works is in the RPA of G28 and sections of G33 as shown in Fig 2 and Fig 3 below. Tree removals are required and are to be determined in full under ACOW (Arboricultural Clerk Of Works).

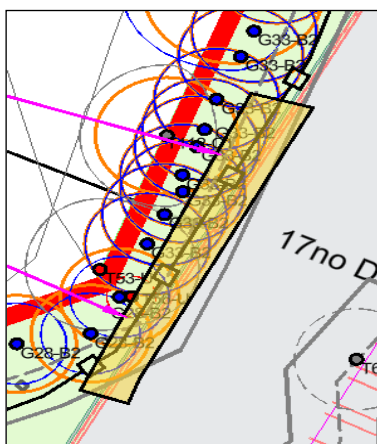


Fig.2

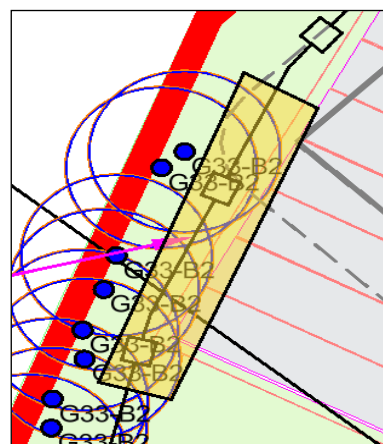


Fig.3

- A new retaining wall in the RPA of G38 as shown in Fig 4 below.

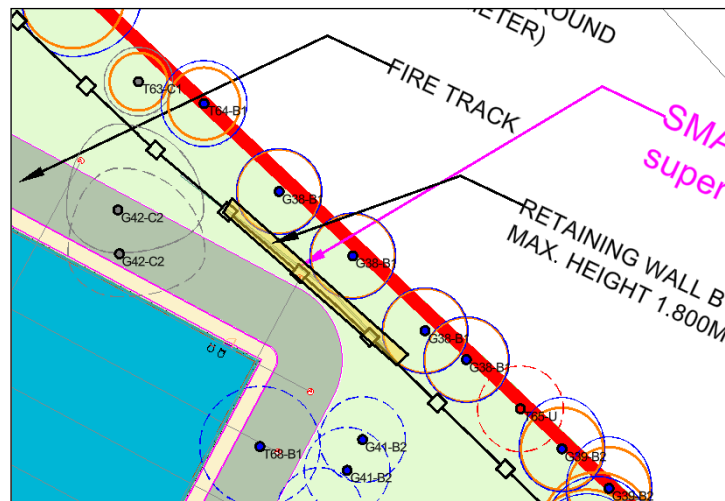


Fig.4

- 2.4 In order to outline working methods in relation to trees prior to any construction activity on site, a site meeting shall take place between the main contractor and AcOW. The organisations and individuals performing these roles shall be appointed prior to a prestart meeting. A record of the meeting will be taken and distributed to relevant parties and the meeting will confirm the duration of the works and any phasing implications or specific contractor related issues and how they are to be resolved.

The following are key aspects of the construction phase and will be explained at the pre start meeting:

The central aspect of tree protection on this site applies to the areas of boundary trees to be retained, removal of existing hard surfaces (see Fig 5) located in protected areas Special Measure Areas (SMA) shall be complete and protected before any other construction works commence thereby avoiding the typical construction related issues such as compaction or direct damage from excavation that occur during site works and prior to new surfacing being installed.



Fig 5: Area of existing hard surface to be removed in SMA under AcOW supervision.

The positions for the Construction Exclusion Zone (CEZ) are shown on the TPP. The CEZ is to be installed prior to works commencing and removed only when under supervision of AcOW for works required in the RPA. CEZ shall be installed following removal of existing hard surfaces or foundations in the yellow SMA works area and retained for construction duration.

The AcOW shall supervise and compliance the initial CEZ install and its repositioning.

It is noted that arboricultural input is prior to construction (prestart) and whilst supervision is required throughout the build period.

All operations in the SMA must be overseen by the arboricultural clerk of works and **must be carried out prior to any other works on site** unless otherwise agreed with the LPA.

3.0 Tree pruning

- 3.1 Only tree works permitted and agreed with the subsequent planning permission shall be permitted. Where tree pruning is required in addition to that already specified in the preliminary tree survey schedule, it will be agreed in writing with the LPA Tree Officer prior to commencement.
- 3.2 All arboricultural works shall conform to the recommendations of BS3998:2010 British Standard Recommendations for Tree Work unless otherwise specified.

4.0 Protective barrier

- 4.1 Before commencing any site works Construction Exclusion Zones (CEZ) will be installed in accordance with the Tree Protection Plan (TPP).
- 4.2 The protective barriers will be constructed to the specification as detailed in BS 5837:2012 and consist of a 2m high steel mesh panels (Heras panels) secured to the ground via rubber feet and metal stakes. The fencing will be secured by uprights driven into the ground to a minimum depth of 0.4m and panels secured using scaffold clamps.
- 4.3 All weather notices will be secured to the barriers showing the following wording: "CONSTRUCTION EXCLUSION ZONE – NO ACCESS".
- 4.4 Once installed all fencing will be inspected by the consulting arboriculturist and signed off as secure prior to any works.

5.0 Additional precautionary measures

- 5.1 Temporary site accommodation, plant and materials will be stored in designated areas outside the CEZ.
- 5.2 Movement of large plant such as cranes on site will be conducted under the supervision of a banks man to ensure that a suitable distance is maintained from trees on site.
- 5.3 Materials will be stored in such a way that if spillage did occur no chemicals would leach into the CEZ.

- 5.4 Wash points for tools and equipment will be placed outside of the CEZ. When determining the proposed location for wash point's consideration will be given to the design of the station to ensure that run off does leach into the RPA.
- 5.5 Fires on site will not be permitted

6.0 Method for construction of new surfacing

- 6.1 The new hard surfacing proposal crosses the RPA of retained trees on the line of an existing access road to the south of the site and therefore the new roads are to be constructed where possible by the use of a no dig method as detailed in BS5837:2012 Trees in relation to design, demolition, and construction recommendations subsection 7.4.2. As a result of this measure the TPP has a designated Special Measure Area (SMA) where the new surface shall be laid. Given there is an existing road surface at this location, it is anticipated that major tree roots would already be influenced by this feature. Any major roots discovered during along this route will be assessed individually and documented as part of the AcOW supervision and any required root pruning will be undertaken by the project Arboriculturist, documented and reported to the LPA if required. The use of Airspade can be utilised to chase back roots and assess which tree they may be from if discovered.
- 6.2 The standard design for cell web if required consists of a three dimensional cellular confinement system and is employed as a sub-base to a depth suitable for pedestrian or vehicular use. The cellular system is laid onto a geotextile membrane in order to prevent pollution contaminating the rooting area. The cellular structure is then expanded and pinned in place using steel rods and back filled using an angular aggregate that contains no fines.

Note: The infill aggregate must not contain any fines as these become compacted overtime and reduce water infiltration. The recommended size of aggregate is 20-40mm in diameter.



- 6.3 In order for the system to allow for gaseous exchange and water infiltration the finished surface treatment will be permeable to allow for water infiltration. In such cases where vehicles or pedestrians are intending to use the new driveway the use of permeable resin bounded gravel would be recommended. (Hoggin or self-binding gravel will not be used as they compact easily and prevent water infiltration)
- 6.4 The finished permeable surface will be protected during construction works in order to prevent the interstices from becoming blocked by excessive construction debris.
- 6.6 Where ground vegetation is present and requires removing in order to construct the cellular system the vegetation will be cleared using hand tools only.
- 6.7 Where the topography of the ground is such that required levels are not met for installing the cellular system, the levelling of the area can be achieved by using sharp sand in order to create an even surface.

Note: Builders sand is not to be used to create a level surface due to the high salt content.

- 6.8 Consideration will be given to ground conditions at the time of installation as during the winter months the ground is more likely to be saturated leading to an increased risk of compaction.

6.9 The operator will take care not to place an exaggerated angular force on the cellular system when filling with the aggregate to prevent compaction and smearing of the soil subgrade layer.

6.10 The granular infill will be spread using hand tools and be loaded from outside the area of works. Machinery will only access the cellular system once a suitable area has been prepared by hand in order to prevent compaction and damage to the cellular system.

Note: a single passage of machinery over a root protection area can cause irreparable damage to tree roots, 90% of which are typically located within the top 400mm of the soil.

7.0 Edge supports

7.1 Excavation will not take place to secure edging or kerbing in place unless under AcOW supervision due to the damage that could be caused by root severance.

8.0 Services within the RPA

8.1 At present there are no plans for services in the RPA of retained trees. Where there is a need to route services with an RPA technical design, plans will be produced in association with the arboriculturist to ensure that the least destructive path is identified. Specialist equipment (ground penetrating radar) may be required in order to accurately map the root system to ensure that the route of least impact is found. It is preferable that where the need to route services through a trees rooting zone, all apparatus will be located together in common ducts. Inspection chambers will be located outside of the RPA.

Note: The desired option will always be to route the proposed new services away from the RPA due to the high probability of significant damage occurring to tree roots.

9.2 The favoured method of insertion for services is a trenchless insertion method which differs on the requirement of the utility apparatus and includes micro-tunnelling, surface launched directional drilling, pipe ramming and impact moling. Where any of these methods is utilised then the entry and retrieval pits will be located outside of the RPA.

Ref: Volume 4: NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) – Operatives Handbook

- 9.3 Any roots un-earthed during the excavation are to be pruned in accordance with British Standard BS5837:2012. Pruning of roots in excess of 25mm is to be agreed with the LPA's Tree Officer and pruning is to be carried out under supervision of the consultant arboriculturist. Exposed roots not to be pruned are to be covered immediately in order to prevent desiccation and to protect from rapid changes in temperature. All protective materials shall be removed prior to infilling with topsoil; care will be taken to ensure that no contaminated material is introduced into the excavation.

10.0 Contact details

- 10.1 The following list details key project consultants and officers who can provide appropriate advice on arboricultural matters relating to the above project.

Site manager:

TBC

Site supervisor:

TBC

Arboricultural consultant:

Amenity Tree Care Ltd

Burwardsley

Chester

Tel: 01829 770075

Tree officer:

TBC

Planning officer:

TBC

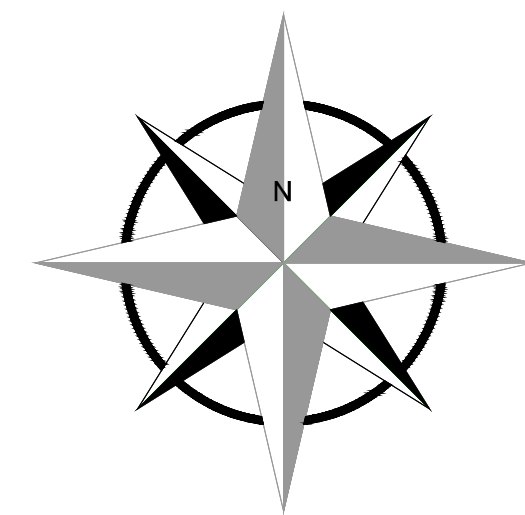
Please do not hesitate to contact me should you require further assistance.

Yours sincerely



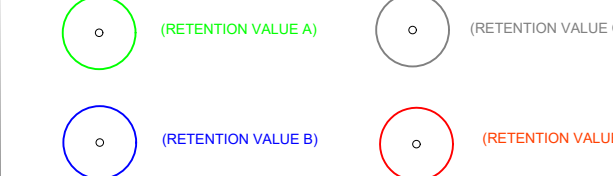
Simon Brain *Ba. Tech Cert Arb. PG Cert (Bio Rec)*
Chartered arboriculturist.

Managing Director



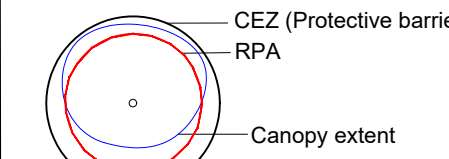
TREE PROTECTION PLAN

Retention value key



Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)

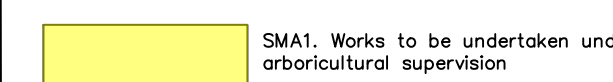
Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.



CEZ and re-positioning during build period
The CEZ's will require installation as shown on the tpp.
The CEZ shall be repositioned only under ACOW

Special Measure Areas (SMA)

Special Measure Areas (SMA's) have been identified for construction in these areas and they have been shown as detailed below.



Refer to Arboricultural Implications Assessment (AIA) for details of recommended construction in SMA's.

NOTES
This drawing shall not be reproduced in black and white.
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Sheet Key

Sheet 1

Sheet 4

Sheet 3

Sheet 2

AMENITYTREE
ENVIRONMENTAL PLANNING CONSULTANTS

The Annexe, Willow Hill Cottage, School Lane,
Burwardsley, Chester. CH3 9NX
Tel. 01829 770075

Client:

Tramell Crow

Project:

Heywood, Tramell Crow
12363

Detail:

TREE PROTECTION PLAN
Overview (Sheet 1)

Drawn By:

PS

Date:

19.12.2024

Scale:

1:750 - A0

Dwg No:

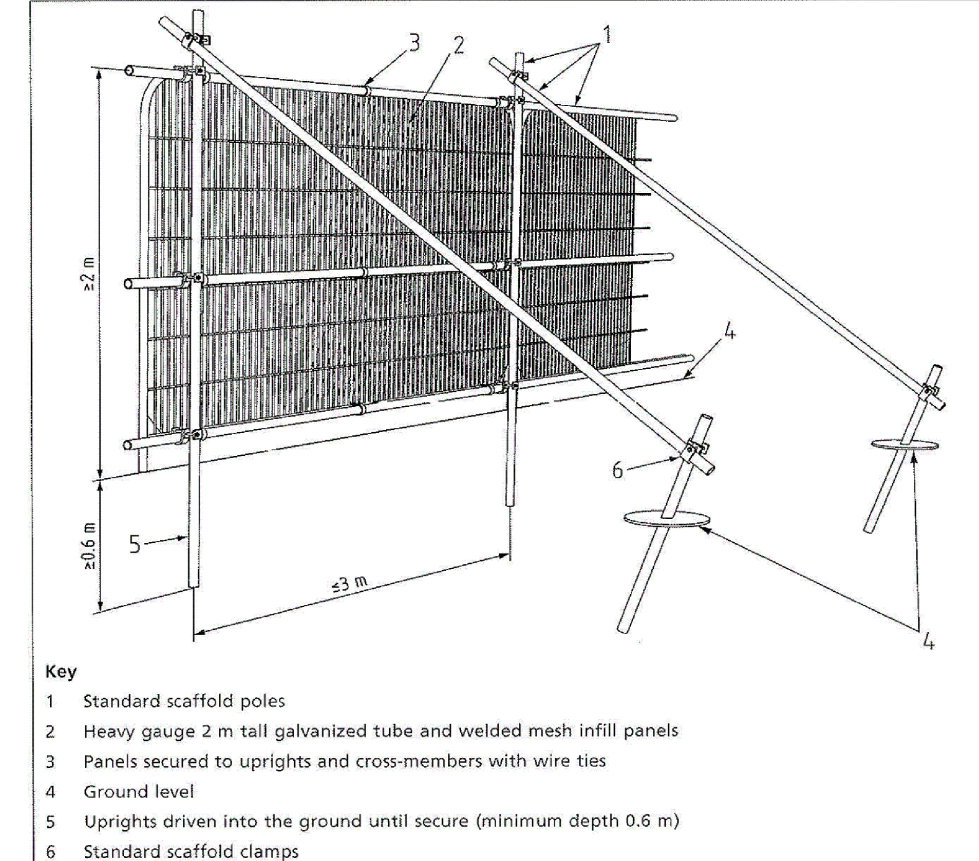
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Revision:

V2

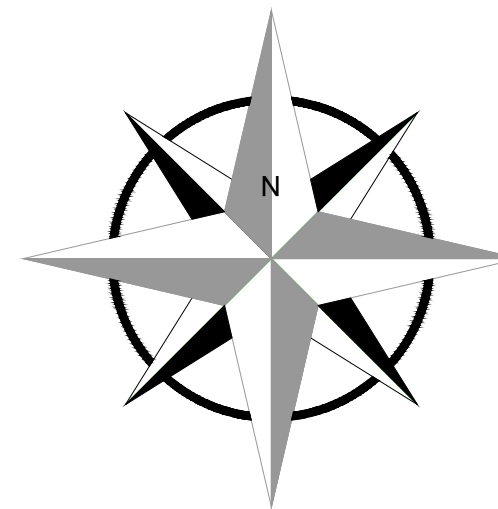
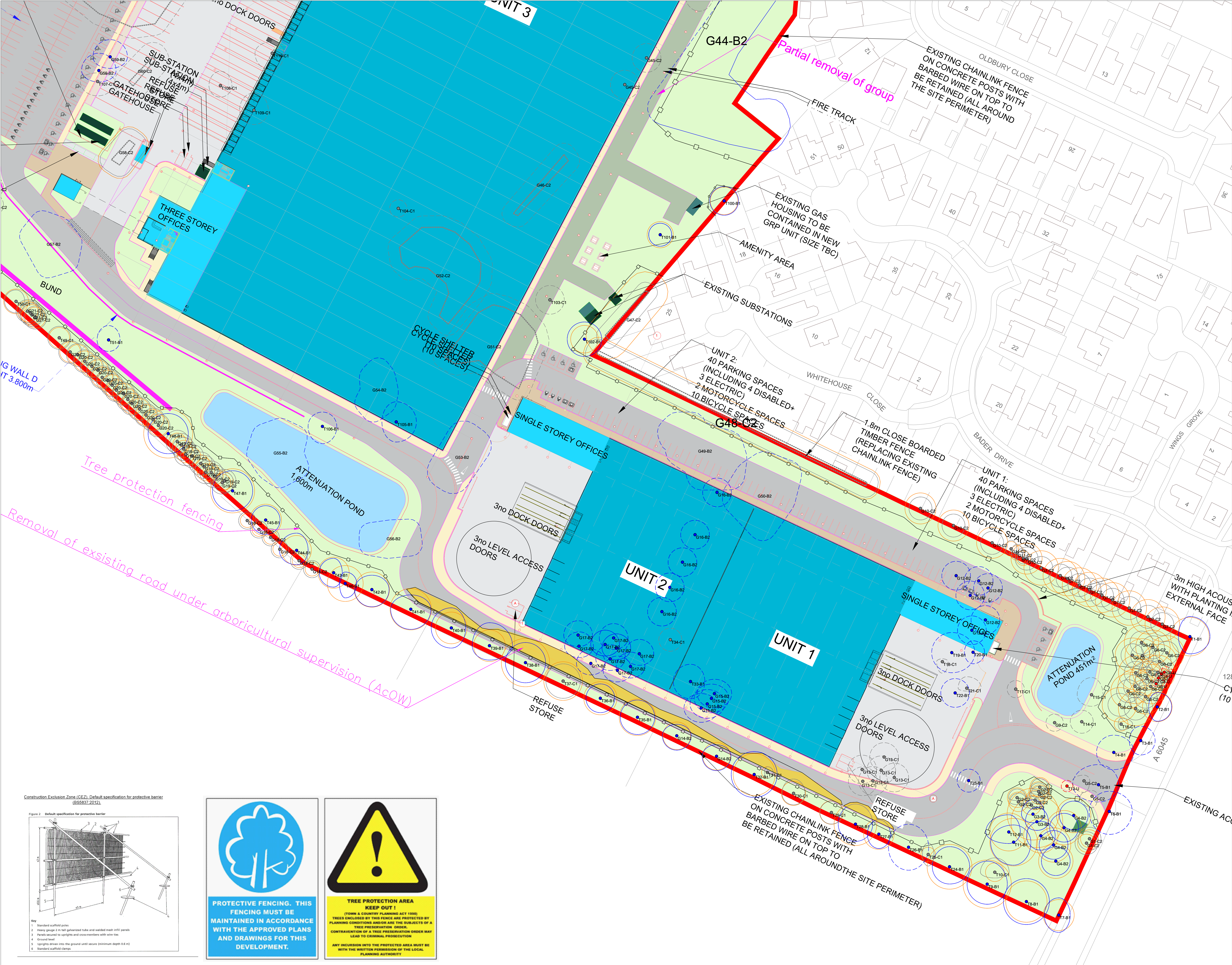
Construction Exclusion Zone (CEZ). Default specification for protective barrier (BS5837:2012).

Figure 2: Default specification for protective barrier



- Key
- Standard scaffold poles
 - Heavy gauge 1.5m tall galvanized tube and welded mesh infill panels
 - Panel's secured to uprights and cross-members with wire ties
 - Ground level
 - Uprights driven into the ground until secure (minimum depth 0.6m)
 - Standard scaffold clamps





TREE PROTECTION PLAN

Retention value key

- RETENTION VALUE A
- RETENTION VALUE B
- RETENTION VALUE C
- RETENTION VALUE D
- RETENTION VALUE E

Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)

Root Protection Areas (RPAs) have been identified and are based on BS5837:2012. RPAs and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.

CEZ (Protective barrier)
RPA
Canopy extent

CEZ and re-positioning during build period

The CEZ's will require installation as shown on the TPP. The CEZ shall be repositioned only under ACOW.

Special Measure Areas (SMA)

Special Measure Areas (SMAs) have been identified for construction in these areas and they have been shown as detailed below.

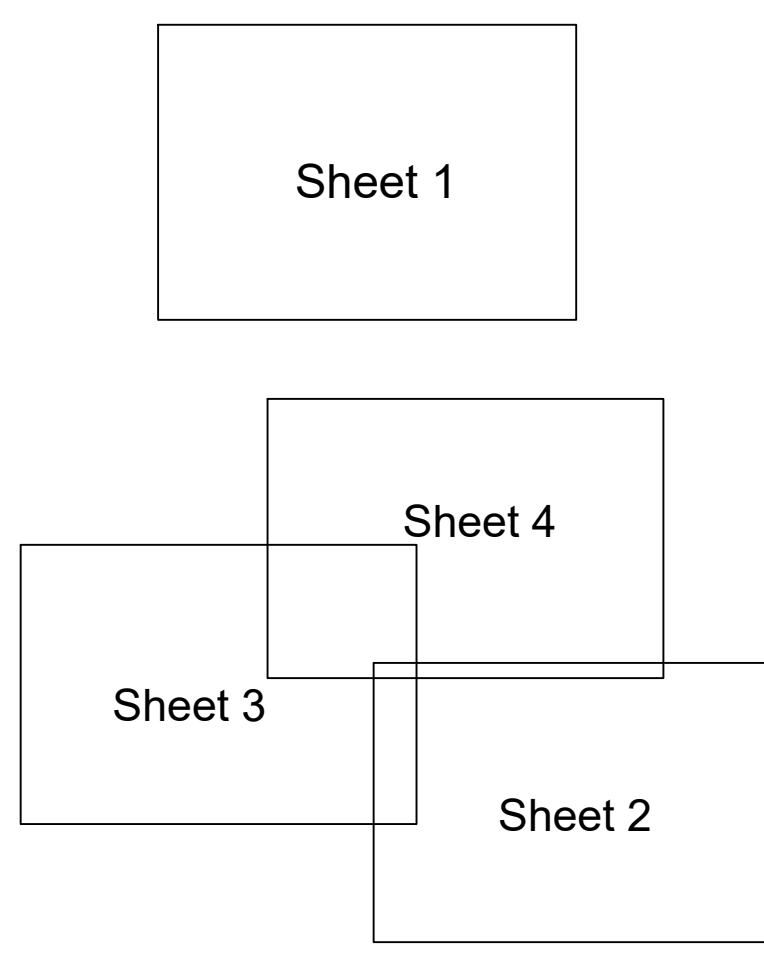
SMA1: Excavation under arboricultural supervision.

Refer to Arboricultural Implications Assessment (AIA) for details of recommended construction in SMAs.

NOTES

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Sheet Key



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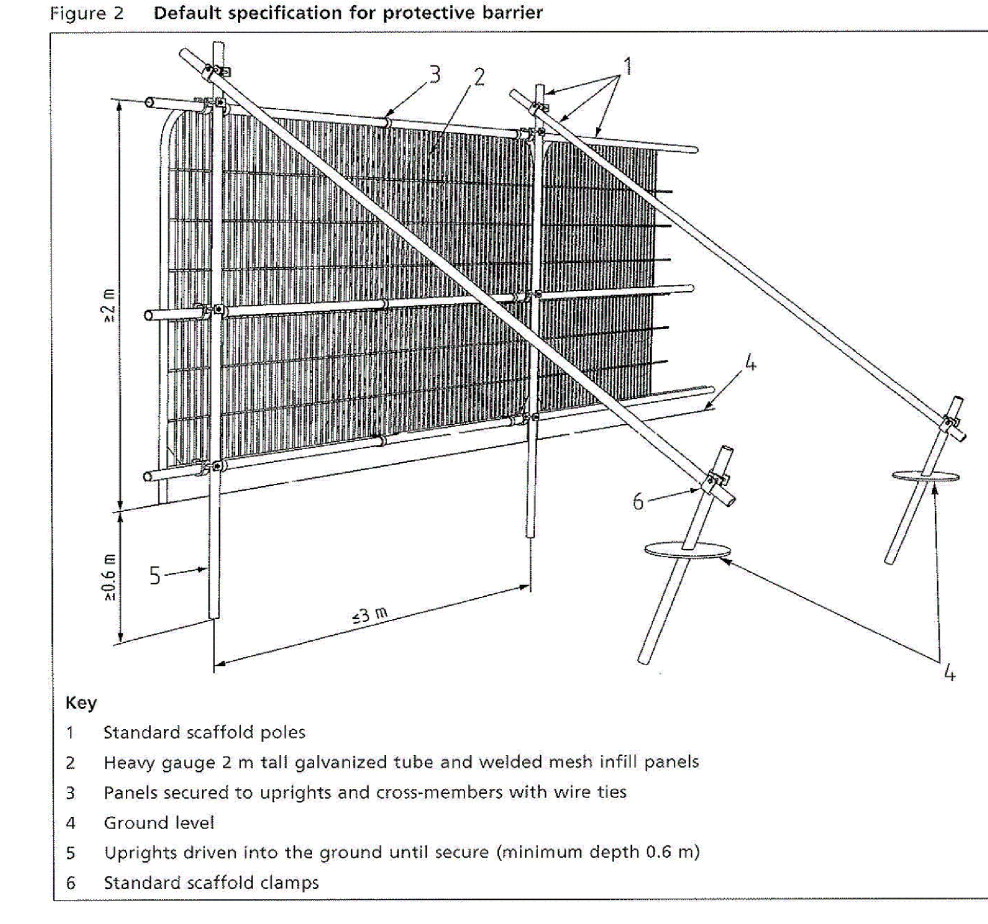
Project:
Heywood, Tramell Crow
12363

Detail:
TREE PROTECTION PLAN
Sheet 2

Drawn By: PS Date: 19.12.2024 Scale: 1:400 - AO

Dwg No: TR-01-Sheet 2 Revision: V2

Construction Exclusion Zone (CEZ) Default specification for protective barrier (BS5837:2012)



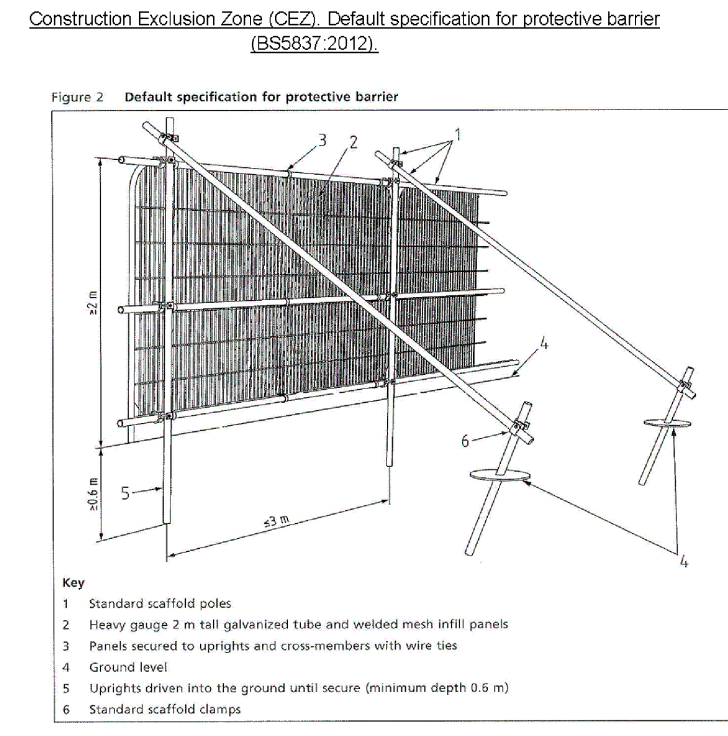
PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

TREE PROTECTION AREA KEEP OUT!

(TOWN & COUNTRY PLANNING ACT 1990)

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION.

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY



5m HIGH ACOUSTIC FENCE WITH PLANTING IN EXTERNAL FACE

4 TRAILER PARKING IN SERVICE YARD (5 PARKING AREA)

UNIT 3: PARKING SPACES INCLUDING 18 DISABLED+ 16 ELECTRIC)

2no BATTERY ENERGY STORAGE SYSTEM

40 BICYCLE SPACES

proposed retaining wall

RETAINING WALL E MAX HEIGHT 2.000m

RETAINING WALL D MAX. HEIGHT 3.800m

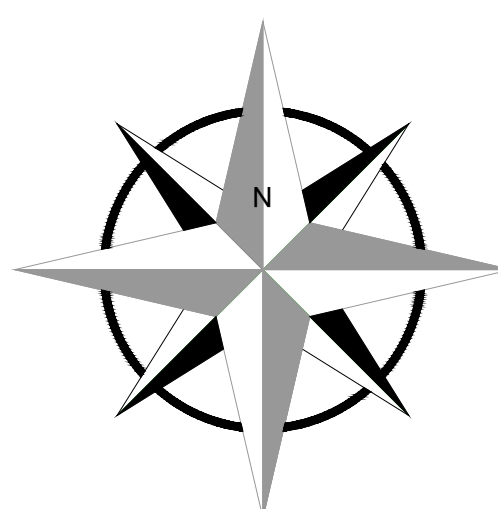
SUB-STATION (4x4m) REFUSE STORE GATEHOUSE

THREE STOREY OFFICES

TWO STOREY HUB OFFICE

UNIT 3

CYCLE SHELTER (10 SPACES)



TREE PROTECTION PLAN

Retention value key

- RETENTION VALUE A1
- RETENTION VALUE B1
- RETENTION VALUE C1
- RETENTION VALUE D1

Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)

Root Protection Areas (RPA) have been identified and are based on BS5837:2012. RPA's and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.

CEZ (Protective barrier)

RPA

Canopy extent

CEZ and re-positioning during build period

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Special Measure Areas (SMA)

Special Measure Areas (SMA) have been identified for construction in these areas and they have been shown as detailed below.

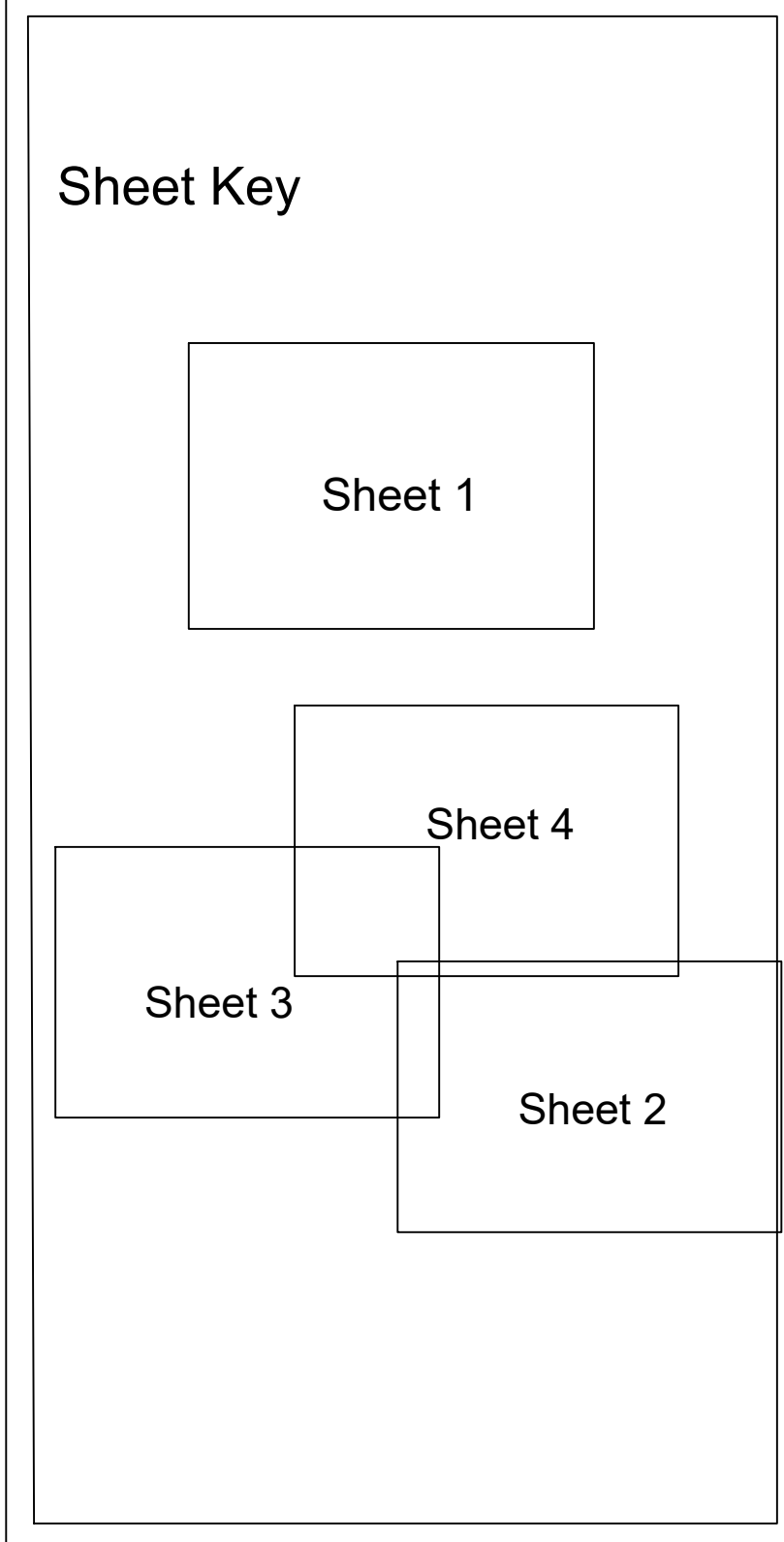
SMA: Works to be undertaken under arboricultural supervision

Refer to Arboricultural Implications Assessment (AIA) for details of recommended construction in SMA's.

Notes

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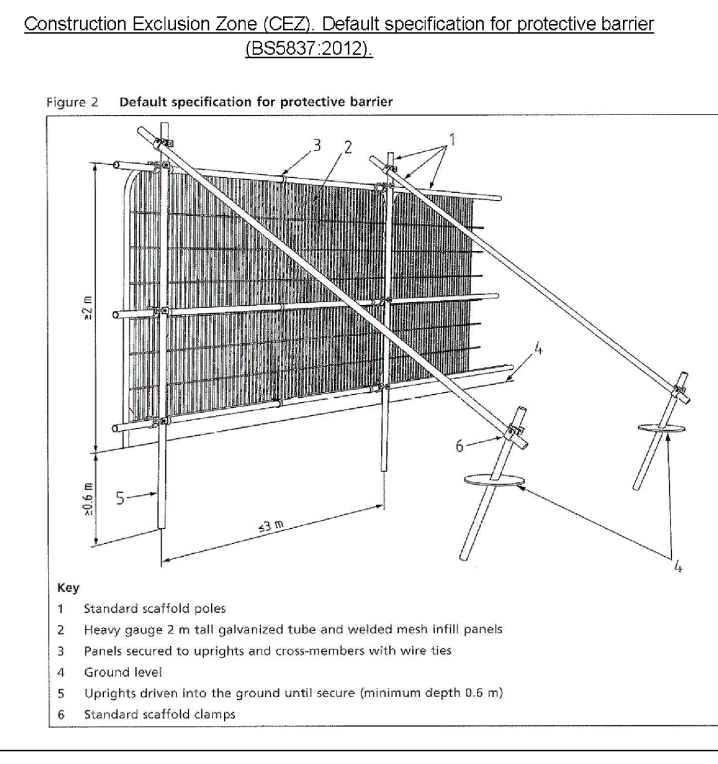
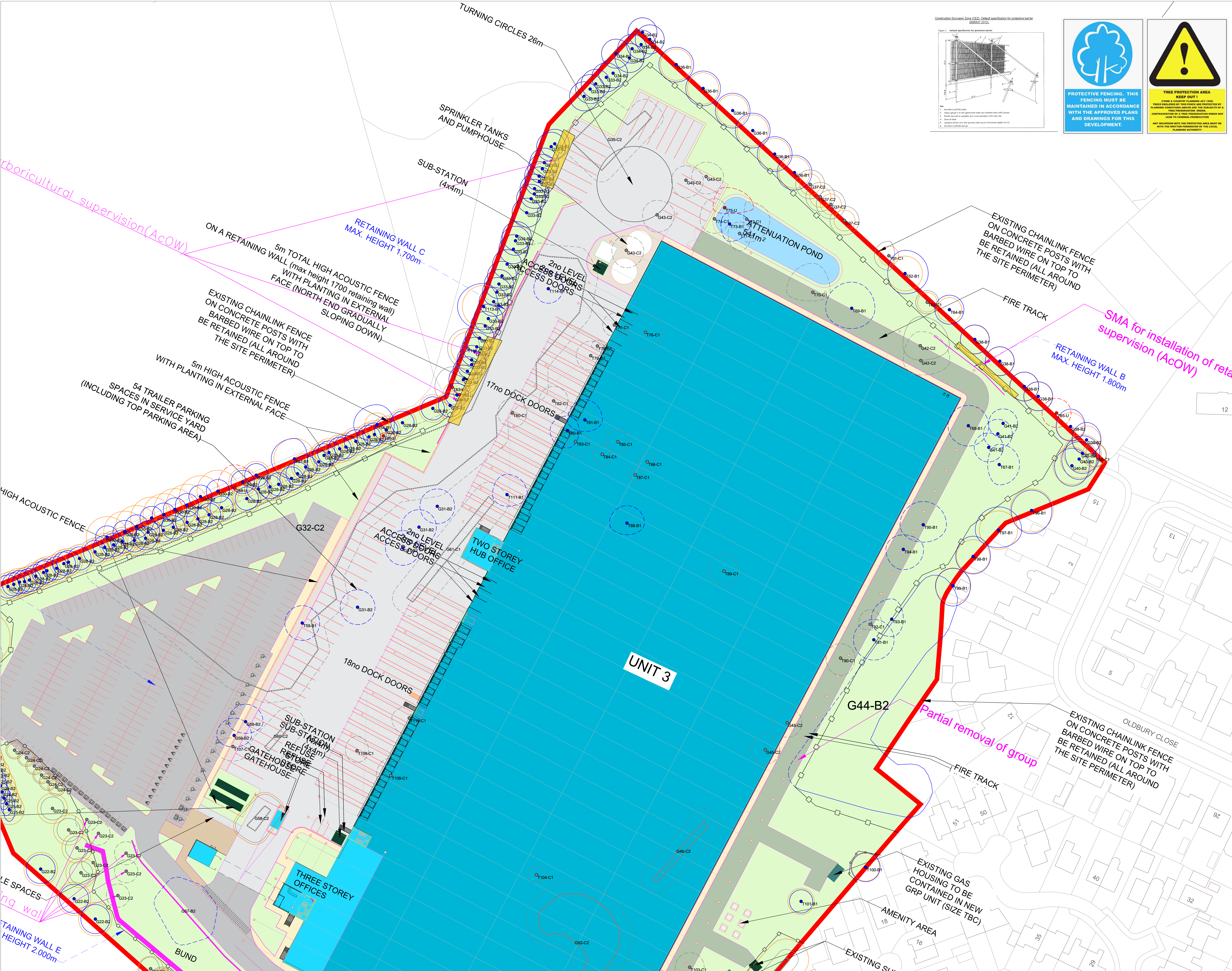
Client:
Tramell Crow

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12363**

Detail:
**TREE PROTECTION PLAN - Overview
Sheet 3**

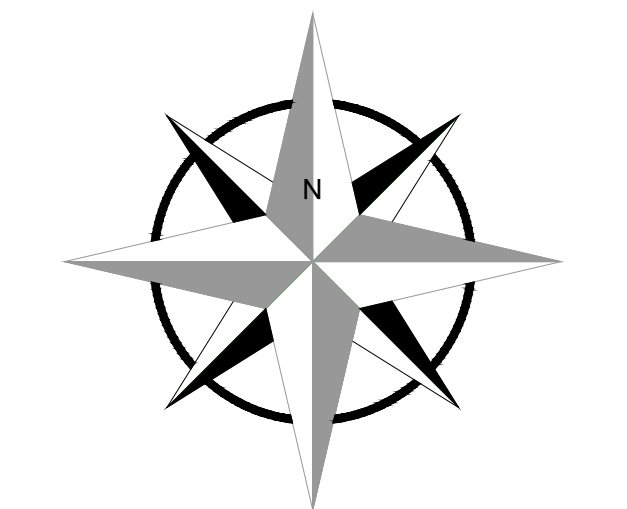
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PS 19.12.2024 1:300 - AO

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TR-01-Sheet 3 V2



PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

TREE PROTECTION AREA
KEEP OUT!
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONSERVATION ORDER NO. 1000. ANY CONSTRUCTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION.
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TREE PROTECTION PLAN

Retention value key

- RETENTION VALUE A
- RETENTION VALUE B
- RETENTION VALUE C
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- RETENTION VALUE F
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- RETENTION VALUE H
- RETENTION VALUE I
- RETENTION VALUE J
- RETENTION VALUE K
- RETENTION VALUE L
- RETENTION VALUE M
- RETENTION VALUE N
- RETENTION VALUE O
- RETENTION VALUE P
- RETENTION VALUE Q
- RETENTION VALUE R
- RETENTION VALUE S
- RETENTION VALUE T
- RETENTION VALUE U
- RETENTION VALUE V
- RETENTION VALUE W
- RETENTION VALUE X
- RETENTION VALUE Y
- RETENTION VALUE Z

Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)

Root Protection Areas (RPA) have been identified and are based on BS5837:2012. RPA's and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.

CEZ and re-positioning during build period

The CEZ's will require installation as shown on the TPP. The CEZ shall be repositioned only under ACOW.

Special Measure Areas (SMA)

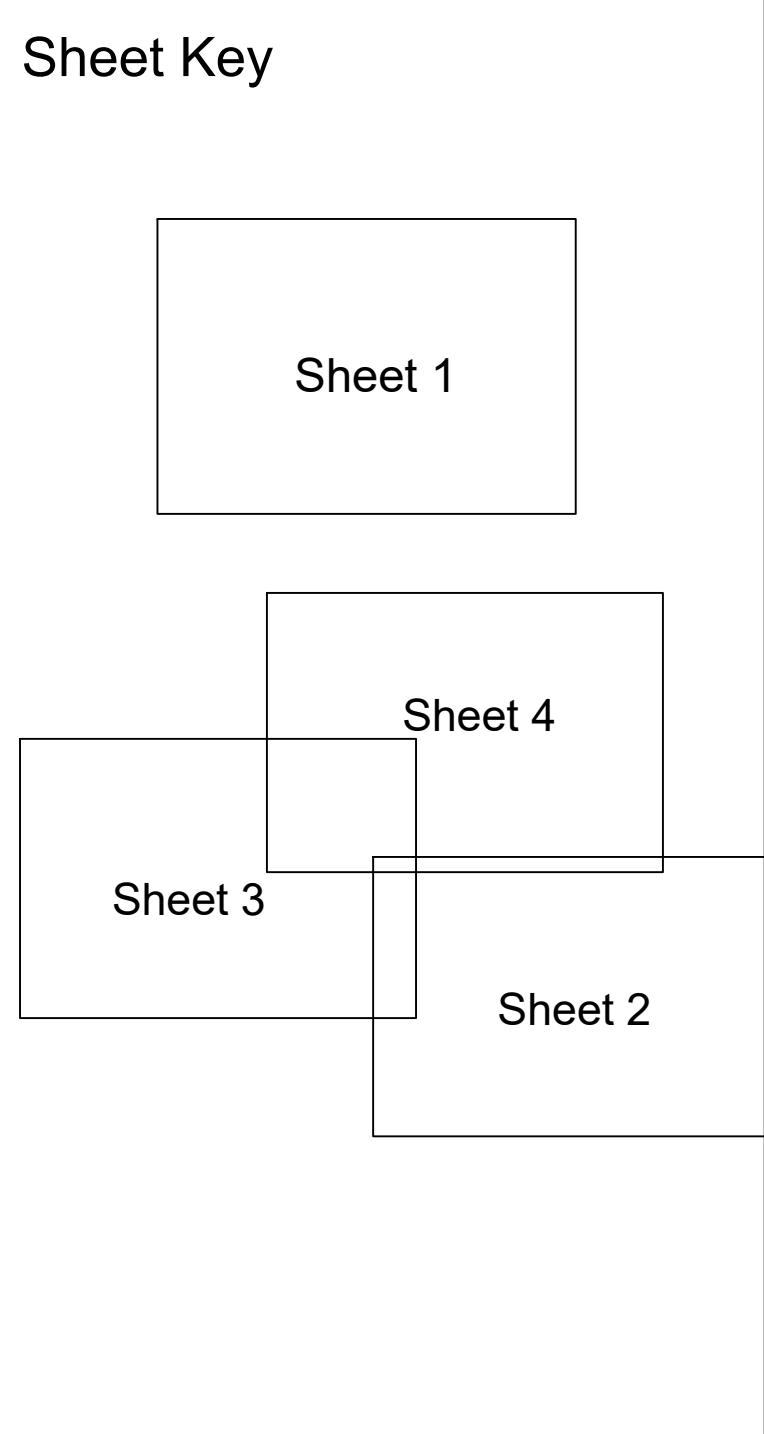
Special Measure Areas (SMA's) have been identified for construction in these areas and they have been shown as detailed below.

SMA1: Works to be undertaken under arboricultural supervision

Refer to Arboricultural Implications Assessment (AIA) for details of recommended construction in SMA's.

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Sheet 4

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