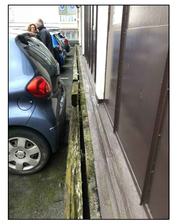
VIEW OF PEDESTRIAN UNDERPASS BELOW CAR PARK DECK
(POTENTIAL SITE STORAGE AREA, IF REQUIRED)

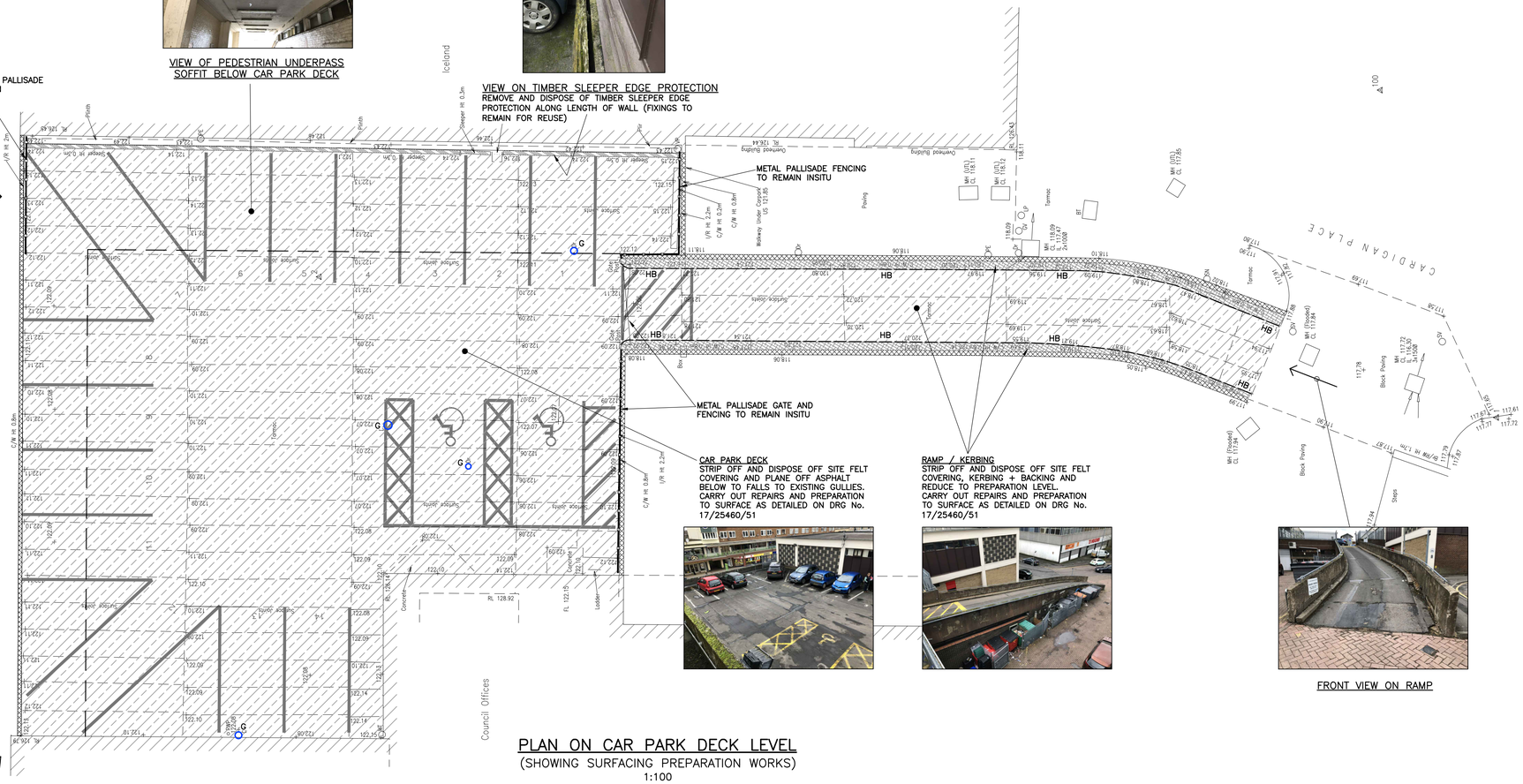
VIEW OF PEDESTRIAN UNDERPASS SOFFIT BELOW CAR PARK DECK



VIEW ON TIMBER SLEEPER EDGE PROTECTION

SECTION OF METAL PALLISADE FENCING TO REMAIN

VIEW OF CAR PARK PARAPET WALL FROM PEDESTRIANISED PAVING BELOW



PLAN ON CAR PARK DECK LEVEL
(SHOWING SURFACING PREPARATION WORKS)
1:100

FRONT VIEW ON RAMP

Notes

1. IF IN DOUBT – ASK !!! DO NOT SCALE
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS AND ENGINEERS DRAWINGS.
3. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AND BUILDING PRACTICE.
4. ALL DIMENSIONS TO BE CHECKED PRIOR TO STARTING THE WORKS ON SITE. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
5. CONTRACTOR TO ASCERTAIN THE LOCATION OF SERVICES ON SITE PRIOR TO STARTING THE WORK.
6. ALL DIMENSIONS FOR CONSTRUCTION ARE TO BE OBTAINED FROM SITE MEASUREMENTS OR ARCHITECTS SETTING OUT DRAWINGS PRIOR TO MANUFACTURE/BUILDING.

CDM 2015 DESIGNER NOTES

7. IN ADDITION TO THE HAZARDS, AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION.

   CONSTRUCTION:

   1. N/A

   FOR INFORMATION RELATING TO END USE, MAINTENANCE, DEMOLITION, SEE THE HEALTH AND SAFETY FILE.

   IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

KEY:

- DECK + RAMP — FELT COVERING TO BE REMOVED (SEE PLAN NOTES)
- RAMP — KERBS AND BACKING TO BE REMOVED. SURFACE BELOW PLANED TO PREPARATION LEVEL
- PERIMETER UPSTAND WALLS — CLEAN DOWN AND MADE READY FOR REPAIR
- G — EXISTING GULLY — ALLOW FOR REMOVING AND REPLACING GULLY GRATING WITH NEW GRATING

NOTE:
CONTRACTOR TO NOTE SETTING OUT OF EXISTING MARKINGS (MARKINGS TO NEW SURFACING TO MATCH EXISTING LAYOUT)

ALL MATERIAL SELECTION/COMPLIANCE

In all cases the Contractor shall provide evidence to verify that they meet the requirements set out in BS EN1504 and as such all materials where relevant should be 'CE' marked.

All materials must be compatible and shall not have any effects on long term durability and bond. The materials must be supplied from a BS EN 1504 approved manufacturing plant and supplied from a single manufacturer to ensure compatibility and ensure long term durability.

All works are to be undertaken as phased and directed by the client's representative and contract documents and drawings.

The resin decking and corrosion control materials must have the following min Performance requirements and must be fully tested to EN1504 part 2 and have full CE marking for all products. The selected decking system shall provide a wearing surface with waterproofing properties. The system shall provide a skid-resistant finish, which will be available in a range of colours. The System shall be based on a PMMA reactive acrylic resin, and must be fast setting. The benefit of any system shall be able to be applied at low temperatures and it is suited to rapid installation applications.

A Sikafloor 32 Pronto system (RB58 - OR EQUIVALENT APPROVED) build up is required and must be applied as per the manufacturers recommendations once the decks have been prepared.

System proposal must meet the below performance requirements which are based on the Sika fully reinforced waterproofing and wear layer systems (RB58),this is a suggested system, but any Equivalent system must be submitted to meet these requirements at tender stage for evaluation, with independent test reports to support the full system, primer, waterproof reinforced layer and wear layer, including sand and seal coat must have these performance requirements.

Any proposed alternative must provide examples from 3 past projects (min 5 years old) where system has been applied onto old asphalt surface, submitted with tender submission. Project details with specifier and client contact details (including exact breakdown of system used) must also be submitted with tender package.

Tenderers must submit full manufacturer and contractor specifications for all works, including what details they have allowed for with tender costs. This must be job specific and not a guide for discussion once works start. The concrete repairs and corrosion reinforcement products must also be from same manufacturer and also meet the below requirements.

ANY ALTERNATIVE PROPOSED SYSTEM MUST MEET THE FOLLOWING MINIMUM CRITERIA AND INDEPENDENT TEST CERTIFICATES MUST BE PROVIDED WITH THE TENDER SUBMISSION

Performance requirements of car park resin systems

All Car Park Deck systems including top deck, intermediate deck and ramp systems must be fully tested to EN1504 part 2 and have full CE marking for all products.

Essential characteristics	Performance	Test Standard	Harmonised technical specification
Abrasion resistance (Taber test):	**< 3000 mg**	**EN ISO 5470-1**	**EN 1504-2: 2004**
Permeability to CO_2:	***Sd* > 50 m**	**EN 1062-6**	
Permeability to water vapour:	**Class III**	**EN ISO 7783-1**	
Capillary absorption and permeability to water:	***w* < 0.1 kg/(m² x $h^{0.5}$)**	**EN 1062-3**	
Resistance to severe chemical attack: 1)	**Loss of hardness <50%**	**EN 13529**	
Impact resistance:	**Class I**	**EN ISO 6272-1**	
Crack bridging capability	**A4 (-20 °C) B4,2 (-20 °C)**	**EN 1062-7**	
Adhesion strength by pull-off test:	**≥ 2.0 N/mm²**	**EN 1542**	
Fire Classification:	**E_{fl} 4/**	**EN 13501-1**	

Any alternative recommended System must be a PMMA membrane with hard wear layer and sealer coating system. The fully built up system must conform to BSEN1504 pt 2 standards in particular EN1062 Table 7 B4.2 upto 0.5mm crack bridging @ -20oc .

CORROSION MANAGEMENT – CORROSION CONTROL –NON REPAIR SITES ON Concrete Access Ramp
SURFACE APPLIED INHIBITOR (BS EN 1504-9 principle 11 method 11.3)

PERFORMANCE REQUIREMENTS OF CORROSION INHIBITOR

The corrosion inhibitor should consist of a multi-functional, water based, amino alcohol containing organic and in-organic elements. Specifically designed for the impregnation of reinforced concrete it should have an affinity for steel reinforcement whereby it forms a physically adsorbed film to reduce corrosion currents density and delays the onset or retards the rate of rusting. It must be ecologically orientated and provide the following performance properties:

Penetration Rate	2.0-20 mm/day
Penetration Depths	>80 mm
Film Thickness	10^{-6} m
Alkalinity Value	pH 11
Potential Values	300-500 mV
Current Densities	<0.2mA/cm²
Weathering Resistance	Approx 10 years
Test Documentation	Likes of BRE or live past project monitored projects
Quality Assurance	BS5750/ISO9000

The inhibitor must have proven track record for use on concrete structures with monitored case studies and have been independently tested by external test houses/consultants.

CORROSION MANAGEMENT - CORROSION PREVENTION
GALVANIC ANODES - Free chloride concentrations exceeding 1% at level of rebar.

APPLICATION OF GALVANIC ANODES TO ALL REPAIRED CONCRETE AREAS TO PREVENT INCIPIENT ANODE FORMATION

Materials Performance
Embedded galvanic anodes shall have the following nomination dimension: 65 mm x 80 mm x 30 mm, pre-manufactured, and consist of a minimum of 100 grams of zinc in compliance with ASTM B6 Special High Grade cast around a pair of steel tie wires in compliance with bright annealed ASTM A82 and encased in a highly alkaline cementitious shell with a pH of 14 or greater. The cementitious shell shall contain no added sulphate nor shall it contain chloride, bromide or other constituents that are corrosive to reinforcing steel or detrimental to the surrounding concrete. Anode units shall be supplied with integral unspliced wires with loop ties for directly tying to the reinforcing steel.

Application for equals to include:

1. A highly alkaline cementitious shell with a pH of 14 or greater.
2. Provide a minimum of 10 years service life (in similar environment).
3. Contain no added constituents corrosive to reinforcing steel or detrimental to concrete, e.g. chloride, bromide, sulphates, etc.
4. Proven track record showing a minimum of 10 years satisfactory field performance.
5. A minimum of three projects of similar size and application.
6. Anode units shall be supplied with solid zinc (ASTM B6 Special High Grade) core cast around integral bright annealed steel (ASTM A82) tie wires for tying to the reinforcing steel.
7. Anode units shall be supplied with integral unspliced tie wires such that the zinc anode is connected to the reinforcement with a continuous, unspliced wire.
8. Third party product evaluation, such as from Concrete Innovations Appraisal Service, BBA, etc.

All Concrete Repair must also comply to BS EN 1504 *Small Non Structural/overhead repair*

WARRANTY MUST BE FROM SINGLE MANUFACTURE FOR THE CONCRETE REPAIRS SYSTEMS AND DECK WATERPROOFING ITEMS

WARRANTY MUST BE FOR A MINIMUM OF 10 YEARS FOR DECKING

WARRANTY MUST BE FOR A MINIMUM OF 10 YEARS FOR CONCRETE REPAIR & COATINGS

ISSUE	REVISION	BY	DATE
T2	COMPLIANCE SPECIFICATION ADDED. TENDER ISSUE	CS	20.07.18
T1	FIRST ISSUE	CS	29.06.18

ISSUE
TENDER

CLIENT
CORBY BOROUGH COUNCIL

CONTRACT
CAR PARK DECK & RAMP REFURBISHMENT
GROSVENOR HOUSE, CORBY

TITLE
SURFACE PREPARATION WORKS

ARCHITECT

DRAWN	CH,KD	DATE	SCALE
CS	BT	JUNE'18	1:100 @A1

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DRAWING NUMBER	17	25460/50	REVISION T2

20.07.18