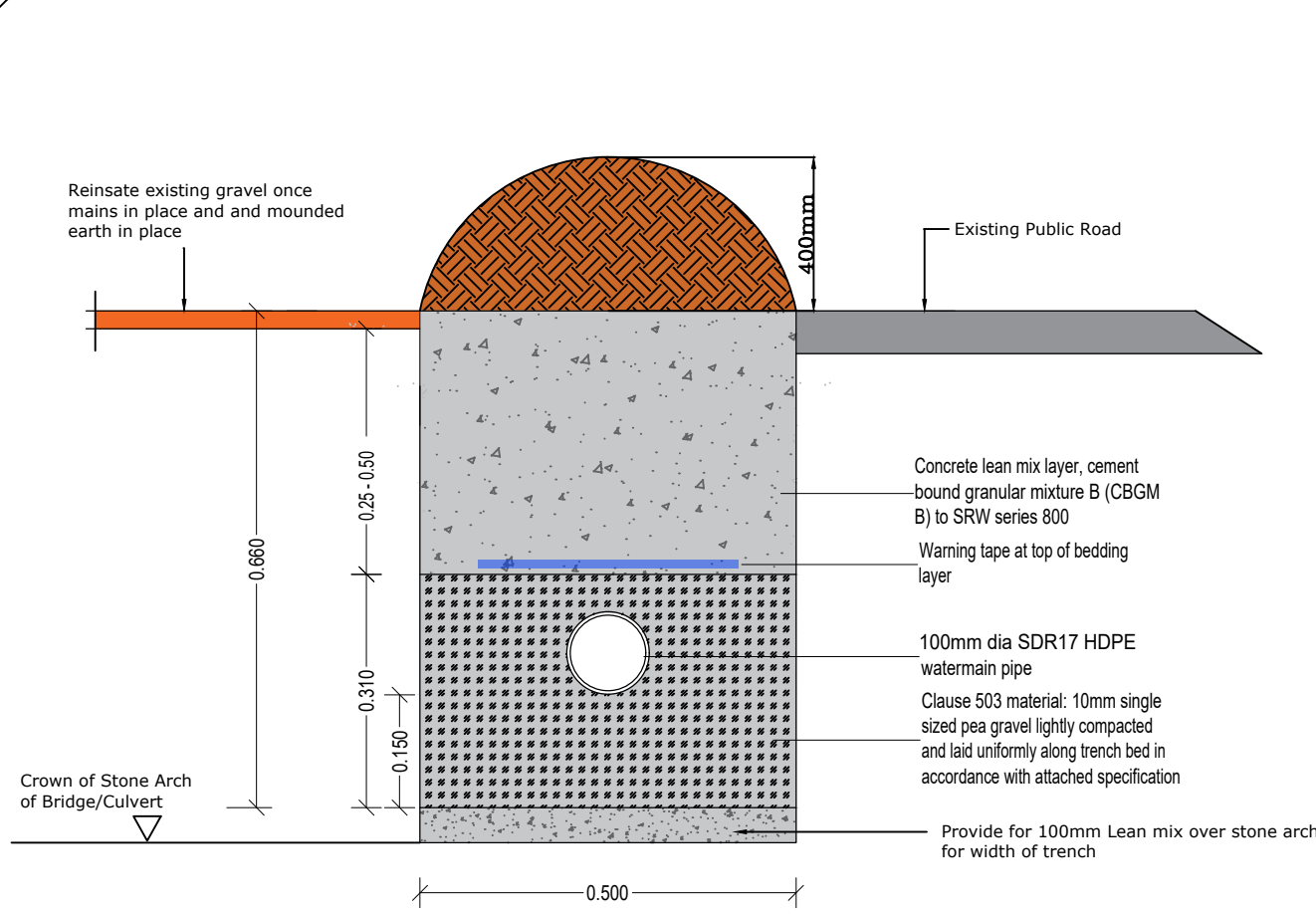
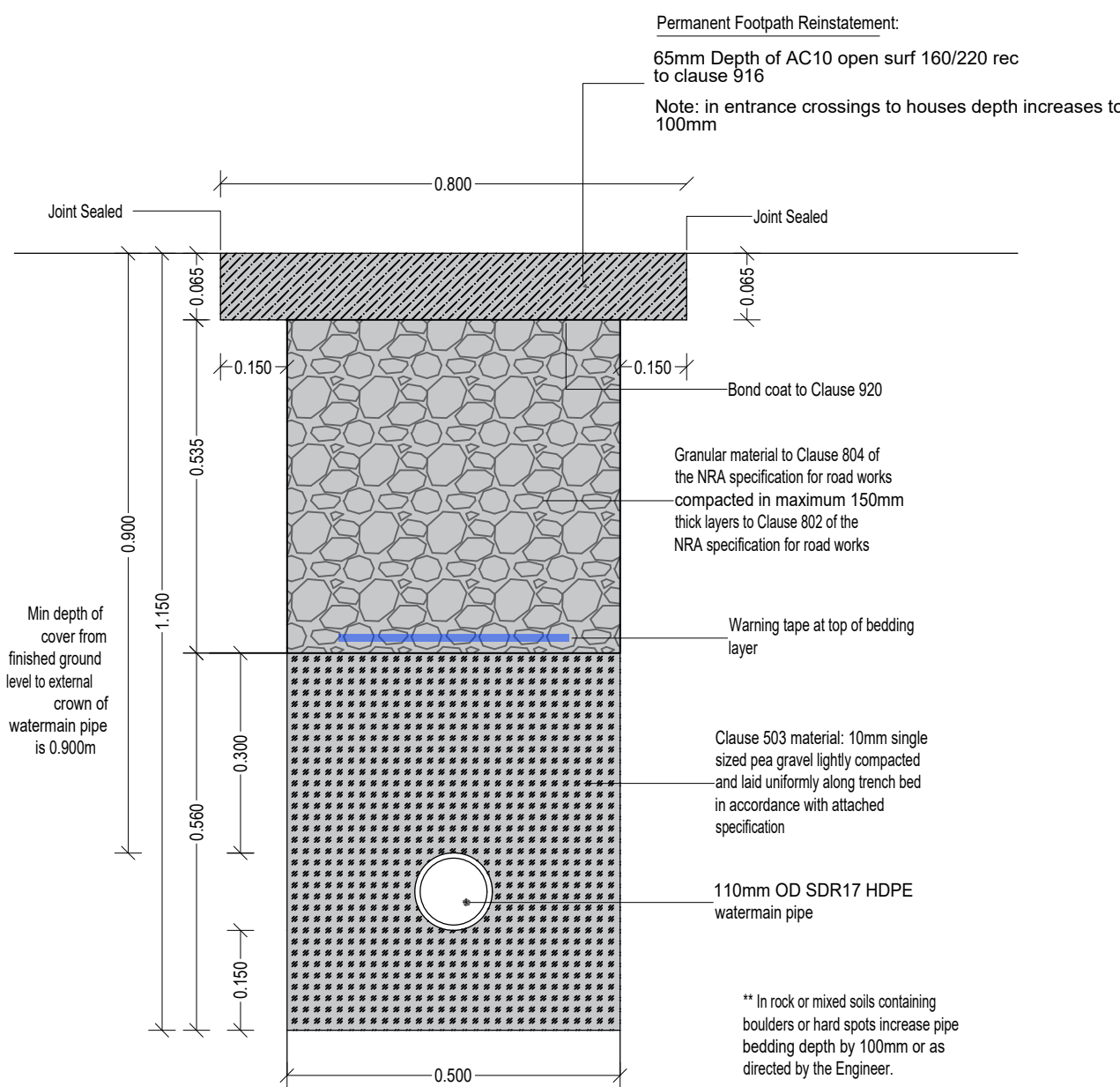
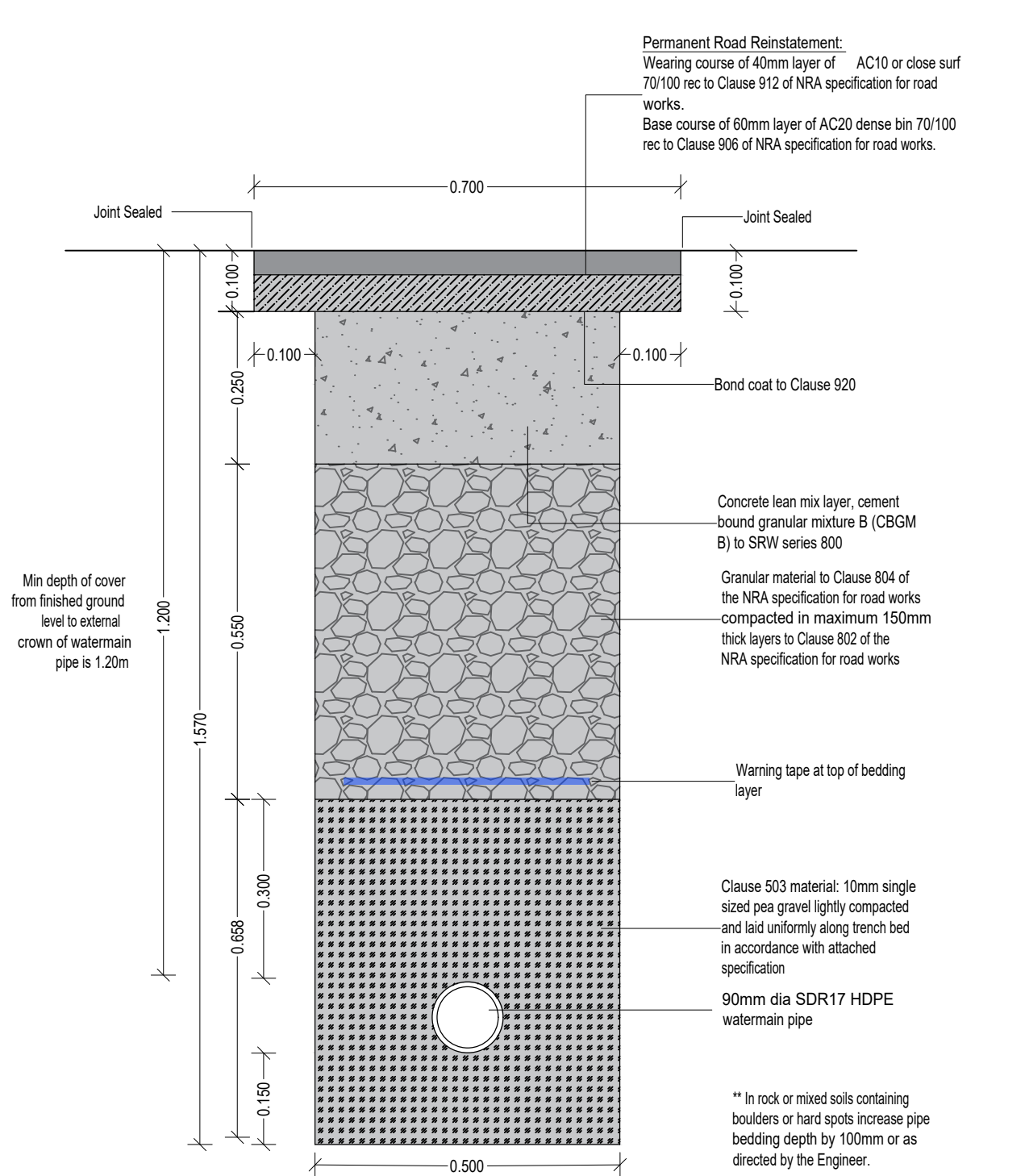




Permanent Reinstatement Details
100mm Diameter Watermain in Public Road (Longitudinal Opening) Culvert / Bridge Crossing Section (Reduced Cover)
Scale 1/10

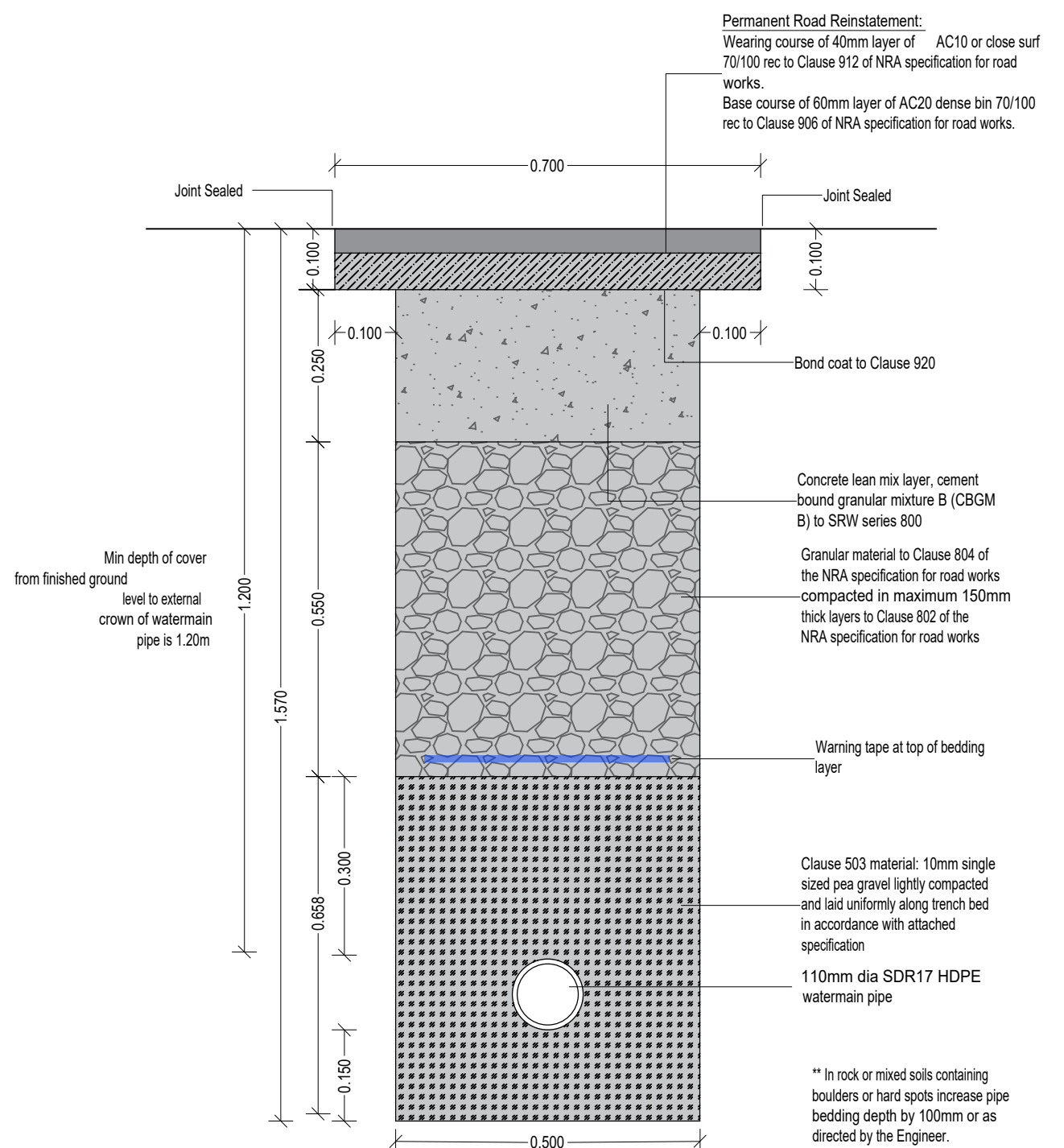


Permanent Reinstatement Details
110mm OD Watermain in Public Road (Longitudinal Opening Detail for Footpaths)
Scale 1/10



Permanent Reinstatement Details
90mm OD Watermain in Public Road (Longitudinal Opening)
Scale 1/10

Permanent Reinstatement Details
100mm Diameter Watermain in Public Road (Longitudinal Opening) Culvert / Bridge Crossing Section (Reduced Cover)
Scale 1/10



Permanent Reinstatement Details
110mm OD Watermain in Public Road (Longitudinal Opening)
Scale 1/10

General Reinstatement Notes(to be read in conjunction Guidelines for Managing Openings in Public Roads April 2017 or recent revision)

- Compliance with these drawings and details are mandatory. Dependent on circumstances and where drawings provide options/alternatives, road authorities may specify one option only as being applicable. Where a utility has an approved equivalent detail for bedding and surround this may be substituted for the bedding and surround detail shown in the Standard Drawings, provided it is agreed with the road authority in advance.
- Full width/lanes/bay reinstatements works shall be machine laid with materials used in accordance with TII Specification for Road Works and use materials and depths of reconstruction to match the existing surface. Note: Surface Dressing does not constitute full width reinstatement unless the structural Asphaltic Concrete (AC) layer is provided over the full width.
- On approach to the works site, the name of the contractor and Licence Holder must be clearly displayed with a 24 hour contact number.
- All works shall have a temporary traffic management plan, which shall be available for inspection on site, and shall comply with the Traffic Signs Manual and health and safety requirements.
- Prior to any excavation works taking place, the location of all underground and over ground services must be identified and marked by a competent person trained in the use of cable detectors. Contact shall be made with all relevant service providers in this regard.
- All works and materials shall comply with the TII Specification for Road Works, Series 900 of that specification will be the March 2011 version. All other Series will be to the current version.
- Excavation on a road should not be closer than 500mm to the kerb line in order to prevent undermining of the adjacent footway. The trench should be located so as to avoid surface joints being located in the wheel track as far as reasonably practicable.
- All bound (or concrete) edges shall be saw cut to expose the full vertical thickness of each layer prior to excavation. All edges shall be essentially straight, smooth and vertical.
- Excavations shall be sufficiently protected to avoid harmful effects caused by weather or adjacent wheel loading.
- Refer to Chapter 6 for requirements on pipe/culvert type/colour and marker tape.
- The method of work shall ensure proper compaction and such compaction may be tested by the road authority. To ensure adequate compaction, minimum clearances must be maintained vertically and horizontally between individual ducts or services installed in a group.
- CL 808 to be used within 500mm of cement bound materials, concrete pavements, concrete structures or concrete products. Otherwise CL 804 may be used. Foamed concrete to CL 1043 may only be used as a bedding material or backfill material with prior approval of the road authority. Cement Bound Granular Mixture B shall have a minimum strength class of CB/10, unless otherwise directed.
- Where steel plates or other trench covers are used, they must comply with Section 6.3.7.
- Hand laying of hot bituminous mixtures shall be restricted to the following circumstances:
 - At the approaches to expansion joints at bridges, viaducts or other structures.
 - In confined spaces where it is impracticable for a paver to operate.
 - At the approaches to expansion joints at bridges, viaducts or other structures.
- Transverse reinstatements less than 4 metres in width.
- Longitudinal reinstatements less than 20 metres in length.
- Surface course reinstatements of longitudinal excavations less than 1 metre in width.
- Temporary reinstatement

The method of laying shall be such that the finished surface is free from dragging, tearing and segregation of the material.

15. All surface course aggregate shall have a minimum PSV of 60 declared unless otherwise specified by the road authority. Temporary surfaces to be managed in accordance with RLS8/2007.

16. Any damage to the road structure or areas adjacent to the opening and resulting from the works shall be repaired and included within the area to be reinstated.

17. Where there are exceptional circumstances not covered by the drawings, the reinstatement specification must be agreed with the road authority

- Notes:**
- All edges of excavated areas to be saw cut prior to excavation.
 - 40/60 pen bitumen binder or cold thixotropic bitumen 50-70 pen to be applied to all vertical cuts in accordance with BS 594987 prior to application of bituminous materials.
 - The contractor shall provide, place and maintain appropriate signage to highlight the road restoration works.
 - All reinstatement to extend minimum 100mm beyond the firm edge of the excavation.
 - Where trench is excavated across existing tarmac/driveway entrances outside of the existing road surface, the trench shall be reinstated with 75mm layer of DBM (dense bitumen macadam) using 14mm nominal size chips and category resistance to polishing PSV60

Reinstatement Notes:

- Compliance with these drawings and details are mandatory. Dependent on circumstances and where drawings provide options/alternatives, road authorities may specify one option only as being applicable. Where a utility has an approved equivalent detail for bedding and surround this may be substituted for the bedding and surround detail shown in the Standard Drawings, provided it is agreed with the road authority in advance.
- Full width/lanes/bay reinstatements works shall be machine laid with materials used in accordance with TII Specification for Road Works and use materials and depths of reconstruction to match the existing surface. Note: Surface Dressing does not constitute full width reinstatement unless the structural Asphaltic Concrete (AC) layer is provided over the full width.
- On approach to the works site, the name of the contractor and Licence Holder must be clearly displayed with a 24 hour contact number.
- All works shall have a temporary traffic management plan, which shall be available for inspection on site, and shall comply with the Traffic Signs Manual and health and safety requirements.
- Prior to any excavation works taking place, the location of all underground and over ground services must be identified and marked by a competent person trained in the use of cable detectors. Contact shall be made with all relevant service providers in this regard.
- All works and materials shall comply with the TII Specification for Road Works, Series 900 of that specification will be the March 2011 version. All other Series will be to the current version.
- Excavation on a road should not be closer than 500mm to the kerb line in order to prevent undermining of the adjacent footway. The trench should be located so as to avoid surface joints being located in the wheel track as far as reasonably practicable.
- All bound (or concrete) edges shall be saw cut to expose the full vertical thickness of each layer prior to excavation. All edges shall be essentially straight, smooth and vertical.
- Excavations shall be sufficiently protected to avoid harmful effects caused by weather or adjacent wheel loading.
- Refer to Chapter 6 for requirements on pipe/culvert type/colour and marker tape.
- The method of work shall ensure proper compaction and such compaction may be tested by the road authority. To ensure adequate compaction, minimum clearances must be maintained vertically and horizontally between individual ducts or services installed in a group.
- CL 808 to be used within 500mm of cement bound materials, concrete pavements, concrete structures or concrete products. Otherwise CL 804 may be used. Foamed concrete to CL 1043 may only be used as a bedding material or backfill material with prior approval of the road authority. Cement Bound Granular Mixture B shall have a minimum strength class of CB/10, unless otherwise directed.
- Where steel plates or other trench covers are used, they must comply with Section 6.3.7.
- Hand laying of hot bituminous mixtures shall be restricted to the following circumstances:
 - At the approaches to expansion joints at bridges, viaducts or other structures.
 - In confined spaces where it is impracticable for a paver to operate.
 - At the approaches to expansion joints at bridges, viaducts or other structures.
- Transverse reinstatements less than 4 metres in width.
- Longitudinal reinstatements less than 20 metres in length.
- Surface course reinstatements of longitudinal excavations less than 1 metre in width.
- Temporary reinstatement

The method of laying shall be such that the finished surface is free from dragging, tearing and segregation of the material.

15. All surface course aggregate shall have a minimum PSV of 60 declared unless otherwise specified by the road authority. Temporary surfaces to be managed in accordance with RLS8/2007.

16. Any damage to the road structure or areas adjacent to the opening and resulting from the works shall be repaired and included within the area to be reinstated.

17. Where there are exceptional circumstances not covered by the drawings, the reinstatement specification must be agreed with the road authority.

18. The existing surface finish shall be plane out to the depth specified for the new permanent reinstatement in this drawing. Where a temporary surface has been used, material shall be plane out to the depth specified in this drawing. The new permanent surface shall be machine laid and mechanically compacted with a vibratory roller.

19. Where the firm edge of an excavation is within 400mm of a junction, kerb or other reinstatement, this firm edge shall be extended to include same and the area of reinstatement shall be extended accordingly. (1 increase to 800mm where this is a pre-existing practice)

20. Clause 808 or Cement Bound Granular Mixture B shall be used to apply to all vertical cuts in accordance with BS 594987 prior to application of bituminous materials.

21. Joint sealant to be laid 400mm per blower binder or cold thixotropic bitumen 50-70 pen to be applied to all vertical cuts in accordance with BS 594987 prior to application of bituminous materials.

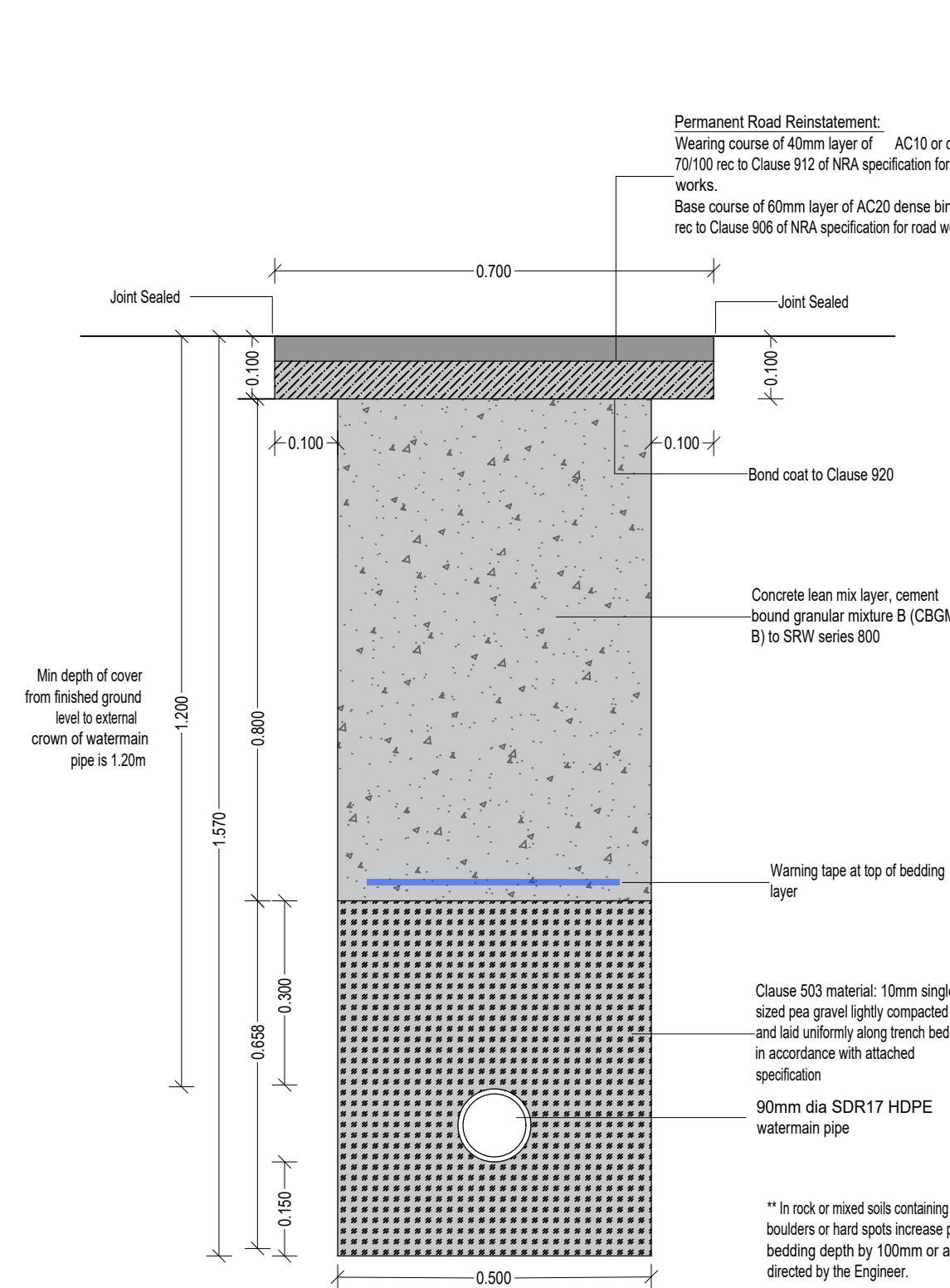
22. Joint sealant to be laid 400mm per blower binder or cold thixotropic bitumen 50-70 pen to be applied to all vertical cuts in accordance with BS 594987 prior to application of bituminous materials.

23. Joint sealant to be laid 400mm per blower binder or cold thixotropic bitumen 50-70 pen to be applied to all vertical cuts in accordance with BS 594987 prior to application of bituminous materials.

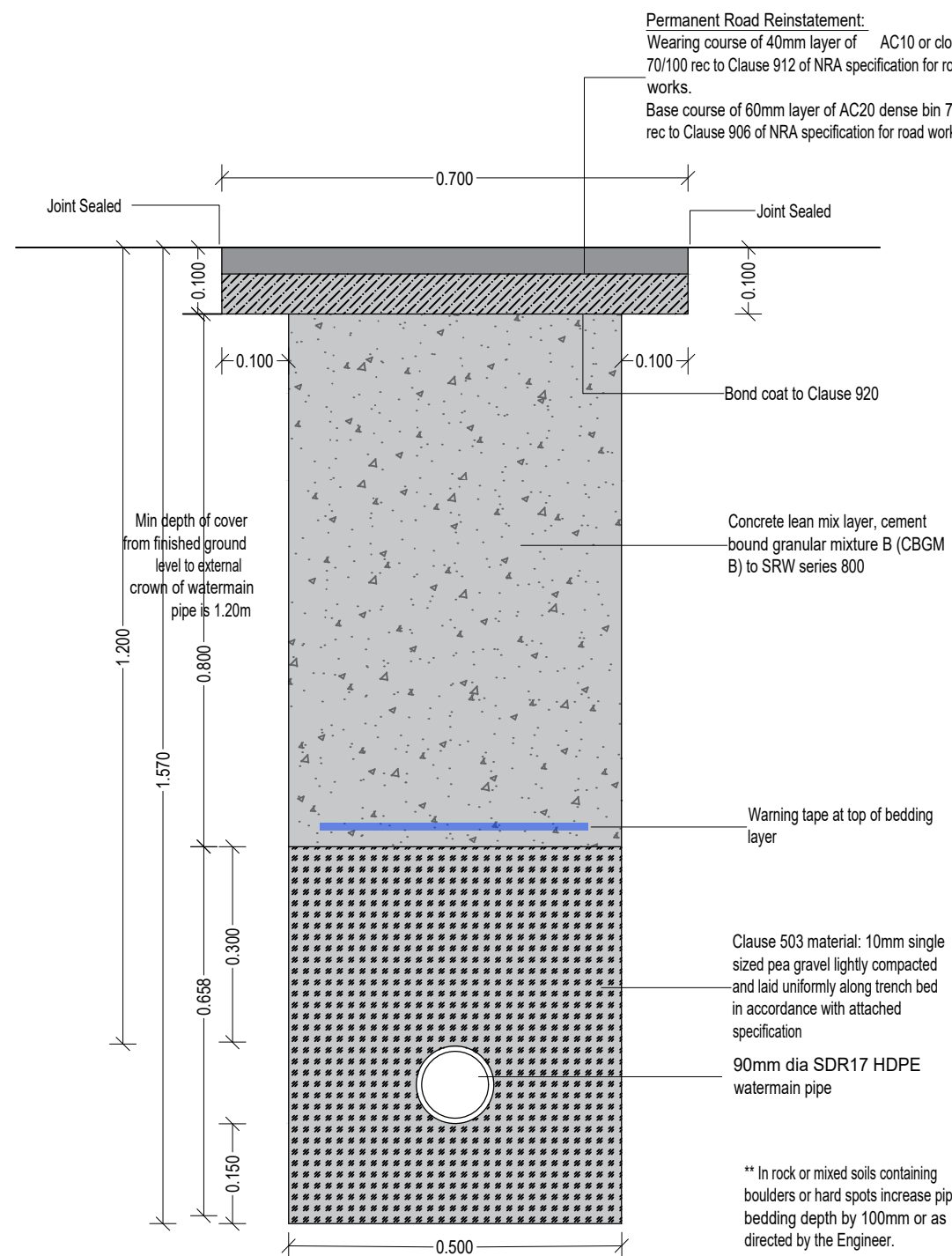
24. Surface course to match existing surface unless otherwise directed by road authority.

25. The coarse aggregate in the asphalt concrete surface course shall have a polished stone value of not less than 60.

26. A minimum depth of cover of 800mm shall be allowed on lightly trafficked areas as directed by the road authority.



Permanent Reinstatement Details
110mm OD Watermain in Public Road (Longitudinal Opening)
Scale 1/10



Permanent Reinstatement Details
90mm OD Watermain in Public Road (Longitudinal Opening)
Scale 1/10

NOTES

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REV.	DESCRIPTION	DATE	BY
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ARCHITECT	RAHEEN GROUP WATER SCHEME
CLIENT	RAHEEN GROUP WATER SCHEME
JOB	PROPOSED NEW WATERMAIN REPLACEMENT & ASSOCIATED WORKS
TITLE	Typical Road Reinstatements
STATUS	TENDER STAGE

Fergal Coughlan
Chartered Engineer

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 Ennis,
 Co. Clare.

Mobile: 087-2696692
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DATE	June 2026	DRG. No.	
DRAWN	FC		
CHECKED			
APPROVED			

F2026/RHGS/011