PENNANT HILLS TO EPPING CYCLEWAY **SECTION B - BEECROFT VILLAGE GREEN TO** THE CRESCENT (CH220.000 TO CH345.000)

ISSUE

NOT TO SCALE

LEGEND

EXISTING KERB & GUTTER EXISTING EDGE OF BITUMEN. EXISTING FENCE. PROPOSED NEW FENCE. EXISTING CONCRETE PATH EDGE EXISTING STORMWATER PIPE EXISTING POWER POLE. EXISTING TREE / TREE TO BE REMOVED. SURVEY TRAVERSE STATION. SSM12345 RL123.456 STATE SURVEY MARK. SURVEY REFERENCE MARKS - DRILL HOLE & WING/GALVANISED IRON PIPE. EXISTING SEWER MANHOLE. EXISTING FIRE HYDRANT EXISTING WATER STOP VALVE.

EXISTING U/G TELSTRA CABLES.	
EXISTING U/G GAS MAIN.	

EXISTING TELSTRA PIT. EXISTING SEWER MAIN.

EXISTING U/G ELECTRICAL CABLES.

EXISTING OVERHEAD ELECTRICAL CABLES.

EXISTING WATER MAIN.

EXTENT OF NEW PAVEMENT CONSTRUCTION (REFER TO COUNCIL DWG No.432.6 FOR DETAILS)

EXTENT OF DRIVEWAY RECONSTRUCTION REINSTATED WITH EXISTING OR MATCHING MATERIALS UNLESS NOTED

EXTENT OF NEW FOOTPATH CONSTRUCTION. ALL PATHS N25 CONCRETE (REFER TO SHEET No.3 FOR DETAILS).

EXTENT OF EXISTING FIBRE REINFORCED PLASTIC GRATING.

(133)

TREE LABELS (REFER TO HSC DWG No.432.5 FOR DETAILS)

S. COMISH

S. COMISH

LANDPARTNERS

Hornsby Shire Council Design & Construction
Branch
ELEPHONE: (02) 9847 6666

resign a consu	uctioi
Branch	
ELEPHONE: (02) 9847 6666 MAIL: hsc@hornsby.nsw.gov.au	
rised for release - Manager Design & Construction	
. M. DRAKE Signed:	Date:

NO.		
1	DRAWING SCHEDULE, LOCALITY PLAN & LEGEND.	1
2	PROJECT NOTES.	1
3	TYPICAL CROSS SECTION & PATH JOINT DETAILS.	1
4	CONTROL LINE 1 SETOUT PLAN & DETAILS.	1
5	GENERAL WORKS & SERVICES PLAN.	1
6	CL1 CROSS SECTIONS - CH230.000 TO CH290.923	1
7	CL1 CROSS SECTIONS - CH295.000 TO CH355.000 & BOLLARD DETAILS.	1
8	RETAINING WALL PLAN & DEVELOPED ELEVATION.	1
9	RETAINING WALL SECTIONS & JOINTING DETAILS.	1
10	RETAINING WALL JOINT DETAILS & NOTES.	1
	NOTE: THESE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH HSC DRAWING No.432.5. (COMPLETE SET OF CIVIL DESIGN DRAWINGS FOR SECTION B).	

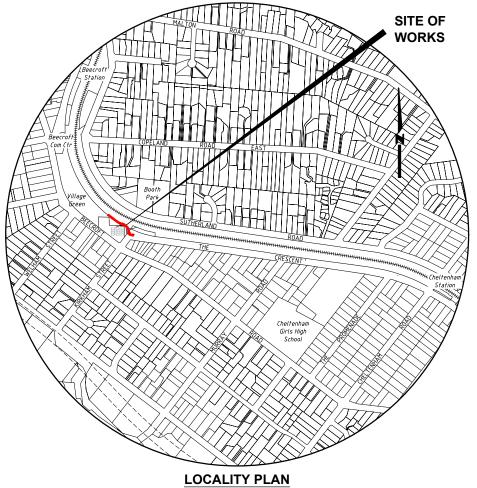
DRAWING SCHEDULE

TITLE

SHEET

NA GDA94

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NOT TO SCALE

TREE PROVENANCE LEGEND

- LOCAL INDIGENOUS
- OTHER INDIGENOUS
- EXOTIC INTRODUCED
- INVASIVE WEED SPECIES

PENNANT HILLS TO EPPING CYCLEWAY -**SECTION B - BEECROFT VILLAGE GREEN TO** THE CRESCENT (CH220.000 TO CH345.000)

BRANCH				
Senior Asset Engineer				
Name: A. BOYD Telephone: 984	7 6672			
Accepted as complying with the general intent of the de	sign brief			
Signed: Date:				
Project Number				
100345				
Sheet of	Issue			
4 40	4			

ASSET MANAGEMENT

DRAWING SCHEDULE, LOCALITY PLAN & LEGEND

432.8

GENERAL NOTES:

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS & SPECIFICATIONS OF HORNSBY SHIRE COUNCIL.
- 2. LEVELS SHALL BE OBTAINED FROM ESTABLISHED BENCH MARKS & NOT FROM SURVEY PEGS.
- 3. PROVIDE TRAFFIC MANAGEMENT, LINE MARKING & SIGNAGE IN ACCORDANCE WITH THE TFNSW "TRAFFIC CONTROL AT WORK SITES" TECHNICAL MANUAL & AS1742.3 REQUIREMENTS.
- 4. SERVICES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM INFORMATION SUPPLIED FROM THE RELEVANT AUTHORITIES VIA A "DIAL BEFORE YOU DIG AUSTRALIA" ENQUIRY. THE LOCATION OF SERVICES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED AS ACCURATELY AS POSSIBLE FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES & FIELD INVESTIGATIONS & ARE TO BE VERIFIED PRIOR TO CONSTRUCTION
- EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH THE LANDCOM PUBLICATION: "MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION" Vol. 1, 4th EDITION.
- ALL DISTURBED AREAS OF THE SITE ARE TO BE REINSTATED WITH EXISTING OR MATCHING MATERIALS UNLESS NOTED OTHERWISE AT THE COMPLETION OF THE WORKS.
- WHERE WORKS ARE ADJACENT TO EXISTING STRUCTURES UNDERTAKE A DILAPIDATION SURVEY OF EXISTING ADJACENT STRUCTURES BEFORE COMMENCEMENT OF ANY WORKS.
- IF SET-OUT IS REQUIRED BY HORNSBY SHIRE COUNCIL DESIGN & CONSTRUCTION BRANCH SURVEYOR. NOTIFY ENGINEERING SURVEYOR A MINIMUM OF 24 HOURS IN ADVANCE.
- WHERE PAVEMENT RESURFACING IS UNDERTAKEN ENSURE ALL BLUE HYDRANT MARKER RRPM'S ARE REINSTATED AT THE COMPLETION OF WORKS.
- REFER TO DENNIS MARSDEN OF THE SUGAR FACTORY ABORIST'S REPORT DATED 18th SEPTEMBER 2018 FOR DETAILED TREE LISTING & HEALTH OF EXISTING VEGETATION. TRIM DOCUMENT # D08271286.

ACCESS & SAFETY NOTES:

- THE CONSTRUCTOR SHALL COMPLY WITH ALL STATUTORY & INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
- THE CONSTRUCTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON & APPROVED BY COUNCIL/REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.
- THE CONSTRUCTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS/RESIDENCES ADJACENT TO THE WORKS IS NOT DISRUPTED.
- 4. WHERE NECESSARY THE CONSTRUCTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE.
- 5. THE CONSTRUCTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCIL DEGLINORMENTS.

SIGNS & LINE MARKING NOTES:

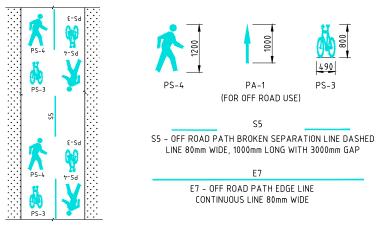
Hornsby Shire Council

Design & Construction

Branch

M DRAKE

- . SIGNS & LINE MARKING TO BE INSTALLED IN ACCORDANCE WITH AS1742.9 -MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PART 9 BICYCLE FACILITIES, PART 2 TRAFFIC CONTROL DEVICES FOR GENERAL USE & THE REQUIREMENTS OF THE RTA NSW BICYCLE GUIDELINES MANUAL.
- 2. WHERE POSSIBLE EXISTING SIGNAGE IS TO BE CLEANED / RELOCATED OR REUSED TO SUIT NEW WORK.
- 3. ALL NEW LINE MARKING TO WHITE THERMOPLASTIC PAINT UNLESS NOTED OTHERWISE.
- 4. LINE MARKING SHALL BE SPOTTED OUT & APPROVED PRIOR TO APPLICATION.



SHARED PATH PAVEMENT SYMBOL DETAILS

S. COMISH

LANDPARTNERS

(INSTALLED AT START& END OF PATH, & AT APPROX. 90m INTERVALS)

NA AHD

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TREE PROTECTION MEASURES:

ALL WORKS WITHIN THE TREE ROOT ZONE OF ANY TREE/S TO BE RETAINED SHOULD NOT REDUCE THE
USEFUL LIFE EXPECTANCY OF THE TREE/S & BE CARRIED OUT UNDER THE SUPERVISION OF AN 'AQF LEVEL 5
ARBORIST'

TREE ROOT PROTECTION ZONES (TPZ)
TREE SIZE
TREES WITH A DIAMETER AT BREAST HEIGHT GREATER THAN 800mm
TREES WITH A DIAMETER AT BREAST HEIGHT BETWEEN 400mm & 800mm
7m
TREES WITH A DIAMETER AT BREAST HEIGHT LESS THAN 400mm
4m

SOIL LEVELS WITHIN THE TREE ROOT ZONE OF TREES TO BE RETAINED SHOULD REMAIN AT EXISTING GRADE & UNDISTURBED

EXCAVATION WITHIN THE TREE PROTECTION ZONE OF TREES TO BE RETAINED SHOULD BE CARRIED OUT BY HAND EXCAVATION ONLY. HAND EXCAVATION SHOULD BE CARRIED OUT UNDER THE SUPERVISION OF A QUALIFIED ARBORIST IN SUCH A MANNER THAT IS NON-INJURIOUS TO ANY ROOTS REVEALED.

NO TREE ROOT GREATER THAN 30mm DIAMETER LOCATED WITHIN THE TPZ OF ANY TREE TO BE RETAINED SHOULD BE SEVERED OR INJURED IN THE PROCESS OF ANY WORKS.

TREE ROOTS LESS THAN 30mm IN DIAMETER REQUIRED TO BE SEVERED SHALL BE CUT CLEANLY BY HAND BY A QUALIFIED & EXPERIENCED ARBORIST OR HORTICULTURIST WITH MINIMUM QUALIFICATIONS OF HORTICULTURAL CERTIFICATE OR TREE SURGERY CERTIFICATE (AQF 3).

- ALL PRUNING SHALL BE UNDERTAKEN AS SPECIFIED IN THE AUSTRALIAN STANDARD 'PRUNING OF AMENITY TREES' (AS 4373-2009).
- 3. THE FILLING OR STOCKPILING OF BUILDING MATERIALS, PARKING OF VEHICLES OR PLANT, THE USE OF MACHINERY OTHER THAN HAND HELD, DISPOSAL OF CEMENT SLURRY, WASTE WATER OR OTHER CONTAINMENTS MUST REMAIN OUTSIDE THE TREE ROOT ZONE OF ANY TREE TO BE RETAINED.
- ANY MECHANICAL DAMAGE TO TREES OR CHEMICAL SPILLS WITHIN THE TRZ MUST BE REPORTED TO THE PROJECT SUPERVISOR/MANAGER
- BARRIER MESH FENCING SHALL BE ERECTED AROUND RETAINED TREES WITHIN THE VILLAGE GREEN TO ENSURE THEY ARE PROTECTED FROM MACHINERY MISTAKENLY TRAVERSING BETWEEN TREES, THIS CAN BE IDENTIFIED/ DIRECTED BY PROJECT ARBORIST.

SEDIMENT & EROSION CONTROL NOTES:

- NO WORK SHALL BE UNDERTAKEN UNTIL ALL SEDIMENT & EROSION CONTROL MEASURES ARE IN PLACE & HAVE BEEN APPROVED BY THE CONSTRUCTION ENGINEER.
- 2. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED BY THE SITE SUPERVISOR ON A DAILY BASIS & SIGNED OFF ON THE BACK OF THE DAY SHEET. A CHECKLIST SHALL BE HANDED OVER TO THE PROJECT MANAGER AT THE END OF EACH DAY. STRUCTURES WILL ALSO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE & ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE. THE CONSTRUCTION ENGINEER MUST INFORM ALL CONTRACTORS & SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION CONTROL PLAN.
- SELECTIVE CLEARING OF VEGETATION TO BE RESTRICTED TO NOMINATED AREAS WITH CLEARED VEGETATION WINDROWED ON THE CONTOUR.
- 4. TREES NEAR THE CONSTRUCTION ZONE NOT OTHERWISE PROTECTED BY FENCING SHALL BE PROTECTED IN ACCORDANCE WITH AS4970 SECTION 4.5. ALTERNATIVE PROTECTION MEASURES SATISFYING THE PROJECTS ARBORIST'S REQUIREMENTS IS ACCEPTABLE. TRUNK PROTECTION SHOULD BE MAINTAINED INTACT UNTIL THE COMPLETION OF ALL WORK ON THE SITE. ALL TREES REQUIRING REMOVAL ARE SHOWN ON THIS PLAN & SHALL BE MARKED ACCORDINGLY PRIOR TO REMOVAL.
- 5. TOPSOIL FROM AREAS THAT WILL BE DISTURBED TO BE STRIPPED & STOCKPILED AT THE NOMINATED SITE.
- 6. A MINIMUM STOCK OF THE FOLLOWING SHALL BE KEPT ON SITE AT ALL TIMES:
- (A) 50m ROLL OF SEDIMENT FENCE & PEGS.
- (B) 50m ROLL OF BIDIM GEOTEXTILE
- . ANY DISTURBED AREA OF LAND SHALL BE COMPACTED AT THE END OF EACH WORKING DAY & BEFORE ANY STORM EVENT.
- B. CONSTRUCTION AREA IS TO BE LIMITED AS SHOWN TO MINIMISE DISTURBANCE.
- 9. SEDIMENT FENCING SHALL BE PLACED AROUND ANY STOCKPILE AREA.
- ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH THE LANDCOM PUBLICATION: "MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION" Vol. 1, 4th EDITION.
- 11. ALL DISTURBED AREAS SHALL BE TURFED WITHIN 14 DAYS OF FINAL TRIMMING

SUBSOIL DRAINAGE NOTES:

ISSUED FOR CONSTRUCTION

 SUBSOIL DRAINAGE TO BE INSTALLED AS DIRECTED BY SUPERVISING CONSTRUCTION ENGINEER.

CONCRETE NOTES

(USING STEEL REINFORCED CONCRETE U.N.O.)

- MATERIALS AND CONSTRUCTION: TO AS 3600, AS 3610. STEEL REINFORCEMENT MATERIALS: TO AS 4671.
- 2. CONCRETE QUALITY: TO AS 1379
 READY MIX CONCRETE: TO AS 1379
 - a) DO NOT USE ADMIXTURES WITHOUT WRITTEN APPROVAL FROM SUPERVISING
 - ENGINEER.
 - b) CEMENT: TYPE 'GP' OR 'GB' TO AS 3972. c) MAXIMUM SIZE OF COARSE AGGREGATE: 20mm
 - d) CONCRETE SLUMP: 80mm U.N.O.

ELEMENT	CHARACTERISTIC CONCRETE STRENGTH(f'c) AT 28 DAYS	REINFORCEMENT	COVER (mm)	SPECIAL REQUIREMENTS
SHARED PATH	N25 (U.N.O.)	SL82	35	BROOM FINISH & BORAL INDIAN INK OR EQUIVALENT COLOUR.

REFER TO SHEET No.10 FOR RETAINING WALL FOOTING DETAILS.

- 3. VERIFY STRENGTH BY PRODUCTION CONTROL TESTING TO AS 1379.
- NO UNSPECIFIED HOLES, DUCTING OR CHASES ARE PERMITTED WITHOUT WRITTEN APPROVAL FROM SUPERINTENDENT (SUPERVISING OFFICER). NO PIPES OR CONDUITS ARE PERMITTED WITHIN CONCRETE COVER.
- 5. STRUCTURAL DIMENSIONS DO NOT INCLUDE TOPPINGS OR FINISHES
- FORM CONSTRUCTION JOINTS ONLY AT LOCATIONS SHOWN ON DRAWINGS. DO NOT VARY WITHOUT WRITTEN APPROVAL FROM SUPERVISING ENGINEER.
- 7. PREPARE COLD JOINTS BY LIGHT SCABBLING, REMOVAL OF DEBRIS & WASHING WITH CLEAN WATER.
- FOUNDATION MATERIALS MUST BE CAPABLE OF WITHSTANDING A SAFE BEARING PRESSURE OF 100kPa.
 VERIFY & RECORD THE BEARING CAPACITY BEFORE ANY CONCRETE IS PLACED.
- DO NOT PLACE CONCRETE UNTIL REINFORCEMENT (IF USED) & FORMWORK ARE INSPECTED BY SUPERVISING ENGINEER.
- 10. THOROUGHLY CLEAN OUT ALL FORMWORK PRIOR TO POURING.
- 1. DO NOT PLACE CONCRETE UNDER THE FOLLOWING CONDITIONS:
- a) WHEN THE SURROUNDING OUTDOOR TEMPERATURE EXCEEDS 30°C.
- b) WHEN THE SURROUNDING WIND SPEED EXCEEDS 12 KNOTS.
- 12. IMPLEMENT THE FOLLOWING PROCEDURES TO MITIGATE PREMATURE DRYING & CRACKING OF THE CONCRETE:
- in hot conditions, program concrete placement for the cooler part of the day (ie Early Morning).
- b) SPRAY EVAPORATIVE RETARDERS WITH FUGATIVE DYES (eg. ALIPHATIC ALCOHOL) OVER THE SURFACE IMMEDIATELY AFTER SCREEDING & WHILST BLEED WATER IS STILL PRESENT. REAPPLY IF THE SURFACE IS DISTURBED.
- c) COMMENCE CURING IMMEDIATELY AFTER FINISHING. CURE FOR 7 DAYS.
- 3. VIBRATE CONCRETE DURING PLACEMENT TO GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION.
- 14. SURFACE FINISH REFER TO DRAWINGS FOR DETAILS
- 5. COMMENCE CURING OF ALL CONCRETE SURFACES IMMEDIATELY ON FINISHING & CONTINUE FOR 7 DAYS MIN.
- 6. EXPANSION JOINTS & ISOLATION JOINTS ARE TO BE SEALED TO MANUFACTURER'S SPECIFICATIONS WITH A GUN GRADE POLYURETHANE LOW MODULUS SELF PRIMING SEALANT EQUAL TO 'TREMCO DYMONIC NT' (+100%, -50% MOVEMENT CAPACITY). SEALANT COLOUR GREY OR EQUIVALENT.

SEDIMENTATION FENCING NOTES:

- SEDIMENT FENCE TO BE CONSTRUCTED BY STRETCHING A FILTER FABRIC APPROVED BY THE PROJECT MANAGER BETWEEN POSTS AT 3.0m CENTRES. FABRIC TO BE BURIED A MINIMUM OF 150mm ALONG IT'S LOWER EDGE.
- 2. SEDIMENT FENCE IS TO BE INSTALLED & APPROVED BY THE PROJECT MANAGER BEFORE OVERBURDEN IS REMOVED. THIS FENCE MAY REQUIRE REPLACEMENT AT TIMES IF LOCATED WITHIN OR NEARBY CONSTRUCTION ZONES.
- 3. CLEAN BEHIND FENCE AFTER EACH MAJOR STORM OR OTHERWISE AS DIRECTED & REMOVE ALL SILT FROM THE SITE. SITE DISPOSAL WILL ONLY BE APPROVED WHERE IT CAN BE ESTABLISHED THAT NO FURTHER EROSION OF THE MATERIAL CAN OCCUR.

ABORIGINAL ARTIFACT NOTES:

1. AN AHIMS WEB SEARCH HAS BEEN UNDERTAKEN FOR THIS PROJECT (REF: 625247). INCLUDING AN EXTENSIVE SEARCH & IDENTIFIED A SITE ID: 45-6-3082 LOCATED AT THE INTERSECTION OF THE CRESCENT & THE PROMENADE. A DETAILED PHYSICAL SEARCH WAS UNDERTAKEN BY AWABAKAI & GURIHAGI PTY LTD ON THE 11 OCTOBER 2021 & IN THERE VIEW NO ARTIFACT IS PRESENT & WORKS CAN BE UNDERTAKEN. SHOULD ANY POTENTIAL ARTIFACTS BE UNCOVERED THEY ARE NOT TO BE REMOVED FROM THE SITE & SHALL BE IMMEDIATELY REPORTED TO COUNCIL'S PROJECT MANAGER.

PENNANT HILLS TO EPPING CYCLEWAY -SECTION B - BEECROFT VILLAGE GREEN TO THE CRESCENT (CH220.000 TO CH345.000)

RNSBY PROJECT NOTES

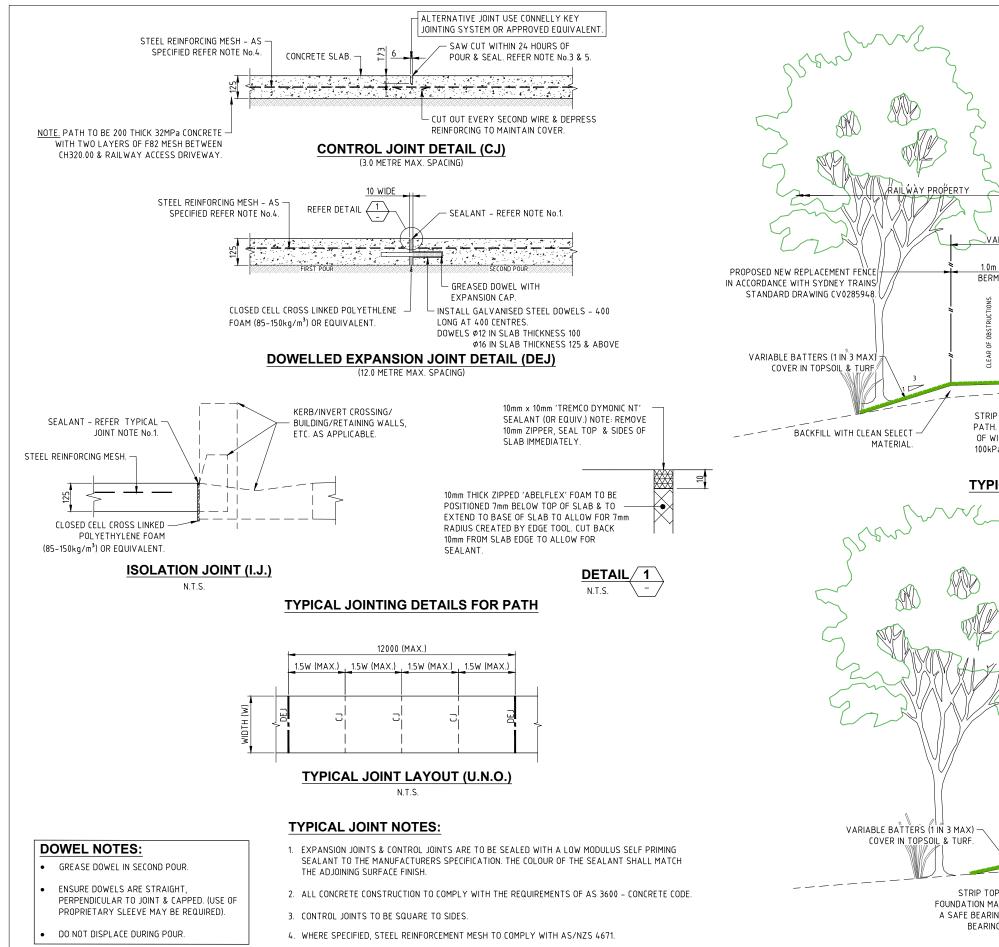
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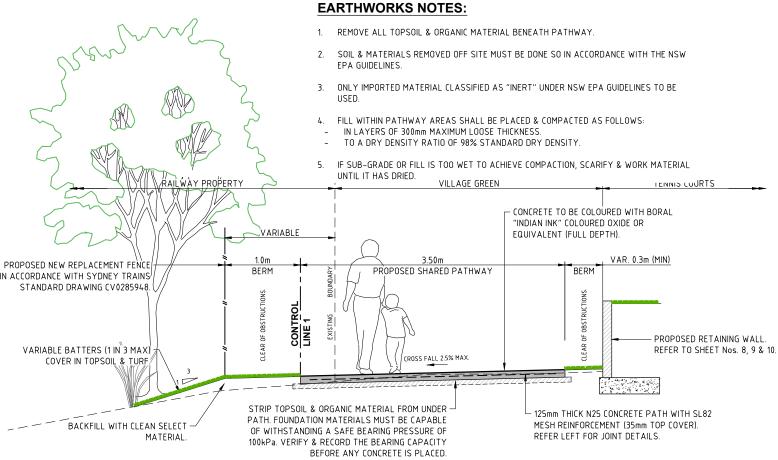
E, USE FIGURED DIMENSIONS ONLY

HORNSB'SHIRE COUNC
PO BOX 37, HORNSBY NSW

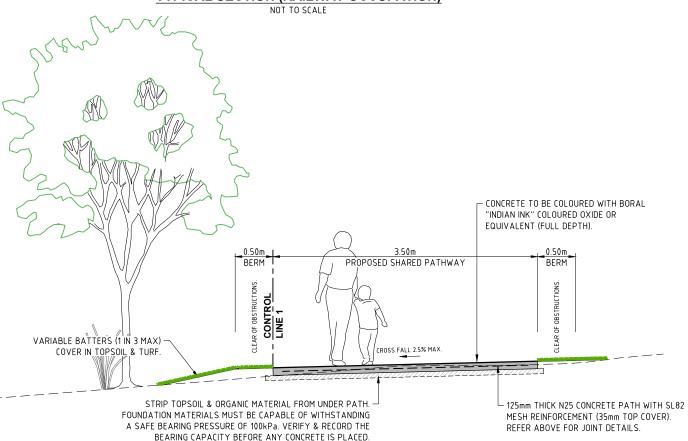
Description Name Initial Date

Design not to be amended without authorisation by Manager Design & Construction DO NOT SCALE, USE FIGURED DIMENSIONS





TYPICAL SECTION (RAILWAY OCCUPATION)



TYPICAL SECTION (VILLAGE GREEN)

NOT TO SCALE

S. COMISH **Hornsby Shire Council Design & Construction** S. COMISH NA AHD LANDPARTNERS H:\\\Pennant Hills to Epping Shared Path_OT_100345\Design\ACAD\Civil Design2024.dwg ISSUED FOR CONSTRUCTION D. TAMANO

D08952676

Branch

. M DRAKE

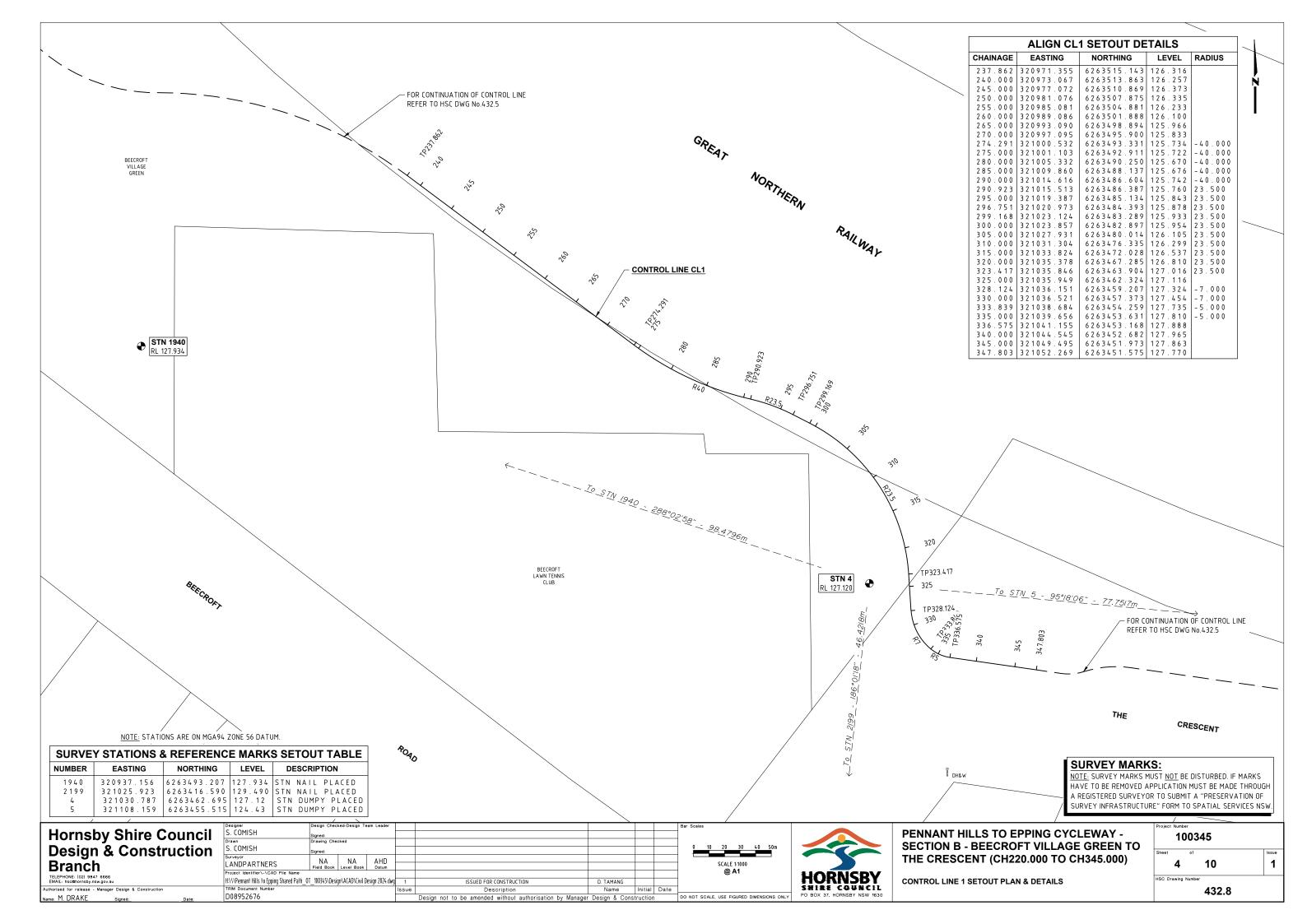
5. CONTROL JOINTS ARE TO BE SAWCUT WITHIN 24 HOURS OF POUR & THEN SEALED. REFER NOTE No.3.

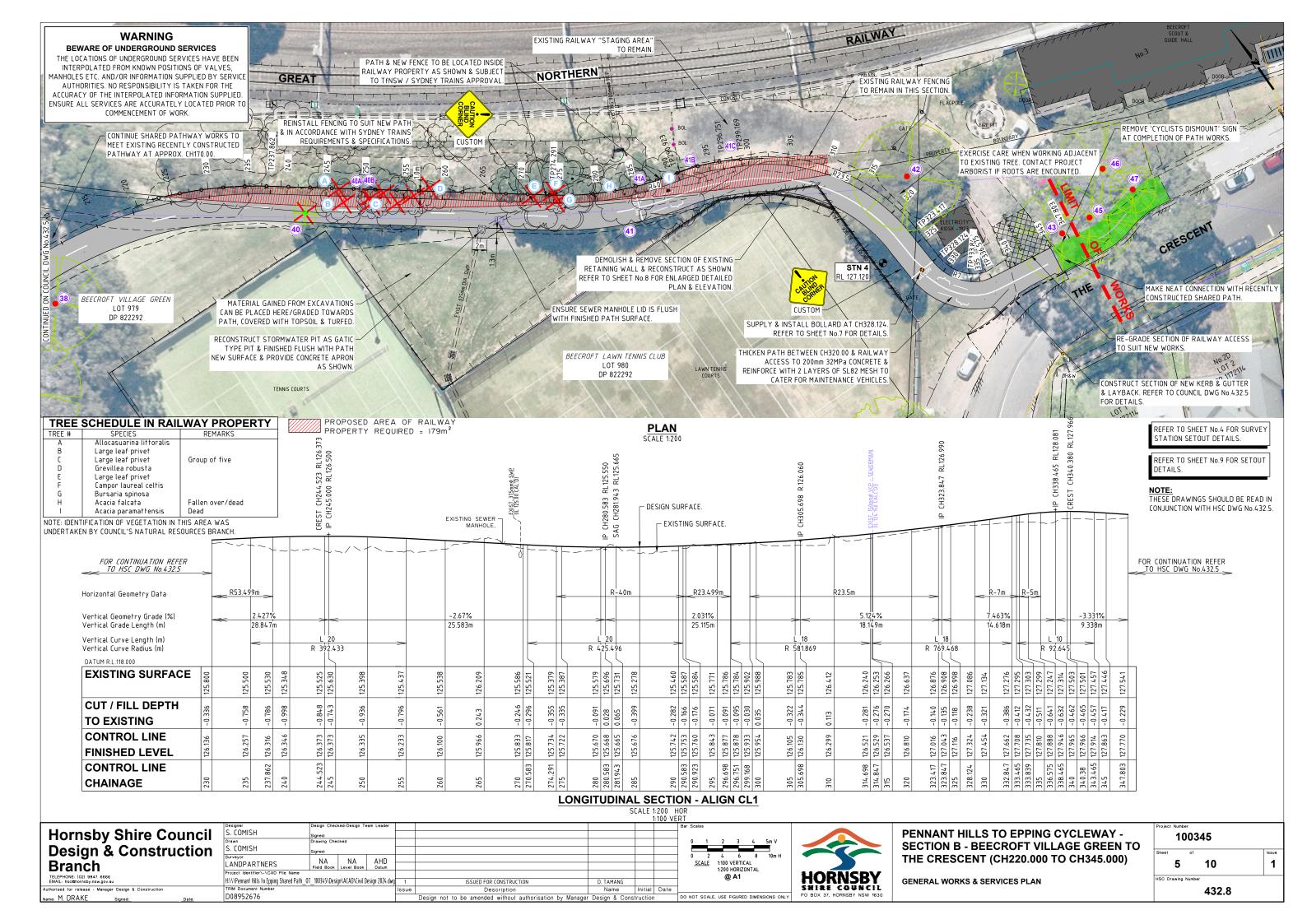
Design not to be amended without authorisation by Manager Design & Const

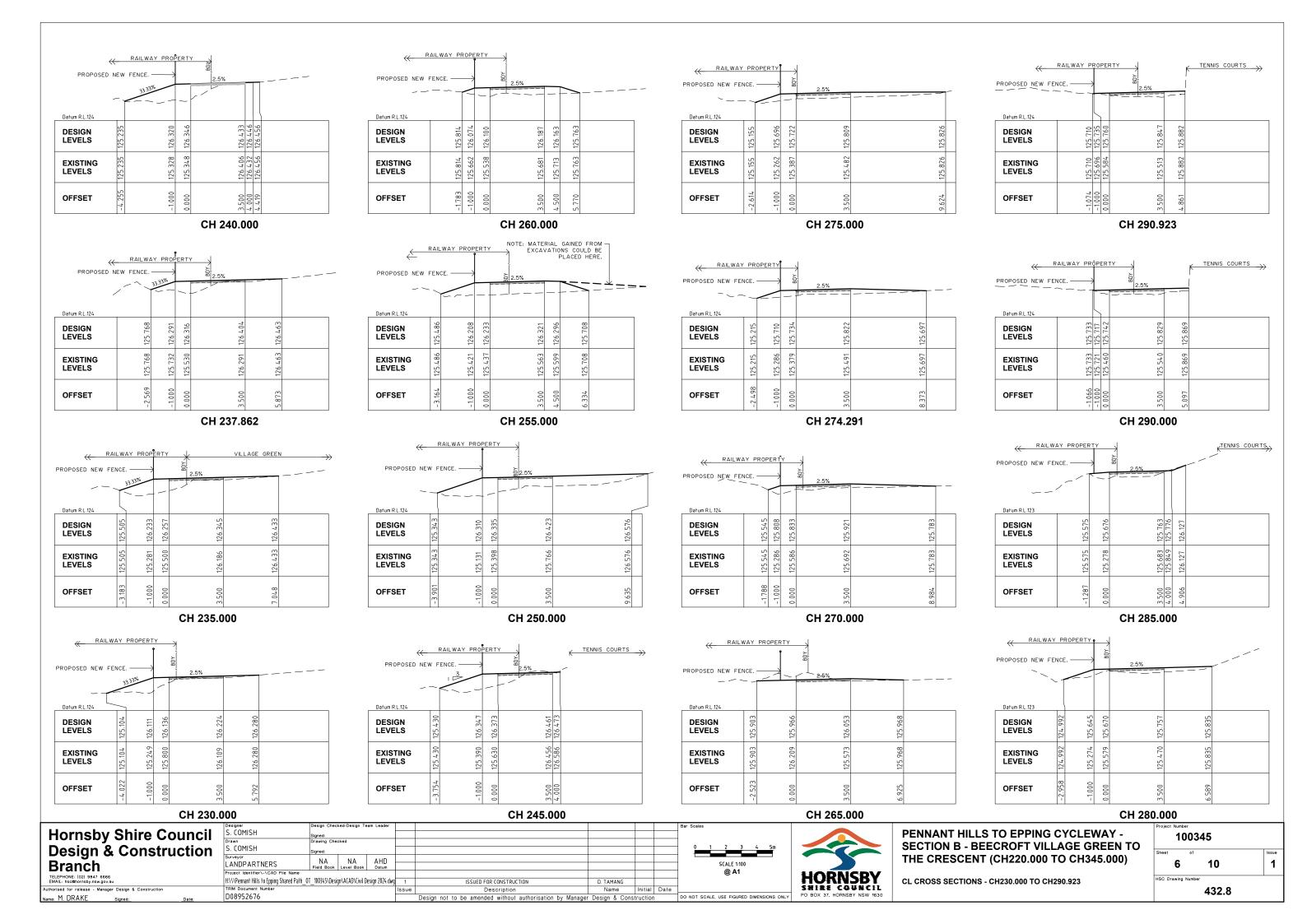
NOT TO SCALE SHIRE COUNCIL PENNANT HILLS TO EPPING CYCLEWAY -**SECTION B - BEECROFT VILLAGE GREEN TO** THE CRESCENT (CH220.000 TO CH345.000)

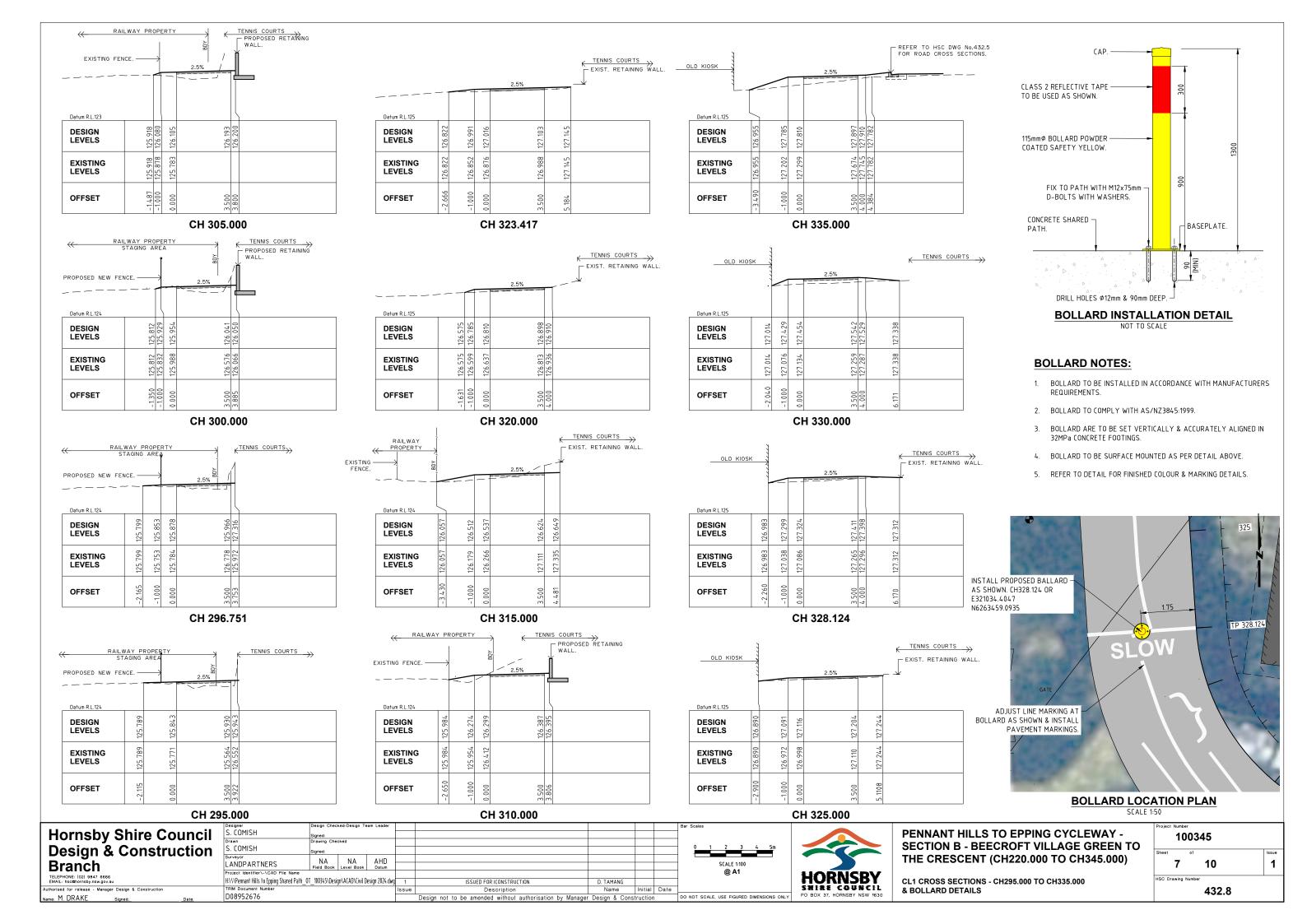
10 3 **TYPICAL SECTION & CONCRETE JOINT DETAILS** 432.8

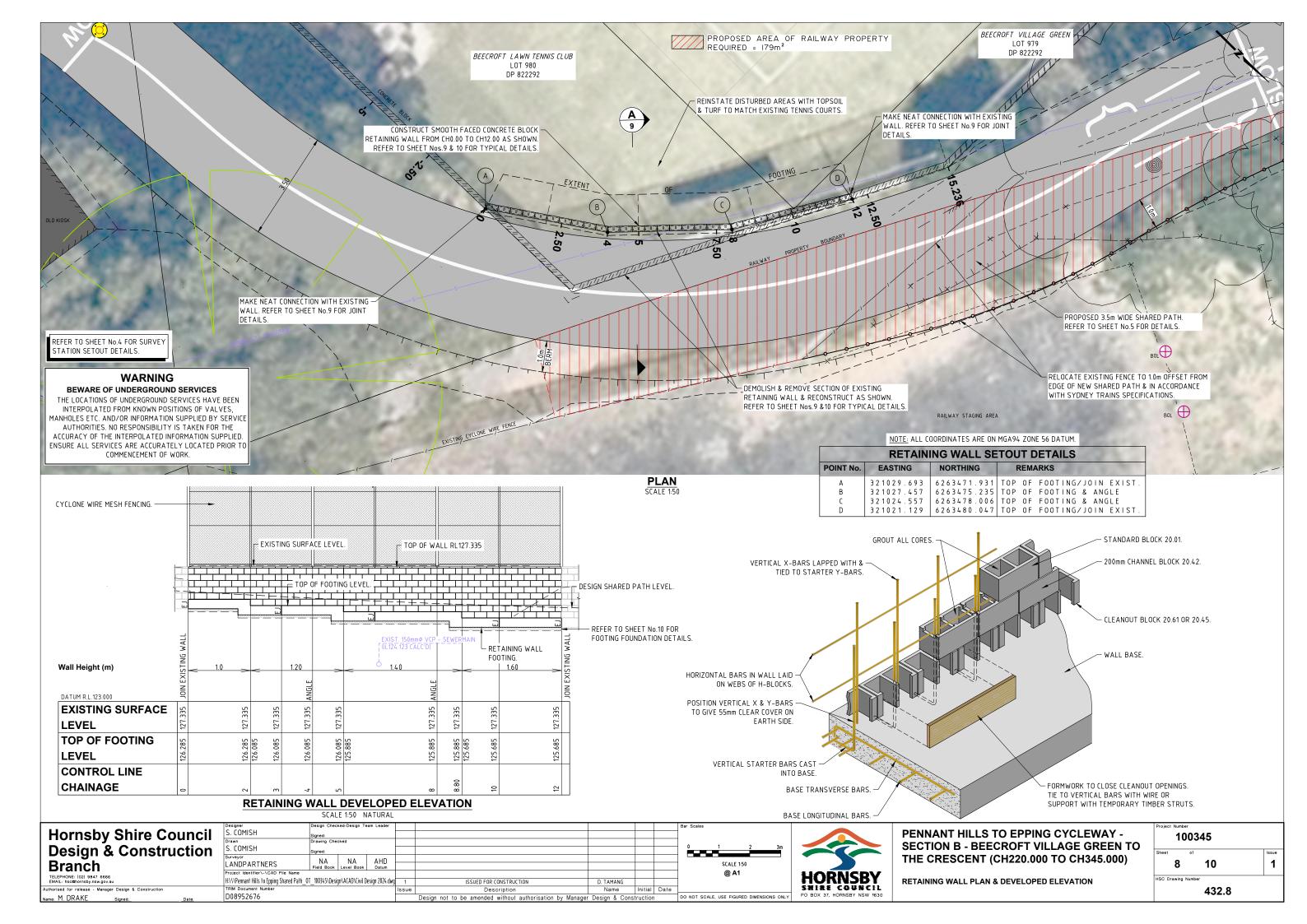
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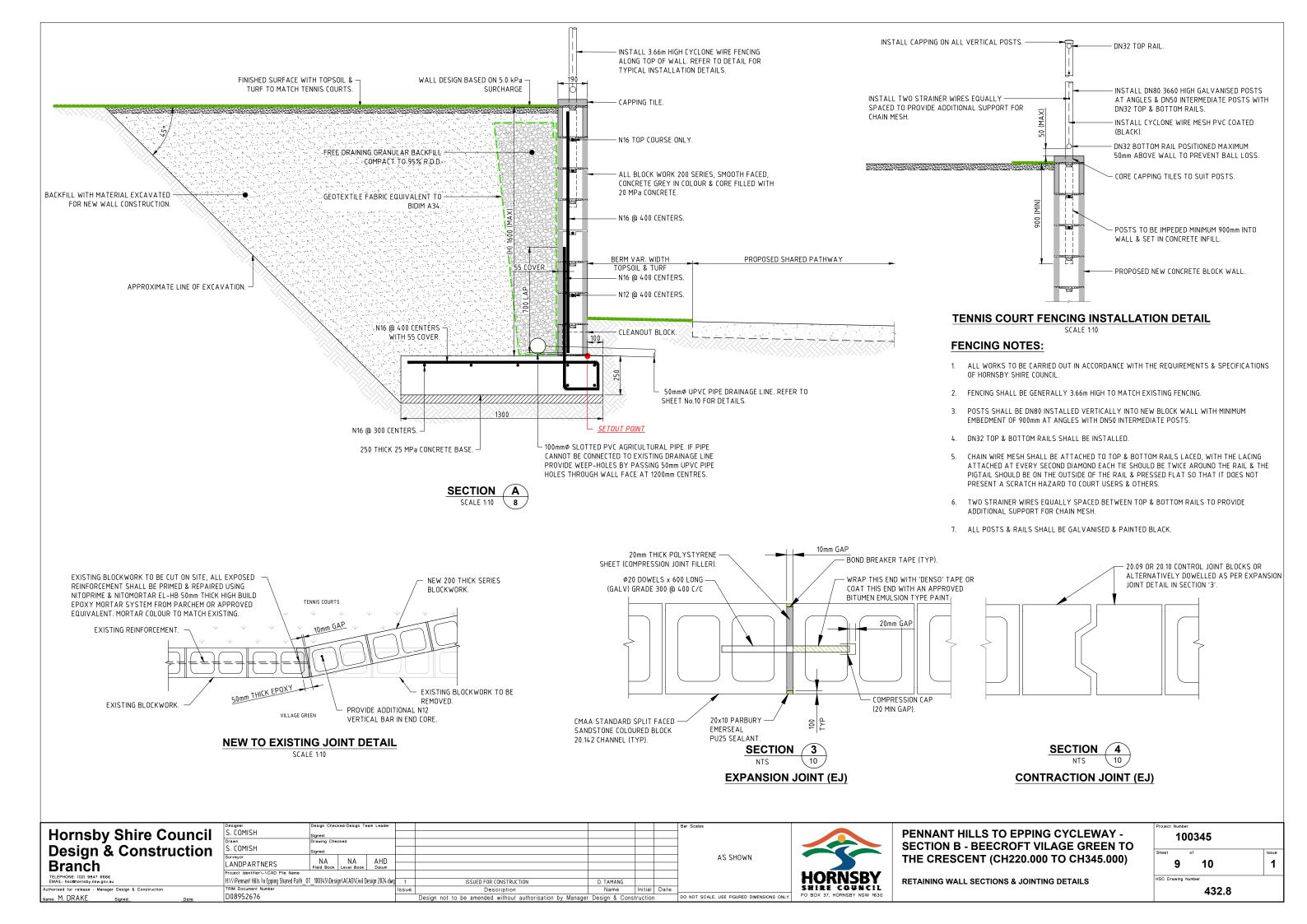


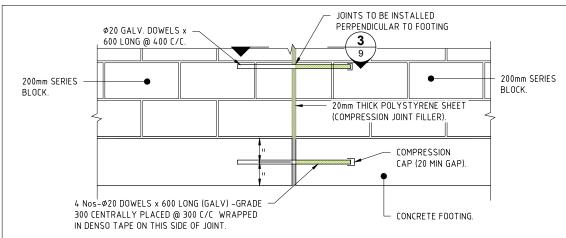




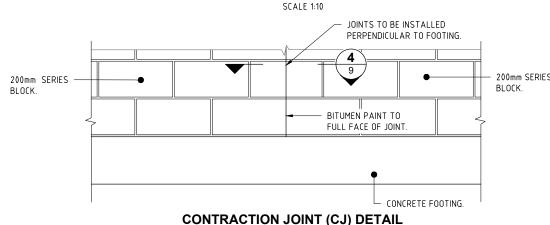








EXPANSION JOINT (EJ) DETAIL



SCALE 1:10

GENERAL:

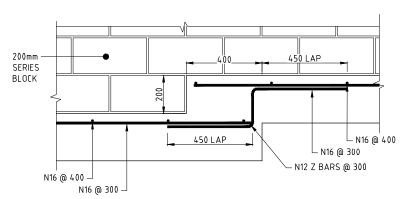
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS &
- 2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

FOUNDATION AND BACKFILL:

- CONCRETE FOUNDATIONS SHALL BE FOUNDED ON AN EXCAVATED SURFACE OR COMPACTED BACKFILL HAVING AN ALLOWABLE BEARING CAPACITY MINIMUM 150KPa. BEFORE ANY CONCRETE OR REINFORCEMENT IS PLACED THE EXCAVATION SHALL BE APPROVED BY AN EXPERIENCED GEO-TECHNICAL ENGINEER.
- ANY AREA OF SOFT OR UNSUITABLE GROUND FOUND TO BE PRESENT BELOW THE UNDERSIDE OF FOOTING LEVEL SHALL BE REMOVED DOWN TO ACCEPTABLE BEARING & BE BACKFILLED WITH LEAN MIX OF GRADE 20 CONCRETE.

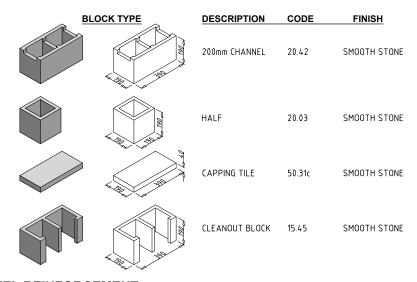
CONCRETE:

- CONCRETE EXPOSURE CLASSIFICATION B1.
- NOMINAL 28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH SHALL BE CAST IN-SITU CONCRETE = 40MPa BLINDING CONCRETE = 25MPa
- NOMINAL COVER OF REINFORCEMENT NEAREST TO THE CONCRETE SURFACE SHALL BE CAST IN-SITU CONCRETE = 40mm (CAST AGAINST STANDARD FORMWORK OR BLINDING) CAST IN SITU CONCRETE = 70mm
- CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED & USED ONLY WHERE SHOWN ON THE DRAWINGS OR SPECIFICALLY APPROVED BY THE DESIGNER. FURTHERMORE, CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED, SHALL BE CLEAN, FREE OF ALL LAITANCE, PROVIDED WITH A MINIMUM 6mm RELIEF & BE DAMPENED DOWN PRIOR TO COMMENCEMENT OF
- EDGES SHALL BE CHAMFERED 20x20 & RE-ENTRANT ANGLES. FILLETED 20x20 UNLESS SPECIFIED OTHERWISE.
- NCF DENOTES NO CHAMFER OR FILLET.



STEP FOOTING DETAIL

SCALE 1:10



STEEL REINFORCEMENT:

- ALL REINFORCEMENT SHALL COMPLY WITH AS4671.
- REINFORCEMENT SHALL NOT HAVE A PROTECTIVE COATING UNLESS NOTED OTHERWISE.
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON PLASTIC CHAIRS WITH FLAT BASES AT NOT GREATER THAN 1200 CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE
- BAR NOTATION GIVES THE FOLLOWING INFORMATION.

5-N16 @ 150 EF (NF) (FF) No OFF — EACH FACE / (NEAR FACE) / (FAR FACE)

- LAPS NOT SHOWN ON THE DRAWINGS SHALL BE STAGGERED SO THAT NO MORE THAN 50% OF BARS ARE LAPPED IN ANY ONE CROSS SECTION.
- REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR RECESSES.
- UNLESS NOTED OTHERWISE THE MINIMUM DEVELOPMENT LENGTHS & LENGTHS OF LAPS FOR

CONCRETE GRADE 40MPa				
BAR SIZE:	N12	N16	N20	N24
a) HORIZONTAL BARS WITH >300mm OF CONCRETE CAST BELOW THE BAR	475	800	1125	1200
b) OTHER BARS	375	625	900	950

- imes TOLERANCES ON NOMINAL COVER OF -5mm HAS BEEN ASSUMED FOR CONCRETE ELEMENTS CAST AGAINST FORMWORK OR BLINDING
- WHERE MORE THAN 50% OF BARS ARE LAPPED IN ANY ONE CROSS SECTION THE LAPS SHOWN IN THE TABLE ABOVE SHALL BE INCREASED BY A MULTIPLE FACTOR OF 1.3.
- REINFORCEMENT SHOWN ON THE DRAWINGS IS REPRESENTED DIAGRAMMATICALLY & NOT NECESSARILY SHOWN IN TRUE PROJECTION.

CONCRETE BLOCK MASONRY WALL:

- ENSURE WORKMANSHIP & MATERIALS CONFORM TO THE CURRENT EDITION OF AS 3700 AND IT'S REFERENCED STANDARDS
- FULLY BED FACE SHELLS & PERPENDS
- PROVIDE CLEAN-OUT HOLES/BLOCKS AT BASE OF ALL WALLS & ROD CORE HOLES TO REMOVE PROTRUDING MORTAR FINS. TIE VERTICAL REINFORCEMENT TO STARTER BARS.
- FILL ALL CORES OF REINFORCED WALLS WITH THOROUGHLY COMPACTED 20MPa GROUT, 10mm MAXIMUM AGG, 250 SLUMP & MINIMUM 300KG/m3 OF TYPE GP ELEMENT, UNO.
- DO NOT CUT CHASES INTO LOAD BEARING BLOCKWORK, OR NON LOAD BEARING BLOCKWORK, WITHOUT WRITTEN APPROVAL FROM PRINCIPAL THROUGH SUPERINTENDENT. ALLOW FOR SERVICES PRIOR TO CONSTRUCTING BLOCKWORK
- DO NOT USE MORTAR ADMIXTURES WITHOUT WRITTEN APPROVAL
- PROVIDE 20mm GAP TO TOP OF NON LOAD BEARING WALLS TO ALLOW SEALANT AS SPECIFIED
- SCHEDULE:

ELEMENT	UNIT STRENGTH	GROUT STRENGTH	MORTAR CEMENT/LIME/SAND
RETAINING WALLS	15MPa	20MPa	M4 1:0.5:3

REINFORCED MASONRY BLOCKWORK NOTES

- MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF:-AS 3700 MASONRY STRUCTURES AS/NZS 4455 MASONRY UNITS & SEGMENTAL PAVERS AS 2701 METHODS OF SAMPLING & TESTING MORTAR FOR MASONRY CONSTRUCTIONS AS 3600 CONCRETE STRUCTURES CODE.
- 2. CONCRETE MASONRY UNITS TO BE f'uc = 15MPa TO AS 3700.
- MORTAR MIX (CEMENT : LIME : SAND):-RETAINING WALLS - 1: 0.5: 3 LOAD BEARING WALLS - 1:1:6 NON LOAD BEARING WALLS - 1:2:9

ALTERNATIVELY USE EQUIVALENT CEMENT SAND MORTAR WITH PLASTICISER. DO NOT USE MORTAR ADMIXTURES WITHOUT WRITTEN APPROVAL FROM SUPERINTENDENT (SUPERVISING ENGINEER)

- 4. MORTAR COMPRESSIVE STRENGTH TO BE 12 MPa AT 28 DAYS.
- 5. MAXIMUM OF 6 COURSES HEIGHT TO BE PLACED AT ANY ONE TIME
- 6. PROVIDE CLEAN-OUT BLOCKS TO THE BASE OF ALL REINFORCED CORES.
- ALL MORTAR DROPPINGS TO BE REMOVED FROM BOTTOM OF CAVITY, THROUGH CLEAN-OUT BLOCKS, BEFORE CONCRETING.
- COVER TO REINFORCEMENT REFER TO DETAILS.
- REINFORCEMENT MUST BE POSITIONED ACCURATELY & TIED SECURELY BEFORE PLACING GROUT VERTICAL BARS, INCLUDING STARTER BARS, SHOULD BE AS CLOSE TO REAR BLOCK FACE OF WALL AS POSSIBLE, CONSISTENT WITH COVER REQUIREMENTS.
- 10. CONSTRUCT VERTICAL CONTROL JOINTS IN WALLS AT EXPANSION & CONSTRUCTION JOINTS IN SLABS, SLAB ENDINGS & DIFFERENT SUPPORT LEVELS, OR AT 6m MAX. CENTRES U.N.O..
- 11. GROUT MIX USED TO FILL CAVITY TO HAVE:-ULTIMATE CRUSHING STRENGTH (f'c) OF 20 MPa SLUMP 230mm TO 250mm MAXIMUM AGGREGATE SIZE OF 10mm MINIMUM 300kg/m³ OF TYPE GP CEMENT
- 12. ALL CORES ARE TO BE WETTED PRIOR TO GROUTING.
- 13. GROUT MIX TO BE THOROUGHLY COMPACTED EITHER BY RODDING OR BY PENCIL VIBRATOR. ALL CORES TO BE FILLED TO A MAXIMUM OF 3m HIGH FREE DROP IN ANY ONE POUR. STOP POUR 50mm BELOW TOP OF BLOCK TO PROVIDE KEY FOR FOLLOWING POUR.
- 14. RETAINING WALL DRAINAGE TO BE 100mm DIA. SLOTTED PVC PIPE ENCLOSED IN AN APPROVED FILTER SOCK WITH 150mm THICK, 20mm GRAVEL U.N.O. GRADE DRAINAGE AT 1 IN 200 MIN. TO SUITABLE OUTLET. IF NOT POSSIBLE WEEP-HOLES MAY BE PROVIDED.
- 15. BACKFILL RETAINING WALL, ON SUPERINTENDENT'S APPROVAL, WITH APPROVED CLEAN GRANULAR MATERIAL, FREE FROM CLAY OR OTHER ORGANIC MATTER. COMPACT BACKFILL IN LAYERS NOT EXCEEDING 200mm TO 95% STANDARD COMPACTION (AS 1289). DO NOT COMPACT UNTIL 7 DAYS AFTER PLACEMENT OF THE FILLING CONCRETE.
- 16. BLOCK WALL TO BE PAINTED IN SIMILAR COLOUR TO EXISTING THEN COATED WITH 'SILASKIN' ANTI-GRAFFITI PRODUCT (OR EQUIVALENT) IN ACCORDANCE WITH MANUFACTURER'S

PENNANT HILLS TO EPPING CYCLEWAY -**SECTION B - BEECROFT VILLAGE GREEN TO** THE CRESCENT (CH220.000 TO CH345.000)

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432.8

Hornsby Shire Council Design & Construction Branch

M DRAKE

S. COMISH NA AHD ANDPARTNERS t:\\\Pennant Hills to Epping Shared Path_OT_100345\Design\ACAD\Civil Design 2024.dwg D. TAMANO Design not to be amended without authorisation by Manager Design & Const

AS SHOWN SHIRE COUNCIL

RETAINING WALL JOINT DETAILS & NOTES