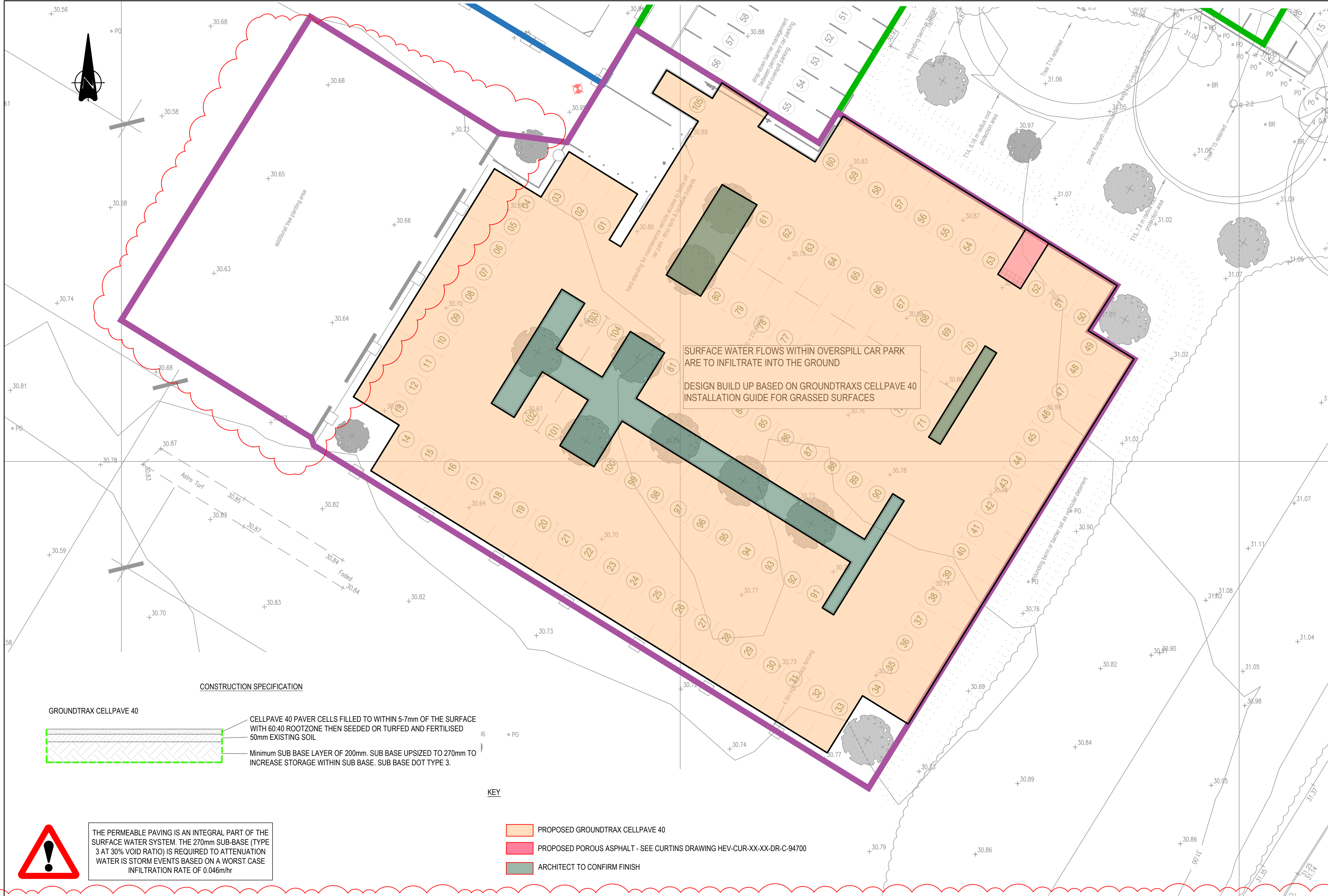




CONSTRUCTION SPECIFICATION

GROUNDTRAX CELLPAVE 40

CELLPAVE 40 PAVER CELLS FILLED TO WITHIN 5-7mm OF THE SURFACE WITH 60:40 ROOTZONE THEN SEEDED OR TURFED AND FERTILISED 50mm EXISTING SOIL

Minimum SUB BASE LAYER OF 200mm. SUB BASE UPSIZED TO 270mm TO INCREASE STORAGE WITHIN SUB BASE. SUB BASE DOT TYPE 3.

KEY

- PROPOSED GROUNDTRAX CELLPAVE 40
- PROPOSED POROUS ASPHALT - SEE CURTINS DRAWING HEV-CUR-XX-XX-DR-C-94700
- ARCHITECT TO CONFIRM FINISH



THE PERMEABLE PAVING IS AN INTEGRAL PART OF THE SURFACE WATER SYSTEM. THE 270mm SUB-BASE (TYPE 3 AT 30% VOID RATIO) IS REQUIRED TO ATTENUATION WATER IS STORM EVENTS BASED ON A WORST CASE INFILTRATION RATE OF 0.046m/hr

SITE ASSESSMENT

EXISTING AREA IS GRASSED AREA, NO POSITIVE DRAINAGE IDENTIFIED ON TOPOGRAPHICAL SURVEY.

ASSUME RAIN WATER CURRENTLY SOAKS AWAY INTO THE GROUND WATER.

SITE TOPOGRAPHY SHOWS SLIGHT FALL c.400mm ACROSS THE SITE HOWEVER GENERALLY FLAT.

PROPOSED STRATEGY

DUE TO THE GROUND BEING SUITABLE FOR INFILTRATION, PERMEABLE PAVING USING INFILTRATION CAN BE USED.

WORST CASE SCENARIO INFILTRATION RATE OF 1.28X10⁻³X3600 TO BE USED.

CAR PARK TO BE GROUNDTRAX CELLPAVE 40 AS PER THE ARCHITECTS SPECIFICATION.

CATCHMENTS AND DISCHARGE RATE

PROPOSED CATCHMENT AREA = 3200m² (0.032ha)

INFILTRATION RATE = 0.046m/hr

DRAINAGE DESIGN

REQUIRED STORAGE VOLUME TO BE ATTENUATED WITHIN STONE SUB-BASE LAYER = MAX 236m³ BASED ON 1:100 YR PLUS 40% CLIMATE CHANGE. FOR INFILTRATION RATES PLEASE SEE LKC GROUP PHASE 2 GEO-ENVIRONMENTAL INVESTIGATION, RISK ASSESSMENT AND REMEDIATION STRATEGY.

CAR PARK AREA = 3000m² x 0.270m (SUB-BASE LAYER DEPTH) = 810m³.

810m³ x 0.3 (30%VR) = 243m³ (ACTUAL STORAGE PROVIDED).

PAVEMENT DESIGN

BASED ON GROUNDTRAX CELLPAVE 40.

40mm CELLPAVE 40 PAVERS
50mm EXISTING SOIL
200mm SUB-BASE LAYER
INCREASE SUB-BASE TO 270mm FROM 200mm TO PROVIDE MINIMUM 240m³ SURFACE WATER ATTENUATION.
BASED ON 5% CBR.

SEE CONSTRUCTION SPECIFICATION.

GENERAL NOTES:

GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH CURTINS DRAINAGE SPECIFICATION, "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION", BS EN 752 2017 'DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS' AND THE BUILDING REGULATIONS APPROVED 'DOCUMENT H'.
- DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
- DESIGN BASED ON TOPOGRAPHICAL SURVEY INFORMATION AVAILABLE AT THE TIME OF THE DESIGN.
- ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.
- COVER LEVELS ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/ LANDSCAPE ARCHITECT. CONTRACTOR TO ALLOW FOR ADJUSTMENT TO SUIT AGREED POSITIONS AND FINISHED LEVELS, AND CONFIRM ALL COVER LEVELS ON SITE.
- SURFACE WATER ATTENUATION TO BE PROVIDED WITHIN THE CONSTRUCTION BUILD UP.

P02	STAGE 4 UPDATE	19/11/21	CD	CG
P01	STAGE 4 ISSUE	30.06.21	CS	CD
Rev:	Description:	Date:	By:	Chkd:

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Status: STAGE 4 UPDATE

Project: HOUGH END SPORTS VILLAGE

Orig Title: CAR PARK DRAINAGE

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	14/05/21	CD	CG	CG
Scale: 1:200				
Project No:	Originator:	Volume:	Level:	Type:
HEV - CUR - XX - XX - DR - C -	92560	-	P02	