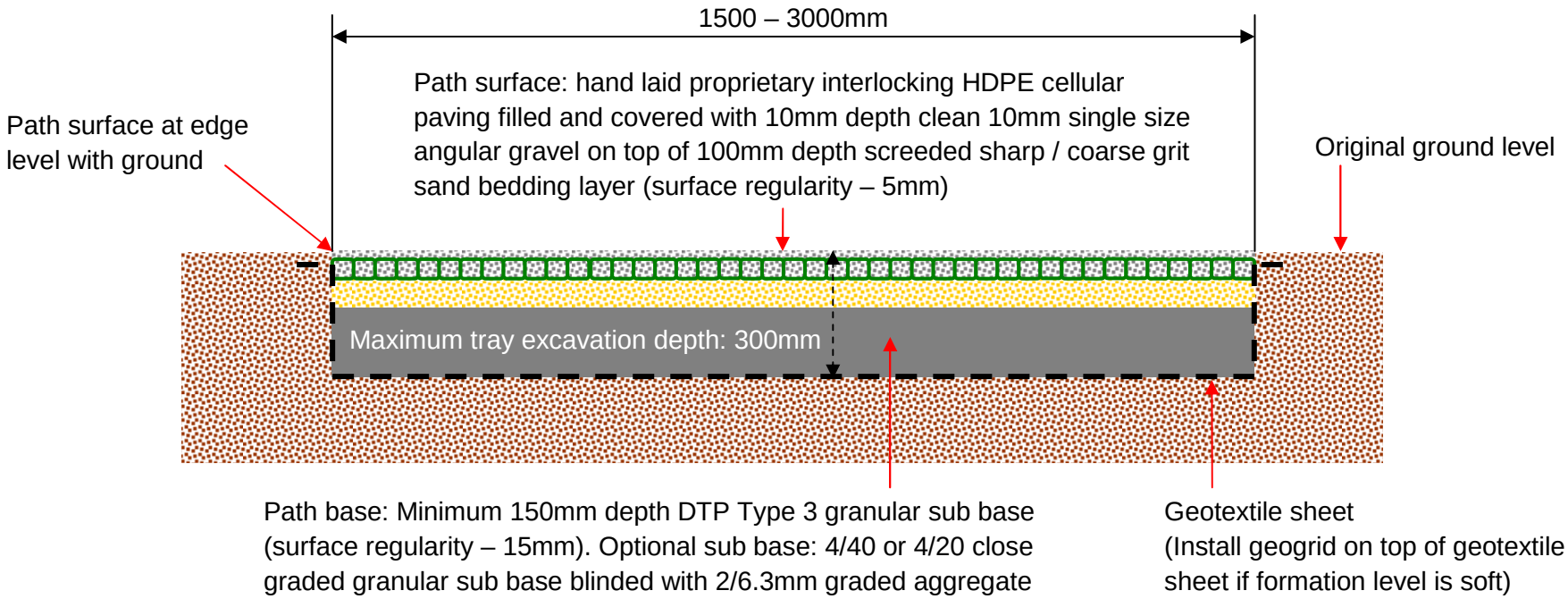
Construction notes:

1. Stripped turfs and excavated soil to be cast and spread locally on site.
2. Formation level to be treated with approved residual herbicide.
3. Soft spots to be excavated and filled with DTp Type 3 granular sub base.
4. If required, bedding layer to be supported with geotextile sheet on top of path sub base.
5. Cellular gravel retention system to be proprietary HDPE product suitable for type of traffic intending to use the path. The system to be filled and covered with 0/10mm single size angular gravel to maximum depth of 10mm.
6. This drawing should be read in conjunction with specification details SPEC/RGP/01. Granular sub base to be produced according to SHW Clause 805.



paths for all

Reinforced Gravel Path (Full Tray Excavation) Standard Detail

Date: 08/06/11
Scale: Not to scale
Drawn by: Technical Officer
Drawing nr: SD/RGP/01

SPECIFICATION DETAILS – SPEC/RGP/01

Reinforced Gravel Path

Note: These specification details should be read in conjunction with standard detail drawing SD/RGP/01 – Reinforced Gravel Path (Full Tray Excavation).

Material Specification Details

Sub base layer	Open DTp Type 3 granular sub base Optional sub base: 4/40 or 4/20 close graded granular sub base blinded with 2/6.3 graded aggregate
Bedding layer	100mm sharp / coarse grit sand
Surface layer	Proprietary interlocking HDPE cellular paving sections, 10mm single size angular gravel
Geotextile (If required)	Autoway 120 or alternative equivalent product grade (Terram 2000, Lotrak 16/15)
Geogrid (If required)	Auto Grid

Construction Specification Details

Formation tray excavation

- Excavate the ground to expose sub soil and grade out irregularities to form 1.5metre wide formation tray to maximum depth of 300mm below ground levels.
- Formation tray should be rectangular in section with vertical sides and level base. Treat formation level with approved residual herbicide.
- Stripped vegetation and excavated topsoil to be cast and spread locally on site, either side of formation tray, and landscaped into existing ground levels. If space is limited, cart excess materials to suitable location on site for spreading and landscaping.
- If soft spots are present, excavate the area below formation level until the sub grade is stable. Back fill with DTp Type 3 granular sub base to formation level and compact to refusal.

Geotextile sheet installation (including geogrid if required)

- Lay and secure geotextile sheet in formation tray. Geotextile sheet should line the base and both sides. Overlap joining sheets by 1.0metre.
- Lay and secure geogrid on top of geotextile sheet. Geogrid should not protrude up the sides of the formation tray. Overlap joining sheets by 1.0metre.

Sub base layer

- Using a drag box lay 150mm depth of DTp Type 3 granular sub base upon the geotextile sheet in the formation tray to form a uniform even level surface for the bedding layer to be installed upon. If no drag box is

available, DTp Type 3 granular sub base should be laid, spread and raked to form a uniform even level surface using asphalt rake.

- Compact sub base layer thoroughly to refusal using a heavy ride-on tandem vibrating roller until full compaction is achieved (minimum 120 type roller recommended).
- Once sub base layer is compacted, check levels of the surface at regular intervals along the compacted sub base layer for consistent even surface regularity, which should be accurate to maximum gap of 15mm under a 3.0metere long straight edge, with no high or low points or hollows.
- Any part of the sub base layer deviating from the required level must be raked off or topped up with additional DTp Type 3 granular sub base and re-compacted to the correct levels.

Geotextile sheet installation

- Lay and secure geotextile sheet on top of compacted sub base layer to support the bedding layer and to avoid filling in the open voids in the surface of sub base layer with sand. Overlap joining sheets by 1.0metre.

Bedding layer

- Lay and screed 100mm depth of sharp / coarse grit sand upon the geotextile sheet on the compacted sub base layer to form a uniform even level surface for laying the interlocking plastic cellular paving upon.
- Do not compact the bedding layer as the base of the cellular paving needs to bed into the bedding layer, so some ‘give’ in the sand is required.
- Check levels of the surface at regular intervals along the bedding layer for consistent even surface regularity, which should be accurate to maximum gap of 5mm under a 3.0metere long straight edge, with no high or low points or hollows.
- Any part of the bedding layer deviating from the required level must be regulated with additional sharp / coarse grit sand and re-screeded to the correct levels.

Surface layer – laying the proprietary interlocking HDPE cellular paving sections

- Set out two taut string lines, 1.5metres apart, against the bedding layer edges on either side of path to act as an alignment guide for installing the interlocking HDPE cellular paving sections onto the bedding layer.
- Starting at the beginning of the bedding layer, in the right hand corner, align the first paving sections grooved edge to the taut string line. The two interlocking tab edges of the paving section will point forwards and to the left. Alternatively, if starting from the left hand corner, the two interlocking tab edges would point forwards and to the right.
- Offer up the next paving section in same orientation as the first section so that grooves fit over interlocking tabs on previous paving section, then lower the paving section into position on bedding layer, apply pressure with foot to complete connection. Check all tabs have locked into the grooves. Also make sure the paving section lies flat on the bedding layer.
- Continue laying paving sections in rows in a forward direction and to the left towards the left hand spring line, stand on the laid paving when laying the next row of paving sections. Continue laying paving sections in this manner until the path area to be paved is completed.

- There is no need to pin paving sections to the bedding layer, unless the path is being built on a steep gradient, the open base will grip into the bedding layer providing good anchorage. If the paving is to be installed on a steep gradient, use anchor pins to securely fix the paving to the bedding layer.
- For fitting paving sections at bends, corners etc. the paving sections can be easily cut in-situ using a power cut-off saw – lay the paving beyond the area to be cut, set up a taut string line to establish the intended cutting line and align a straightedge with the string line to give a firm cutting guide edge, then cut straight through the paving sections using the cut-off saw to give a neat and reasonably straight edge. Cut paving sections should be nailed down using manufacturer's pins.
- Once the paved surface layer is laid and any cutting required completed, the entire area should be compacted using a medium weight walk-behind vibrating roller or whacker compaction plate, to bed the paving into the bedding layer.

Surface layer – filling the proprietary interlocking HDPE cellular paving sections

- Fill cellular paved surface layer with 10mm single sized angular gravel to the top edges of each cell.
- Lay and spread 10mm depth of 10mm single sized angular gravel over the top of infilled cellular paved surface to cover and conceal the exposed cell ring edges.
- Lightly consolidate gravel surface with medium weight walk-behind vibrating roller or whacker compaction plate to help the angular gravel interlock, preventing displacement when walked or wheeled over.

Landscaping

- Exposed geotextile sheet edges either side of path should be covered over with a 150mm depth of topsoil. The topsoil should be landscaped level with finished path surface.
- The finished path surface should be level with the ground on either side of path to allow surface water to run off onto adjacent ground.