

# APPENDIX 7

## **Scope of Works**

- Single Track - No intermediate stations (Base Case)
- Double Track - No intermediate stations
- Partial Double Track - No intermediate stations
- Single Track - With intermediate stations
- Double Track - With intermediate stations
- Single Track - No intermediate stations (Option 2a)

## SINGLE TRACK – NO INTERMEDIATE STATIONS (Base Case)

Description of Works	Comments
<b>GENERAL</b>	
<u>Land Purchase</u> Purchase land for 15m wide corridor along the route. (Majority is agricultural use).	
Property purchase.	
<u>Site Clearance</u> Clear heavy vegetation / trees from track bed and track side (width 15m).	
Excavate topsoil (depth 150mm).	
Break up and remove roadway / car park surfacing (depth 300mm, width 9000mm).	
<b>TRACK WORKS</b>	
<u>Earthworks</u> Construct new embankment for double track railway (width 8500mm, height varies – assume average 3000mm).  Embankment stabilisation.	Hamsey end of route.
<u>Drainage</u> Clear, excavate, lay drain run (including catchpits) and backfill.	Single drain run.
<u>Track Formation</u> Prepare subgrade and lay trackbed for double track railway	
Trackbed to include sand blanket (200mm depth, 6500mm width) for 75% of route.	
Trackbed to include geomembrane (6500mm width) for 25% of route.	
<u>Plain Line</u> Lift and remove existing track (Down line), sleepers and ballast, including removal of crossover and laying plain line.  Lift, set aside and relay existing track (Up line), including buffer stops, following formation works.	Lavender Line at Isfield.  Lavender Line at Isfield.
Remove buffer stops.	Lavender Line at Isfield.
Remove buffer stops.	Uckfield station.
Lift and remove existing plain line, sleepers and ballast through station.	Uckfield station.
Lay plain line (CWR).	Includes sections of double track at Uckfield station and Hamsey.
<u>Switches and Crossings (S&amp;C)</u> S&C at Hamsey and Uckfield ends of the route.  Points heating and associated power supplies.	

## SINGLE TRACK – NO INTERMEDIATE STATIONS (Base Case)

Description of Works	Comments
Modifications to conductor rail layout.	Hamsey end of route.
<u>Access Path</u> Construct access path for maintenance purposes throughout route (700mm wide).	
<u>Fencing</u> Install fencing to both sides of railway corridor.  Post and wire.  Steel palisade security fence.	  21000m total.  3000m total.
<u>Access Points</u> Access for road/rail vehicles (double track Strail crossing).  Access gates for road/rail vehicles (palisade fencing).  Access gates (palisade fencing).	  Authorised access point for RRV at Uckfield.    Authorised access points for maintenance purposes at Barcombe Mills and Isfield.
<b>CIVIL / STRUCTURAL WORKS</b>	
<u>Demolition of Uckfield station (current).</u> Precast concrete trestle units, including canopy and ticket office.  Precast concrete beam and block construction, blockwork crosswalls and reinforced concrete strip foundations, including ramp.	Single platform, canopy, fencing, ticket office, lighting, signage, CIS and PA.
<u>Former Signal Box (Uckfield)</u> Demolition of former signal box.	
<u>New Uckfield station</u> Platforms (2 no., length 250m, width 3.5m min.), including lighting, fencing, signage, seating, CIS and PA.  Station building.  Platform canopy (length 50m).  Waiting shelters.  Station car park, including drainage and lighting.  Footbridge (modular) at new Uckfield station.	  Includes demolition of remains of original platforms.    Assume 12m x 6m modular station building.      Assume footbridge with lifts and stairs.
<u>Civil/structural alterations.</u> Isfield.  Barcombe Mills.	Works to existing buildings and platforms (gauge clearance) at both locations
<u>Footbridges</u> Footbridges (for double track) at locations where footpaths cross the railway.  Footbridge (for double track) across railway at Uckfield on alignment of High Street.	    Assume ramped footbridge with stairs.

## SINGLE TRACK – NO INTERMEDIATE STATIONS (Base Case)

Description of Works	Comments
<p><u>Culverts</u> Repair and strengthen brick arch culverts under double width trackbed.</p>	Assume 25% of culverts along route require repair and strengthening.
<p><u>Bridge 1046 (Mill Stream)</u> Demolish existing single span wheeltimber underbridge (single track at Uckfield station). Widen abutments and construct new steel underbridge with ballasted deck for double track.</p>	Uckfield station (current location).
<p><u>New bridge for road diversion</u> Construct two span overbridge to carry road over new Uckfield station (25m span) and river (15m span), includes 2500m of road.</p>	Uckfield station (new location).
<p><u>Retaining wall</u> Construct retaining wall where railway passes between sewage works and industrial estate. Assume height of wall 3m, length 400m.</p>	
<p><u>A22 (Uckfield By-Pass)</u> A22 crosses old track alignment at grade level. Reprofile A22 vertical alignment, rising 5m at highest point, on each side of overbridge. Allow sum for road diversions. Assume 800m length of road to be reprofiled.</p>	
<p><u>Bridge 1049</u> Demolish existing single span reinforced concrete underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for single track.</p>	Allows for installation of second bridge deck at a later date for double track railway.
<p><u>Bridge 1050</u> Demolish existing three span wheeltimber underbridge and intermediate trestle. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for single track.</p>	Allows for installation of second bridge deck at a later date for double track railway.
<p><u>Bridge 2035</u> Demolish existing three span wheeltimber underbridge and intermediate trestle. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for single track.</p>	Allows for installation of second bridge deck at a later date for double track railway.
<p><u>Bridge 2032</u> Brick piers of wrought iron girder overbridge conflict with clearance requirements. Overbridge to be reconstructed.</p>	
<p><u>Bridge 1053</u> Demolish existing single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for single track.</p>	Allows for installation of second bridge deck at a later date for double track railway.
<p><u>Bridge 2026</u> Demolish existing single span wheeltimber underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for single track.</p>	Allows for installation of second bridge deck at a later date for double track railway.

## SINGLE TRACK – NO INTERMEDIATE STATIONS (Base Case)

Description of Works	Comments
<u>Bridge 2025</u> Demolish existing single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for single track.	Allows for installation of second bridge deck at a later date for double track railway.
<u>Bridge 2022</u> Demolish existing single span wheeltimber underbridge. Widen abutments for double track railway. Construct new single span underbridge with ballasted deck for single track.	Allows for installation of second bridge deck at a later date for double track railway.
<u>Bridge 2021</u> Demolish existing three span wheeltimber underbridge. Widen abutments and strengthen for double track railway. Construct new single span underbridge with ballasted deck for single track.	Allows for installation of second bridge deck at a later date for double track railway.
<u>Bridge 2015</u> Demolish existing single span wrought iron underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for single track.	Allows for installation of second bridge deck at a later date for double track railway.
<u>Bridge 2013</u> Demolish single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for single track.	Allows for installation of second bridge deck at a later date for double track railway.
<u>Bridge 2005</u> Demolish existing two span wrought iron underbridge and central brick pier. Construct new single span steel underbridge with ballasted deck for single track.	Allows for installation of second bridge deck at a later date for double track railway.
<u>Bridge 2009</u> Lower track under wrought iron overbridge to achieve minimum gauge clearance.	
<u>New Bridge (Whitfeld Road)</u> Construct new rail over road bridge. Concrete abutments (brick-faced) with steel ballasted deck for double track.	
<u>New Bridge (Ivors Lane)</u> Construct new rail over road bridge. Concrete abutments (brick-faced) with steel ballasted deck for double track.	

## DOUBLE TRACK – NO INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<b>TRACK WORKS</b>	
<u>Drainage</u> Clear, excavate, lay drain runs (including catchpits) and backfill.	Two drain runs.
<u>Plain Line</u> Lift and remove existing track (Up and Down lines), sleepers and ballast, including removal of crossover.	Lavender Line at Isfield.
Remove buffer stops.	Lavender Line at Isfield.
Lay plain line (CWR).	
<u>Switches and Crossings (S&amp;C)</u> S&C at Hamsey and Uckfield ends of the route.  Points heating and associated power supplies.	
<b>CIVIL / STRUCTURAL WORKS</b>	
<u>Bridge 1049</u> Demolish existing single span reinforced concrete underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 1050</u> Demolish existing three span wheeltimber underbridge and intermediate trestle. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2035</u> Demolish existing three span wheeltimber underbridge and intermediate trestle. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 1053</u> Demolish existing single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2026</u> Demolish existing single span wheeltimber underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2025</u> Demolish existing single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for double track.	

## DOUBLE TRACK – NO INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

<u>Bridge 2022</u> Demolish existing single span wheeltimber underbridge. Widen abutments for double track railway. Construct new single span underbridge with ballasted deck for double track.	
<u>Bridge 2021</u> Demolish existing three span wheeltimber underbridge. Widen abutments and strengthen for double track railway. Construct new single span underbridge with ballasted deck for double track.	
<u>Bridge 2015</u> Demolish existing single span wrought iron underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2013</u> Demolish single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2005</u> Demolish existing two span wrought iron underbridge and central brick pier. Construct new single span steel underbridge with ballasted deck for double track.	

## PARTIAL DOUBLE TRACK – NO INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<b>TRACK WORKS</b>	
<u>Drainage</u> Clear, excavate, lay drain runs (including catchpits) and backfill.	Two drain runs.
Lay plain line (CWR).	Includes sections of double track at Uckfield station and Hamsey.
<u>Switches and Crossings (S&amp;C)</u> S&C at Hamsey and Uckfield ends of the route.  Points heating and associated power supplies.	
<b>CIVIL / STRUCTURAL WORKS</b>	
<u>Civil/structural alterations.</u> Isfield.  Barcombe Mills.	Works to existing buildings and platforms (gauge clearance) at both locations.
<u>Bridge 1053</u> Demolish existing single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2026</u> Demolish existing single span wheeltimber underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2025</u> Demolish existing single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2022</u> Demolish existing single span wheeltimber underbridge. Widen abutments for double track railway. Construct new single span underbridge with ballasted deck for double track.	
<u>Bridge 2021</u> Demolish existing three span wheeltimber underbridge. Widen abutments and strengthen for double track railway. Construct new single span underbridge with ballasted deck for double track.	
<u>Bridge 2015</u> Demolish existing single span wrought iron underbridge. Widen abutments for double track railway. Construct new single span steel underbridge with ballasted deck for double track.	
<u>Bridge 2013</u> Demolish single span reinforced concrete underbridge. Construct new single span steel underbridge with ballasted deck for double track.	



**PARTIAL DOUBLE TRACK – NO INTERMEDIATE STATIONS**

**ALTERATIONS TO BASE CASE**

Bridge 2005

Demolish existing two span wrought iron underbridge and central brick pier. Construct new single span steel underbridge with ballasted deck for double track.

## SINGLE TRACK – INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<b>CIVIL / STRUCTURAL WORKS</b>	
<p><u>Barcombe Mills station</u> Remove building on former Down platform.</p> <p>Extend existing Down platform (length 170m, width 3.5m) in crosswall and slab construction, including precast concrete coping units, fence at rear of platform, lighting, mesh screens to underside, drainage, tactile warning slabs, surfacing, yellow and white lining.</p> <p>Refurbish existing Down platform (solid-fill construction with brickwork walls) Allow for widening existing platform to 3.5m width. Reduce height of walls and build up to standard platform height (allowing for gauge clearance requirements), incorporating precast concrete coping units, drainage, tactile paving slabs, surfacing, white and yellow lining. New fence to be installed at rear of existing platform. New lighting columns to be installed on existing platform.</p> <p>Waiting shelters.</p> <p>Signage, seating, CIS and PA to be installed to existing platform and extension.</p> <p>Ticket office / building.</p> <p>Car park, including drainage and lighting, for station use.</p>	
<p><u>Isfield station</u> Remove waiting shelter on Down platform, signal box, water tower and other heritage items / facilities.</p> <p>Cut back and reprofile cutting slope and construct retaining wall.</p> <p>Extend existing Down platform (length 170m, width 3.5m) in crosswall and slab construction, including precast concrete coping units, fence at rear of platform, lighting, mesh screens to underside, drainage, tactile warning slabs, surfacing, yellow and white lining.</p> <p>Refurbish existing Down platform (solid-fill construction with brickwork walls) Allow for widening existing platform to 3.5m width. Reduce height of walls and build up to standard platform height (allowing for gauge clearance requirements), incorporating precast concrete coping units, drainage, tactile paving slabs, surfacing, white and yellow lining. New fence to be installed at rear of existing platform. New lighting columns to be installed on existing platform.</p> <p>Waiting shelters.</p>	<p>Lavender Line.</p>

## SINGLE TRACK – INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<p>Signage, seating, CIS and PA to be installed to existing platform and extension.</p> <p>Ticket office / building</p> <p>Works to upgrade current Lavender Line car park for station use, including drainage and lighting.</p> <p>New entrance to station on Down side.</p>	

## DOUBLE TRACK – INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<b>CIVIL / STRUCTURAL WORKS</b>	
<p><u>Barcombe Mills station</u> Remove building on former Down platform.</p> <p>Remove structure under canopy on former Up platform, including building alterations.</p> <p>Extend existing Up and Down platforms (length 170m, width 3.5m) in crosswall and slab construction, including precast concrete coping units, fence at rear of platform, lighting, mesh screens to underside, drainage, tactile warning slabs, surfacing, yellow and white lining.</p> <p>Refurbish existing Up and Down platforms (solid-fill construction with brickwork walls) Allow for widening existing platform to 3.5m width. Reduce height of walls and build up to standard platform height (allowing for gauge clearance requirements), incorporating precast concrete coping units, drainage, tactile paving slabs, surfacing, white and yellow lining. New fence to be installed at rear of existing platforms. New lighting columns to be installed on existing platforms.</p> <p>Waiting shelters.</p> <p>Signage, seating, CIS and PA to be installed to existing platforms and extensions.</p> <p>Ticket office / building.</p> <p>Car park, including drainage and lighting, for station use.</p>	
<p><u>Isfield station</u> Remove waiting shelter on Down platform, signal box, water tower and other heritage items / facilities.</p> <p>Remove waiting shelter, crane on loading dock, miscellaneous equipment and other heritage items/ facilities on Up platform.</p> <p>Cut back and reprofile cutting slope and construct retaining wall (Down side).</p> <p>Extend existing Up and Down platforms (length 170m, width 3.5m) in crosswall and slab construction, including precast concrete coping units, fence at rear of platform, lighting, mesh screens to underside, drainage, tactile warning slabs, surfacing, yellow and white lining.</p> <p>Refurbish existing Up and Down platforms (solid-fill construction with brickwork walls) Allow for widening existing platform to 3.5m width. Reduce height of walls and build up to standard platform height (allowing for gauge clearance requirements), incorporating precast concrete coping units, drainage, tactile paving slabs, surfacing, white and yellow lining. New fence to be installed at rear of existing platforms. New lighting columns to be installed on existing platforms.</p>	<p>Lavender Line.</p> <p>Lavender Line.</p>

## DOUBLE TRACK – INTERMEDIATE STATIONS

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<p>Waiting shelters.</p> <p>Signage, seating, CIS and PA to be installed to existing platforms and extensions.</p> <p>Ticket office / building.</p> <p>Works to upgrade current Lavender Line car park for station use, including drainage and lighting.</p> <p>New entrance to station on Down side.</p>	<p>In total.</p>

## SINGLE TRACK – NO INTERMEDIATE STATIONS (Option 2a)

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<b>GENERAL</b>	
<u>Land Purchase</u> Purchase land for 15m wide corridor along the route. (Majority is agricultural use).	Lewes end of route.
<u>Site Clearance</u> Clear heavy vegetation / trees from track bed and track side (width 15m).	
Excavate topsoil (depth 150mm).	
<b>TRACK WORKS</b>	
<u>Earthworks</u> Construct new embankment for double track railway (width 8500mm, height varies – assume average 3500mm).  Construct new embankment for double track railway (width 8500mm, height varies – assume 3000mm).  Excavate landfill from former railway cutting and reprofile cutting slopes (width 9000mm, depth of fill varies – assume average 3000mm). Assume landfill material to be contaminated.  Embankment stabilisation.	
<u>Drainage</u> Clear, excavate, lay drain run (including catchpits) and backfill.	Single drain run.
<u>Track Formation</u> Prepare subgrade and lay trackbed for double track railway	
Trackbed to include sand blanket (200mm depth, 6500mm width) for 75% of route.	
Trackbed to include geomembrane (6500mm width) for 25% of route.	
<u>Plain Line</u> Lay plain line (CWR).	Includes section of double track at Lewes end.
<u>Switches and Crossings (S&amp;C)</u> S&C at Keymer Junction / Lewes end and start of single track section.  Points heating and associated power supplies.	
<u>Access Path</u> Construct access path for maintenance purposes throughout route (700mm wide).	

## SINGLE TRACK – NO INTERMEDIATE STATIONS (Option 2a)

### ALTERATIONS TO BASE CASE

Description of Works	Comments
<u>Fencing</u> Install fencing to both sides of railway corridor.  Post and wire.  Steel palisade security fence.	  3000m total.  1200m total.
<u>Access Points</u> Access gates (palisade fencing).	Authorised access point for maintenance purposes.
<b>CIVIL / STRUCTURAL WORKS</b>	
<u>New Bridge (River Ouse)</u> Construct new rail over river bridge. Concrete abutments (brick-faced) with steel ballasted deck for double track.	
<u>New Bridge (Old Malling Farm)</u> Construct road over rail bridge. Concrete abutments (brick-faced) for double track with steel ballasted deck for single track.	
<u>New Bridge (Ouse Viaduct)</u> Construct new three span rail over river bridge. Piled supports behind existing abutments of original viaduct and intermediate supports for centre span either side of river. Supports to be for double track. Steel ballasted decks for single track. Remedial works to original brick abutments.	
<u>Road over Rail Bridge</u> Excavate landfill from under bridge (width 9000mm, depth of fill 4000mm). Assume landfill material to be contaminated. Remedial works to brick arch structure.	
<u>New Bridge (River Ouse)</u> Construct new single span rail over river bridge. Concrete abutments (brick-faced) for double track with steel ballasted deck for single track.	