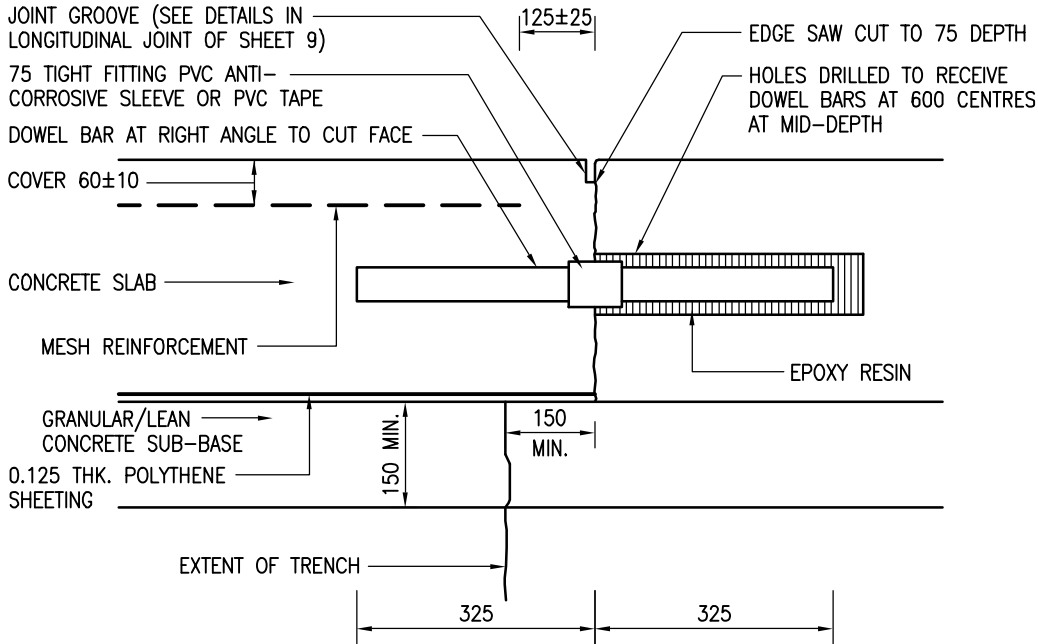


EXISTING CONSTRUCTION

PERMANENT REINSTATEMENT



DETAIL '1'
CONSTRUCTION JOINT
CONCRETE CARRIAGEWAY

NOTES :

1. THESE DRAWINGS ARE BASED ON HyD's STANDARD DRAWINGS NOS. H1107, H1109 AND H1124 TO H1131.
2. ALL DIMENSIONS ARE IN MILLIMETRES.
3. THE SUB-BASE TO BE PUT BACK SHALL BE OF GRANULAR MATERIAL TO GS CL. 9.02 (OR LEAN CONCRETE IF THE EXISTING CONSTRUCTION IS OF THE SAME MATERIAL), AND SHALL BE OF THE SAME THICKNESS AS THE ADJOINING PAVEMENT SUBJECT TO A MINIMUM OF 150mm.
4. THE CONCRETE ROAD SLAB TO BE PUT BACK SHALL BE OF GRADE 40/20D CONCRETE AND SHALL BE OF THE SAME THICKNESS AS THE ADJOINING PAVEMENT.
5. MESH REINFORCEMENT SHALL BE C503 LONG MESH OR OF THE EXISTING TYPE WHICHEVER IS HEAVIER AND SHALL BE LAID WITH THE MAIN BARS PARALLEL TO THE LONGER DIMENSION OF THE REINSTATEMENT AREA.
6. DOWEL BARS SHALL BE MILD STEEL BARS OF DIAMETER 25mm. DOWEL BARS SHALL BE PROVIDED ON ALL SIDES OF THE REINSTATEMENT AREA EXCEPT WHERE IT ABUTS A TRANSVERSE JOINT OR LONGITUDINAL JOINT.
7. ALL TRANSVERSE JOINTS AND LONGITUDINAL JOINTS REMOVED OR DAMAGED BY THE WORKS SHALL BE REINSTATED TO THE SAME TYPE AND ALIGNMENT. FOR DETAILS REFER TO DRAWING NO. WSD 1.2 (SHEET 3 OF 9).
8. THE REINSTATEMENT AREA SHALL BE OF SUFFICIENT WIDTH TO ENABLE DOWEL HOLES TO BE DRILLED SUBJECT TO A MINIMUM OF 900mm.
9. FOR LIMITS OF REINSTATEMENT REFER TO DRAWING NO. WSD 1.2 (SHEET 2 OF 9).
10. EXISTING SLAB TO BE THOROUGHLY MOISTENED WITH WATER BEFORE CONCRETING.

E	GENERAL REVISION & GRADE OF CONCRETE FOR FOOTWAY REVISED	W.K. CHIU	28/4/05
D	RE-FORMATTED TO CSWP	W.K. CHIU	5/9/03
C	GENERAL REVISION & JOINT GROOVE DETAILS REVISED	W.K. CHIU	20/9/00
B	GENERAL REVISION	K.W. CHAN	31/10/96
A	GENERAL REVISION	K.W. CHAN	23/11/93
REF.	REVISION	APPROVED	DATE

Cad Ref. : WSD010201-E.dwg

PERMANENT REINSTATEMENT OF PAVEMENT



水務署
Water Supplies Department

APPROVED

G.C. LEE
AD/NW

DATE

9/6/92

SCALE

N.T.S.

DRAWING NO.

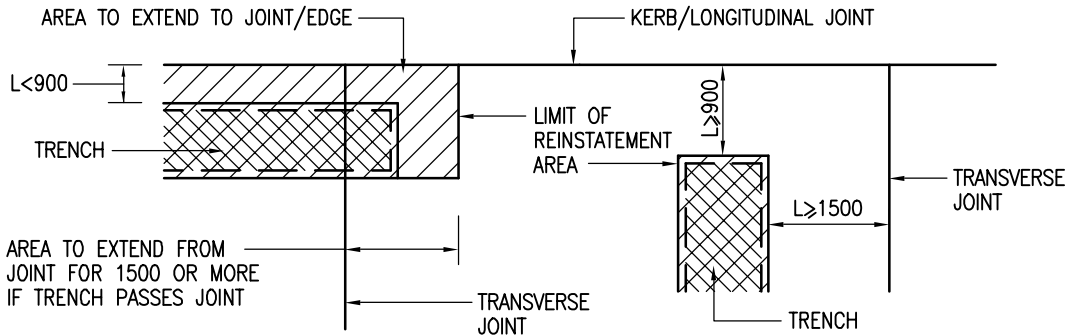
WSD 1.2E
(SHEET 1 OF 9)

CSWP

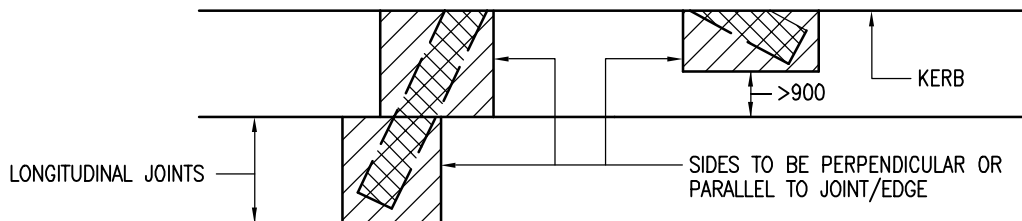
RULES TO DETERMINE THE LIMIT OF REINSTATEMENT IN CONCRETE CARRIAGEWAY

A. CARRIAGEWAY CONSTRUCTED OR RECONSTRUCTED MORE THAN FIVE YEARS AGO

1. ALL TRANSVERSE JOINTS AND LONGITUDINAL JOINTS REMOVED OR DAMAGED BY THE WORKS SHALL BE REINSTATED TO THE SAME TYPE AND ALIGNMENT.
2. THE REINSTATEMENT AREA SHALL BE OF SUFFICIENT WIDTH TO ENABLE DOWEL HOLES TO BE DRILLED SUBJECT TO A MINIMUM OF 900mm.
3. THE REINSTATEMENT AREA SHALL EITHER
 - a) ABUT OR STRADDLE A JOINT/AN EDGE OF THE CONCRETE SLAB; OR
 - b) BE AT A MINIMUM DISTANCE (MEASURED FROM ANY PART OF THE REINSTATEMENT AREA AT RIGHT ANGLE TO THE JOINT/EDGE) OF L MILLIMETRES FROM A JOINT/EDGE.
 FOR TRANSVERSE JOINTS WHICH MAY BE AN EXPANSION JOINT, A CONTRACTION JOINT OR A CONSTRUCTION JOINT, L IS EQUAL TO 1500mm. FOR LONGITUDINAL JOINTS WHICH INCLUDE THE KERB LINE AND CONSTRUCTION JOINTS, L IS EQUAL TO 900mm.

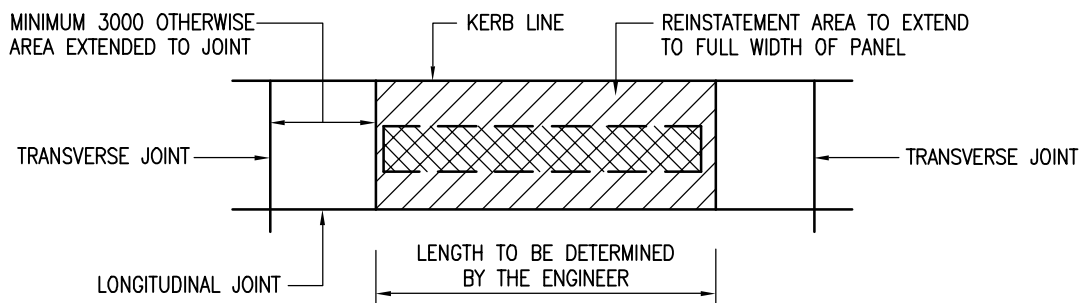


4. THE REINSTATEMENT AREA WITHIN A SLAB PANEL SHALL BE RECTANGULAR IN PLAN WITH THE SIDES EITHER PARALLEL OR PERPENDICULAR TO THE NEAREST EDGE OF THE CONCRETE SLAB WHERE IT IS SITUATED. STEPPED OR L-SHAPED REINSTATEMENT AREA WITHIN A SLAB PANEL IS NOT PERMITTED.



B. CARRIAGEWAY CONSTRUCTED OR RECONSTRUCTED WITHIN THE LAST FIVE YEARS

1. IN ADDITION TO THE RULES A1, A2, A3, AND A4 MENTIONED ABOVE, THE REINSTATEMENT AREA SHALL EXTEND TO THE FULL WIDTH OF THE SLAB PANEL. THE OTHER DIMENSION SHALL BE DETERMINED BY THE ENGINEER TAKING INTO ACCOUNT THE LOCATION OF THE TRENCH WITHIN THE PANEL, DEGREE OF DISRUPTION TO THE SUBGRADE ON THE TWO SIDES OF THE TRENCH, AND ADDITIONAL JOINT LENGTH CREATED. THE ENGINEER MAY REQUIRE THE REINSTATEMENT AREA TO EXTEND TO THE FULL LENGTH OF THE SLAB PANEL.



PERMANENT REINSTATEMENT
OF PAVEMENT



水務署
Water Supplies Department

APPROVED

G.C. LEE
AD/NW

DATE

9/6/92

SCALE

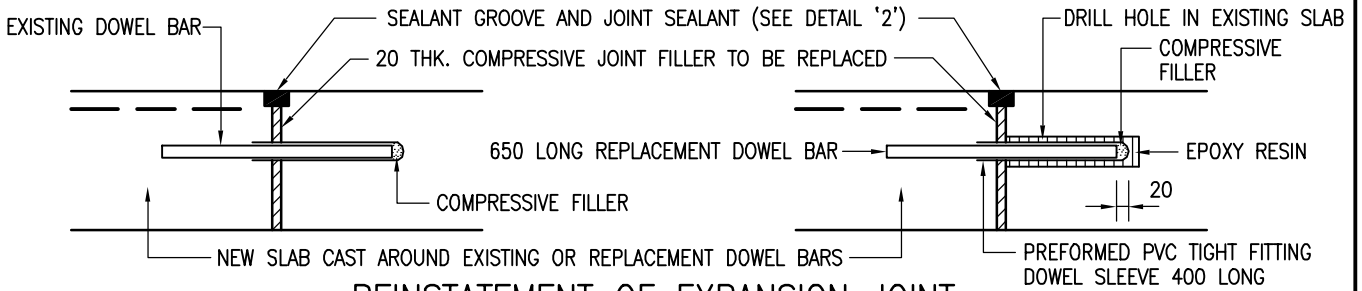
N.T.S.

DRAWING NO.

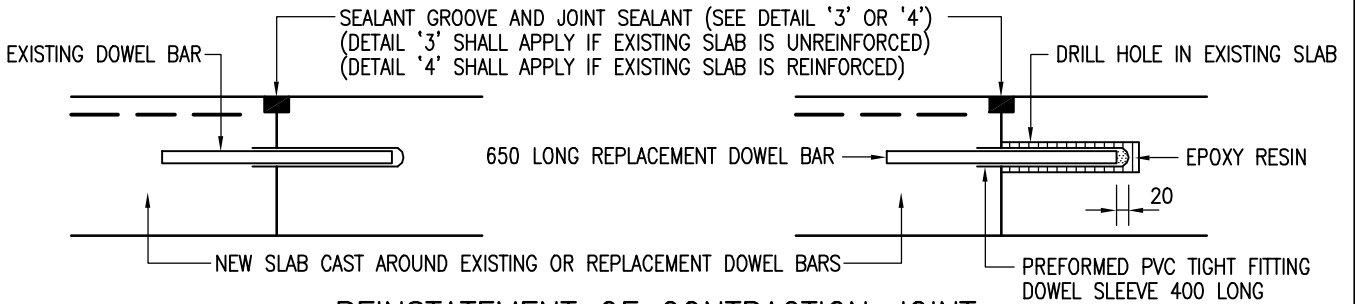
WSD 1.2E

(SHEET 2 OF 9)

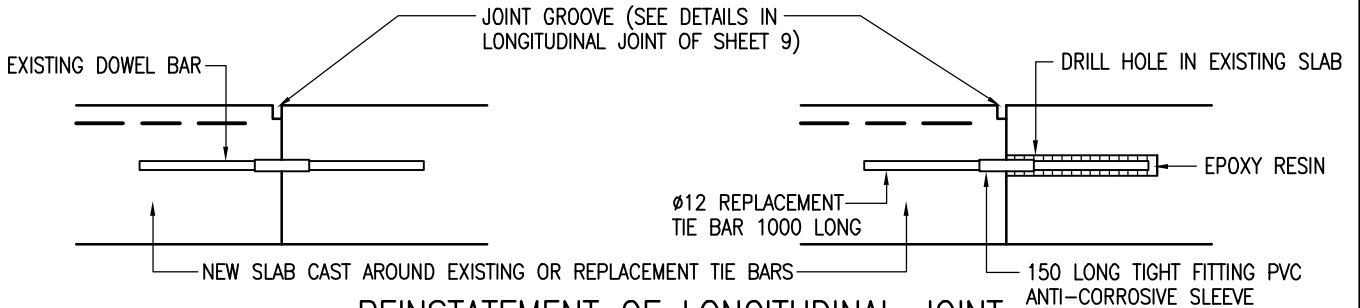
CSWP



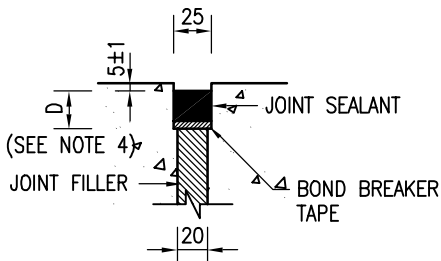
REINSTATEMENT OF EXPANSION JOINT



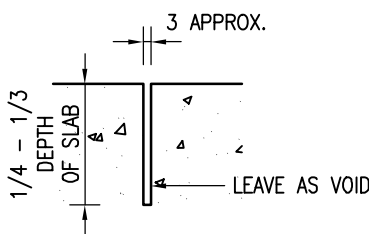
REINSTATEMENT OF CONTRACTION JOINT



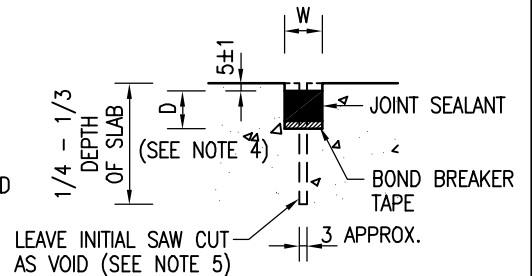
REINSTATEMENT OF LONGITUDINAL JOINT



DETAIL '2'
(EXPANSION JOINT)



DETAIL '3'
(CONTRACTION JOINT FOR UNREINFORCED SLABS)



DETAIL '4'
(CONTRACTION JOINT FOR REINFORCED SLABS)

NOTES :

- DOWEL BARS OR TIE BARS NOT DISPLACED, BENT OR DAMAGED COULD REMAIN BUT THE OLD CONCRETE AROUND THE BARS SHALL BE CAREFULLY REMOVED BEFORE CONCRETING.
- ANY DOWEL BARS OR TIE BARS DISPLACED, BENT OR DAMAGED SHALL BE CUT ALONG THE FACE OF THE JOINT AND REPLACEMENT BARS OF THE SAME DIAMETER INSTALLED AT A DISTANCE OF 75mm FROM THE CUT BAR (CENTRE TO CENTRE MEASUREMENT). REPLACEMENT BARS SHALL BE AT MID-DEPTH AND PARALLEL TO BOTH THE BOTTOM EDGE OF THE SLAB AND THE LONGITUDINAL JOINT/SIDE EDGE OF THE SLAB.
- OLD JOINT SEALANT, GROOVE FORMING STRIP AND JOINT FILLER SHALL BE REMOVED AND REPLACED.
- THE DEPTH 'D' SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR THE JOINT SEALANT.
- INITIAL SAW CUT SHALL BE OMITTED WHEN SLABS ARE NOT CAST THROUGH THE JOINT.

CONCRETE CARRIAGEWAY

JOINT SPACING (m)	WIDTH W (mm)
LESS THAN 10	10
10.1 - 15	20
15.1 - 20	25

Cad Ref. : WSD010203-E.dwg

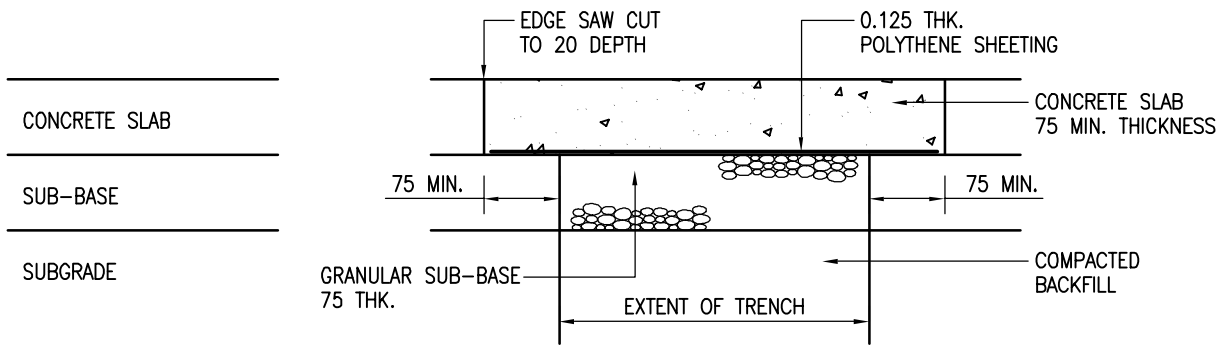
PERMANENT REINSTATEMENT OF PAVEMENT



水務署
Water Supplies Department

APPROVED	G.C. LEE AD/NW
DATE	9/6/92
SCALE	N.T.S.

DRAWING NO.	CSWP
WSD 1.2E (SHEET 3 OF 9)	



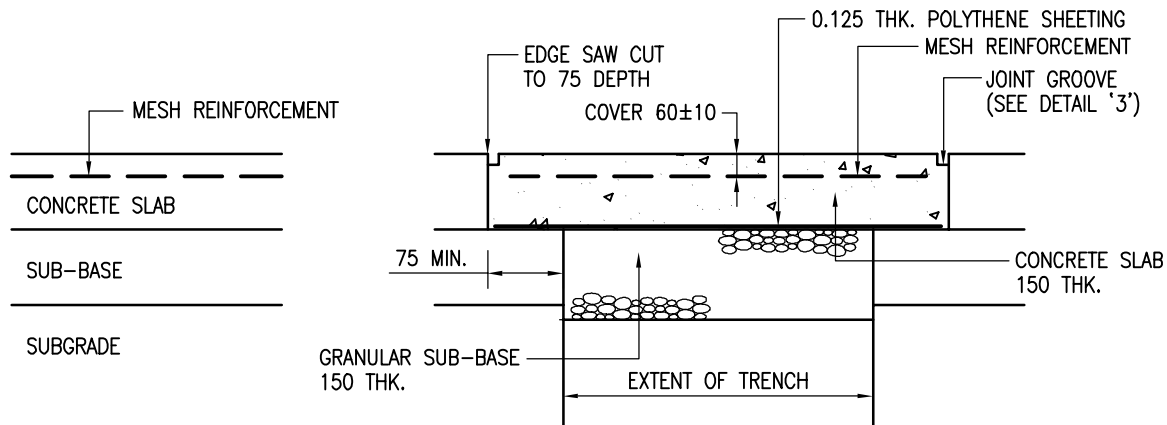
EXISTING CONSTRUCTION

PERMANENT REINSTATEMENT

NOTES :

1. THE SUB-BASE TO BE PUT BACK SHALL BE OF GRANULAR MATERIAL TO GS CL. 9.02 AND SHALL BE OF THE SAME THICKNESS OF THE ADJOINING FOOTWAY SUBJECT TO A MINIMUM OF 75mm.
2. THE CONCRETE SLAB TO BE PUT BACK SHALL BE OF GRADE 30/20D CONCRETE AND SHALL BE OF THE SAME THICKNESS OF THE ADJOINING FOOTWAY SUBJECT TO A MINIMUM OF 75mm.
3. FOR LIMITS OF REINSTATEMENT REFER TO DRAWING NO. WSD 1.2 (SHEET 5 OF 9).

CONCRETE FOOTWAY



EXISTING CONSTRUCTION

PERMANENT REINSTATEMENT

NOTES :

1. THE SUB-BASE TO BE PUT BACK SHALL BE OF GRANULAR MATERIAL TO GS CL. 9.02 AND SHALL BE 150mm THICK.
2. THE CONCRETE SLAB TO BE PUT BACK SHALL BE OF GRADE 40/20D AND SHALL BE 150mm THICK.
3. MESH REINFORCEMENT SHALL BE C283 LONG MESH AND SHALL BE LAID WITH THE MAIN BARS PARALLEL TO THE LONGER DIMENSION OF THE REINSTATEMENT AREA.
4. FOR LIMITS OF REINSTATEMENT REFER TO DRAWING NO. WSD 1.2 (SHEET 5 OF 9).

CONCRETE RUN-IN

PERMANENT REINSTATEMENT
OF PAVEMENT



水務署
Water Supplies Department

APPROVED

G.C. LEE
AD/NW

DATE

9/6/92

SCALE

N.T.S.

DRAWING NO.

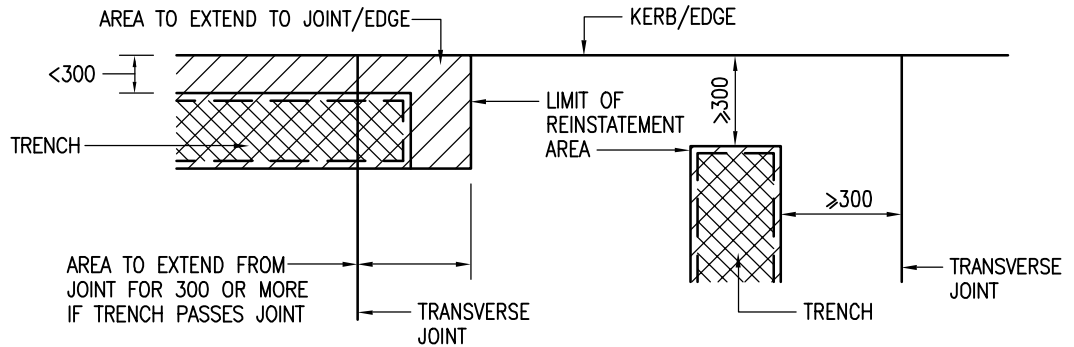
WSD 1.2E
(SHEET 4 OF 9)

CSWP

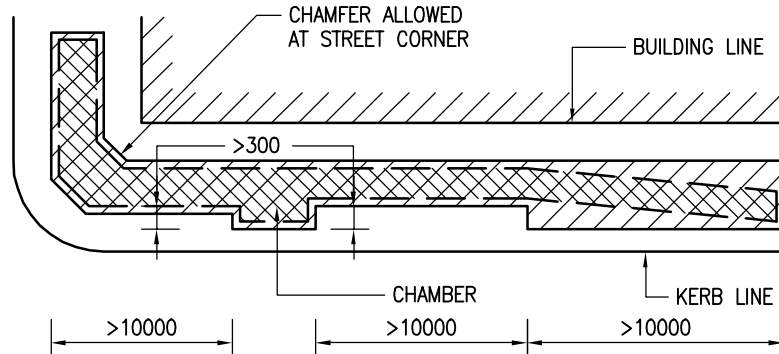
RULES TO DETERMINE THE LIMIT OF REINSTATEMENT IN CONCRETE FOOTWAY OR RUN-IN

A. FOOTWAY OR RUN-IN CONSTRUCTED MORE THAN ONE YEAR AGO

1. THE REINSTATEMENT AREA SHALL BE OF MINIMUM WIDTH 300mm.
2. ALL JOINTS REMOVED OR DAMAGED BY THE WORKS SHALL BE REINSTATED TO THE SAME ALIGNMENT.
3. THE REINSTATEMENT AREA SHALL EITHER
 - a) ABUT OR STRADDLE A JOINT/AN EDGE (THE KERB LINE OR THE BUILDING LINE) OF THE CONCRETE SLAB; OR
 - b) BE AT A MINIMUM DISTANCE (MEASURED FROM ANY PART OF THE REINSTATEMENT AREA AT RIGHT ANGLE TO THE JOINT/EDGE) OF 300mm FROM A JOINT/EDGE.

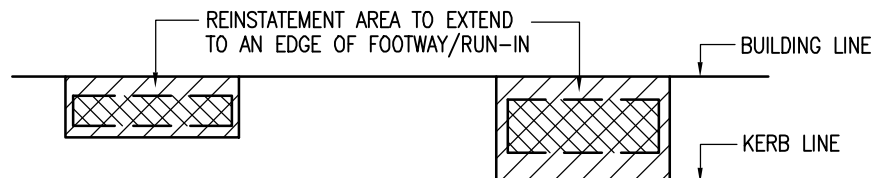


4. THE REINSTATEMENT AREA WITHIN A SLAB PANEL SHALL BE RECTANGULAR IN PLAN WITH THE SIDES EITHER PARALLEL OR PERPENDICULAR TO THE NEAREST EDGE OF THE CONCRETE SLAB WHERE IT IS SITUATED. STEPPED OR L-SHAPED REINSTATEMENT AREA WITHIN A SLAB PANEL OR WITHIN A RUN-IN IS NOT PERMITTED, EXCEPT THAT WHERE A FOOTWAY IS NOT DIVIDED INTO PANELS, STEPPED OR L-SHAPED REINSTATEMENT AREA WILL BE PERMITTED
 - a) IF THE LENGTH OF EACH STEP ALONG THE LENGTH OF THE FOOTWAY IS NOT LESS THAN 10m EXCEPT AT LOCATION OF MANHOLES OR JUNCTION BOXES AND THE LENGTH OF EACH STEP PERPENDICULAR TO THE LENGTH OF THE FOOTWAY IS NOT LESS THAN 300mm; OR
 - b) IF THE TRENCH GOES ROUND STREET CORNERS (IN SUCH CIRCUMSTANCE A CHAMFER AT THE CORNER IS PERMITTED).



B. FOOTWAY OR RUN-IN CONSTRUCTED WITHIN THE LAST ONE YEAR

1. IN ADDITION TO THE RULES A1, A2, A3, AND A4 MENTIONED ABOVE, THE REINSTATEMENT AREA SHALL EXTEND TO THE FULL WIDTH OF THE SLAB PANEL OR FULL WIDTH OF THE RUN-IN. IN CASE THE FOOTWAY IS NOT DIVIDED INTO PANELS ACROSS ITS WIDTH, THE REINSTATEMENT AREA SHALL EXTEND AT LEAST TO AN EDGE (THE KERB LINE OR THE BUILDING LINE) OF THE FOOTWAY. THE OTHER DIMENSIONS SHALL BE DETERMINED BY THE ENGINEER TAKING INTO ACCOUNT THE LOCATION OF THE TRENCH WITHIN THE PANEL, DEGREE OF DISRUPTION TO THE SUBGRADE ON THE TWO SIDES OF THE TRENCH, AND ADDITIONAL JOINT LENGTH CREATED. THE ENGINEER MAY REQUIRE THE REINSTATEMENT AREA TO EXTEND TO THE FULL SIZE OF THE RUN-IN, FULL LENGTH OF THE SLAB PANEL, OR FULL WIDTH OF THE FOOTWAY IF IT IS NOT DIVIDED INTO PANELS ACROSS ITS WIDTH.



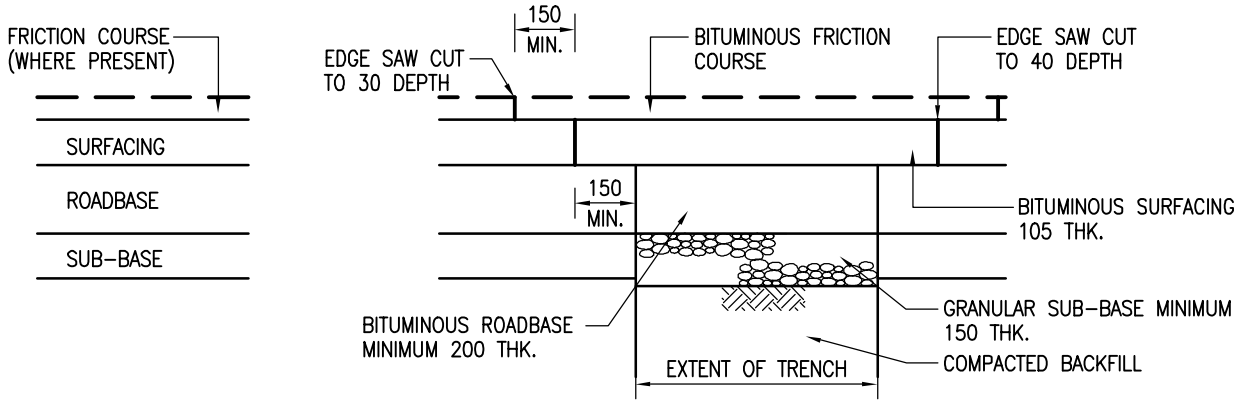
Cad Ref. : WSD010205-E.dwg

PERMANENT REINSTATEMENT OF PAVEMENT



水務署
Water Supplies Department

APPROVED	G.C. LEE AD/NW	DRAWING NO.	CSWP
DATE	9/6/92	WSD 1.2E	
SCALE	N.T.S.	(SHEET 5 OF 9)	



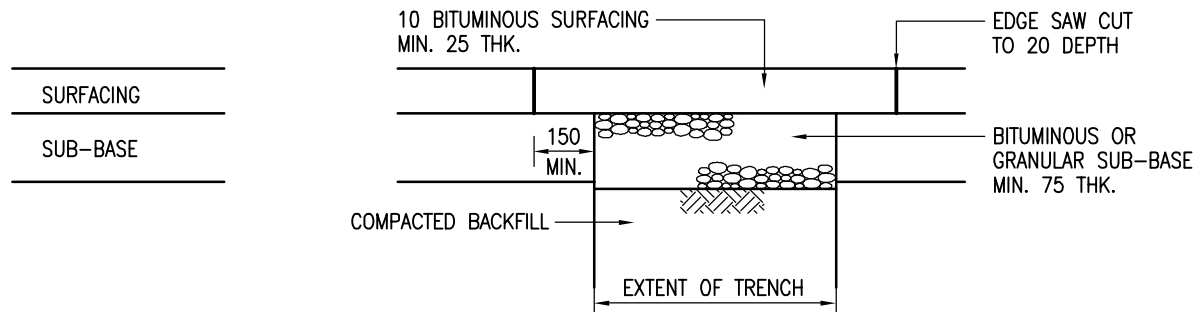
EXISTING CONSTRUCTION

PERMANENT REINSTATEMENT

NOTES :

1. THE SUB-BASE TO BE PUT BACK SHALL BE OF THE SAME THICKNESS AS THE ADJOINING PAVEMENT SUBJECT TO A MINIMUM OF 150mm.
2. THE ROADBASE TO BE PUT BACK SHALL BE OF BITUMINOUS MATERIAL AND OF THE SAME THICKNESS AS THE ADJOINING PAVEMENT SUBJECT TO A MINIMUM OF 200mm.
3. THE BITUMINOUS SURFACING LAYER TO BE PUT BACK SHALL BE 105mm THICK AND SHALL CONSIST OF A 65mm THICK BASE COURSE AND A 40mm THICK WEARING COURSE.
4. FRICTION COURSE IS ABSENT IN MOST URBAN ROADS, BUT WHERE A FRICTION COURSE IS PRESENT, A FRICTION COURSE LAYER OF THE SAME THICKNESS SHALL BE PUT BACK.
5. REFER TO GENERAL SPECIFICATION FOR THE MATERIAL SPECIFICATIONS. IN GENERAL A TYPICAL CONSTRUCTION COULD CONSIST OF
 FRICTION COURSE -10mm NOMINAL SIZE FRICTION COURSE MATERIAL
 WEARING COURSE -10 OR 20mm NOMINAL SIZE WEARING COURSE MATERIAL
 BASE COURSE -28 OR 37.5mm NOMINAL SIZE BASE COURSE MATERIAL
 ROADBASE -37.5mm NOMINAL SIZE ROADBASE MATERIAL
 SUB-BASE -GRANULAR SUB-BASE
6. FOR LIMITS OF REINSTATEMENT REFER TO DRAWING NO. WSD 1.2 (SHEET 7 OF 9).

BITUMINOUS CARRIAGEWAY



EXISTING CONSTRUCTION

PERMANENT REINSTATEMENT

NOTES :

1. THE SUB-BASE TO BE PUT BACK SHALL BE OF EITHER GRANULAR MATERIAL TO GS CL. 9.02 OR BITUMINOUS MATERIAL AND SHALL BE OF THE SAME THICKNESS AS THE ADJOINING FOOTWAY OR CYCLETRACK SUBJECT TO A MINIMUM OF 75mm.
2. THE SURFACING TO BE PUT BACK SHALL BE OF 10mm NOMINAL SIZE WEARING COURSE MATERIAL AND SHALL BE OF THE SAME THICKNESS AS THE ADJOINING FOOTWAY OR CYCLETRACK SUBJECT TO A MINIMUM OF 25mm.
3. FOR LIMITS OF REINSTATEMENT REFER TO DRAWING NO. WSD 1.2 (SHEET 7 OF 9).

BITUMINOUS FOOTWAY AND CYCLETRACK

PERMANENT REINSTATEMENT
OF PAVEMENT



水務署
Water Supplies Department

APPROVED

G.C. LEE
AD/NW

DATE

9/6/92

SCALE

N.T.S.

DRAWING NO.

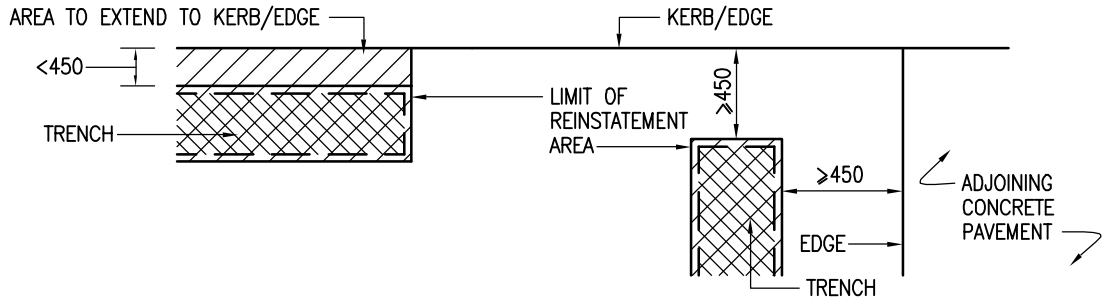
WSD 1.2E
(SHEET 6 OF 9)

CSWP

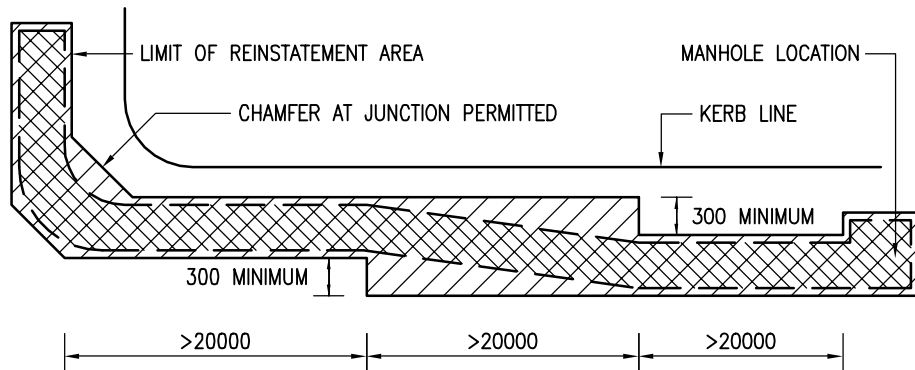
RULES TO DETERMINE THE LIMIT OF REINSTATEMENT IN BITUMINOUS CARRIAGEWAY, FOOTWAY AND CYCLETRACK

A. CARRIAGEWAY CONSTRUCTED MORE THAN 5 YEARS AGO, CARRIAGEWAY RE-SURFACED MORE THAN 1 YEAR AGO AND FOOTWAY OR CYCLETRACK CONSTRUCTED MORE THAN 1 YEAR AGO

1. THE REINSTATEMENT AREA SHALL BE OF SUFFICIENT WIDTH TO ALLOW THE USE OF PROPER COMPACTING EQUIPMENT.
2. THE REINSTATEMENT AREA SHALL EITHER
 - a) ABUT AN EDGE (THE KERB LINE, THE BUILDING LINE OR AN ADJOINING CONCRETE PAVEMENT) OF THE BITUMINOUS PAVEMENT; OR
 - b) BE AT A MINIMUM DISTANCE (MEASURED FROM ANY PART OF THE REINSTATEMENT AREA AT RIGHT ANGLE TO THE EDGE) OF 450mm FROM AN EDGE.

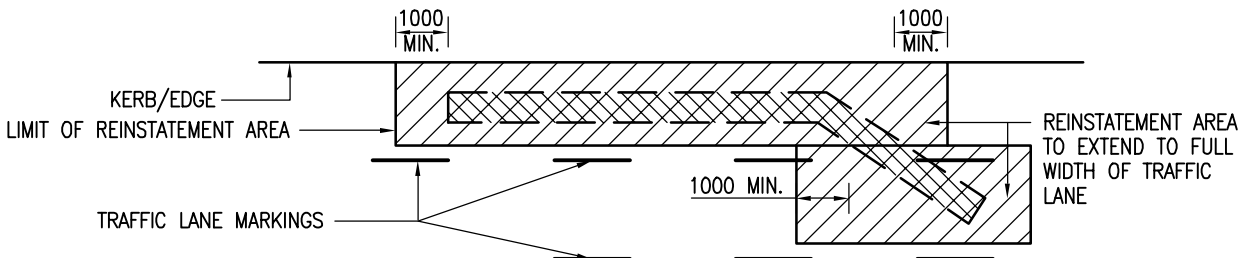


3. THE REINSTATEMENT AREA SHALL BE RECTANGULAR IN PLAN WITH THE SIDES EITHER PARALLEL OR PERPENDICULAR TO THE NEAREST EDGE OF THE BITUMINOUS PAVEMENT. STEPPED OR L-SHAPED REINSTATEMENT AREA IS PERMITTED ONLY IF
 - a) THE REINSTATEMENT AREA RUNS ALONG THE LENGTH OF THE CARRIAGEWAY, FOOTWAY OR CYCLETRACK. IN SUCH CASES
 - THE LENGTH OF EACH STEP ALONG THE LENGTH OF THE CARRIAGEWAY, FOOTWAY OR CYCLETRACK IS NOT LESS THAN 20m EXCEPT AT LOCATION OF MANHOLES OR JUNCTION BOXES;
 - THE LENGTH OF EACH STEP PERPENDICULAR TO THE LENGTH OF THE CARRIAGEWAY, FOOTWAY OR CYCLETRACK IS NOT LESS THAN 300mm; OR
 - b) THE TRENCH GOES ROUND A ROAD JUNCTION, IN SUCH CASES A CHAMFER AT THE CORNER IS PERMITTED.



B. CARRIAGEWAY CONSTRUCTED WITHIN THE LAST 5 YEARS, CARRIAGEWAY RE-SURFACED WITHIN THE LAST 1 YEAR AND FOOTWAY OR CYCLETRACK CONSTRUCTED WITHIN THE LAST 1 YEAR

1. IN ADDITION TO THE RULES A1, A2 AND A3 MENTIONED ABOVE, THE REINSTATEMENT AREA SHALL EXTEND TO THE FULL WIDTH OF THE TRAFFIC LANE(S) IN WHICH THE TRENCH IS SITUATED. ANY EXTENSION OF THE REINSTATEMENT AREA BEYOND THE MINIMUM LIMIT CAN BE DONE BY COLD MILLING AND RESURFACING THE WEARING COURSE WITHIN THE EXTENDED AREA.



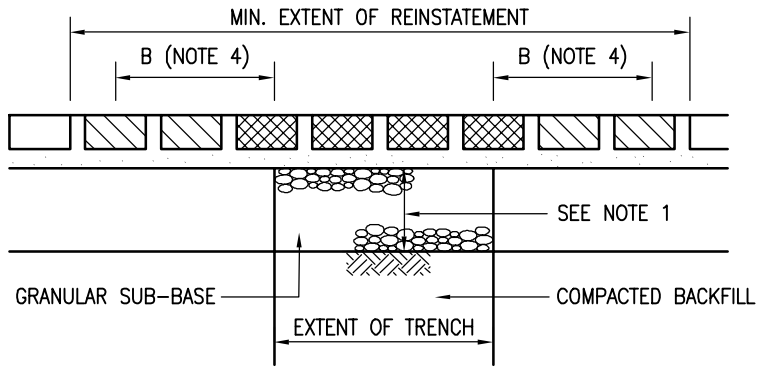
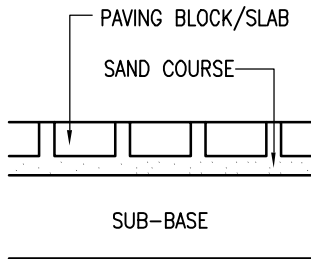
Cad Ref. : WSD010207-E.dwg

PERMANENT REINSTATEMENT OF PAVEMENT



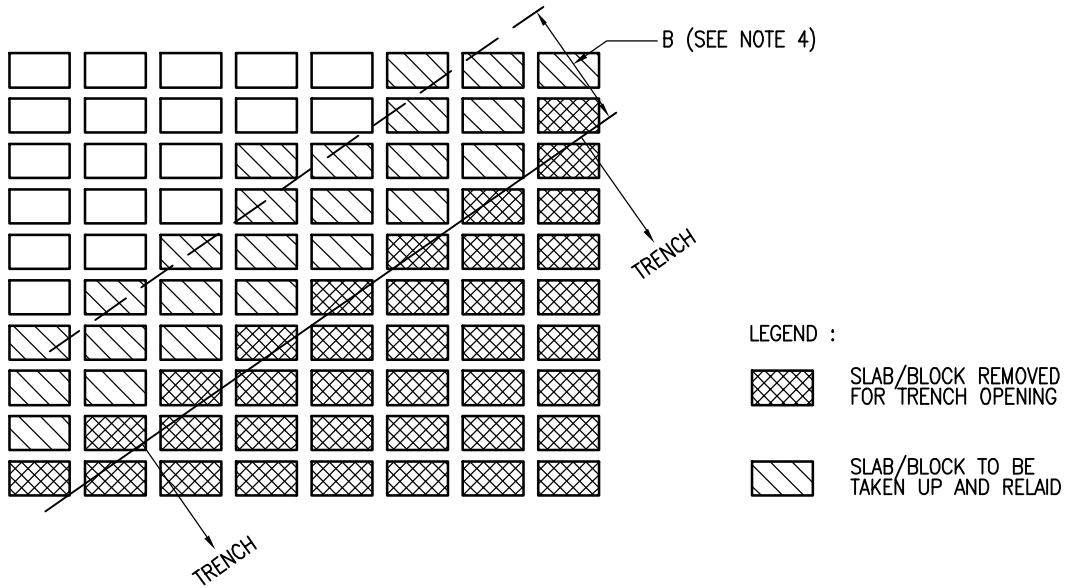
水務署
Water Supplies Department

APPROVED	G.C. LEE AD/NW	DRAWING NO.	CSWP
DATE	9/6/92	WSD 1.2E (SHEET 7 OF 9)	
SCALE	N.T.S.		



EXISTING CONSTRUCTION

PERMANENT REINSTATEMENT



PLAN
PAVING SLAB/BLOCK CONSTRUCTION

NOTES :

1. THE SUB-BASE TO BE PUT BACK SHALL BE OF GRANULAR MATERIAL TO GS CL. 9.02 AND SHALL BE OF THE SAME THICKNESS AS THE ADJOINING PAVEMENT SUBJECT TO A MINIMUM OF 75mm IN FOOTWAY AND 150mm IN RUN-IN AND CARRIAGEWAY.
2. THE SAND COURSE TO BE PUT BACK SHALL EXCEED 20mm AND NOT EXCEED 30mm THICK.
3. THE PAVING SLABS/BLOCKS TO BE PUT BACK SHALL BE OF THE SAME THICKNESS AS THE ADJOINING PAVEMENT SUBJECT TO A MINIMUM OF 60mm IN FOOTWAY AND 80mm IN CARRIAGEWAY OR RUN-IN.
4. ALL PAVING SLABS/BLOCKS WITHIN A DISTANCE OF B MILLIMETRES FROM THE SIDE OF A TRENCH OR DISTURBED AS A RESULT OF THE TRENCH WORKS SHALL BE TAKEN UP AND RELAID TOGETHER WITH THE OTHER SLABS/BLOCKS REMOVED FOR THE TRENCHING WORK. B SHALL BE AT LEAST 300mm OR TWICE THE LARGEST LATERAL DIMENSION OF THE PAVING SLABS/BLOCKS USED IN THE PAVING PATTERN (THE PATTERN MAY INVOLVE SLABS/BLOCKS OF A FEW DIFFERENT SIZES), WHICHEVER IS THE GREATER. IF NECESSARY, FURTHER SLABS/BLOCKS SHOULD BE LIFTED AND REINSTATED.
5. THE PAVING SLABS/BLOCKS SHALL BE RELAID ACCORDING TO THE ORIGINAL PATTERN. ANY SLABS/BLOCKS DAMAGED OR LOST SHALL BE REPLACED.

Cad Ref. : WSD010208-E.dwg

PERMANENT REINSTATEMENT
OF PAVEMENT



水務署
Water Supplies Department

APPROVED

G.C. LEE
AD/NW

DATE

9/6/92

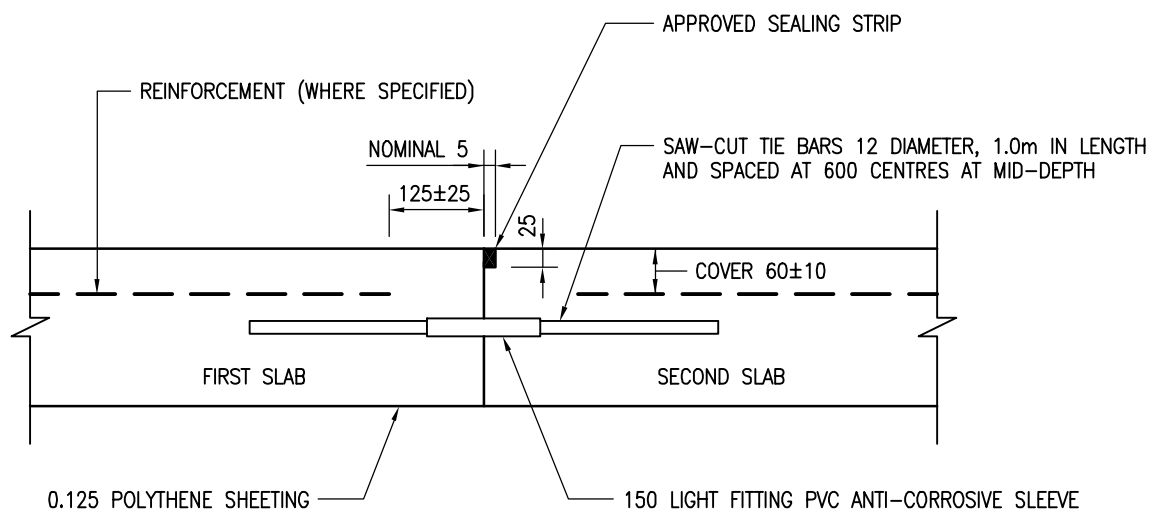
SCALE

N.T.S.

DRAWING NO.

WSD 1.2E
(SHEET 8 OF 9)

CSWP



LONGITUDINAL JOINT IN CONCRETE CARRIAGEWAY

Cad Ref. : WSD010209-E.dwg

PERMANENT REINSTATEMENT
OF PAVEMENT



水務署
Water Supplies Department

APPROVED	G.C. LEE AD/NW	DRAWING NO.	CSWP WSD 1.2E (SHEET 9 OF 9)
DATE	9/6/92		
SCALE	N.T.S.		