



THE CORPORATION OF
THE CITY OF VERNON

POLSON PARK NATURALIZATION
PHASE 2

ISSUED FOR PROPOSAL

JANUARY 29, 2024

Project Number: 111710119

Contract Number: 23-100-INF

DRAWING LIST

GENERAL

- G001 COVER
- G002 DRAWING LIST & PROJECT LOCATION
- G003 LEGEND
- G004 GENERAL NOTES & MATERIAL SIZING

CIVIL

- C104 KEY PLAN
- C105 EXISTING SITE PLAN
- C106 PROPOSED SITE PLAN
- C112 REMOVALS PLAN

- C205 CHANNEL PLAN / PROFILE STA 1+900 - 2+070
- C206 CHANNEL PLAN / PROFILE STA 2+070 - 2+260
- C207 CHANNEL PLAN / PROFILE REACH 2 DOWNSTREAM CHANNEL TIE-IN
- C215 PEDESTRIAN BRIDGE PLAN / PROFILE
- C216 PEDESTRIAN BRIDGE PLAN / PROFILE
- C225 MULTI-USE PATHWAY PLAN / PROFILE STA 1+000 - 1+140
- C226 MULTI-USE PATHWAY PLAN / PROFILE STA 1+140 - 1+290
- C227 MULTI-USE PATHWAY PLAN / PROFILE STA 1+290 - 1+345
- C250 GRAVEL PATHWAY PLAN / PROFILE STA 1+000 - 1+110
- C251 GRAVEL PATHWAY PLAN / PROFILE STA 2+000 - 2+130
- C252 GRAVEL PATHWAY PLAN / PROFILE STA 2+130 - 2+260

SECTIONS

- C310 SECTIONS
- C311 SECTIONS
- C312 SECTIONS
- C313 SECTIONS
- C314 SECTIONS

TYPICAL CHANNEL DETAILS

- C501 TYPICAL CHANNEL DETAILS
- C502 TYPICAL CHANNEL DETAILS
- C503 TYPICAL CHANNEL DETAILS
- C504 TYPICAL CHANNEL DETAILS

PLANTING PLAN

- C610 PLANTING PLAN
- C611 PLANTING PLAN
- C612 PLANTING DETAILS

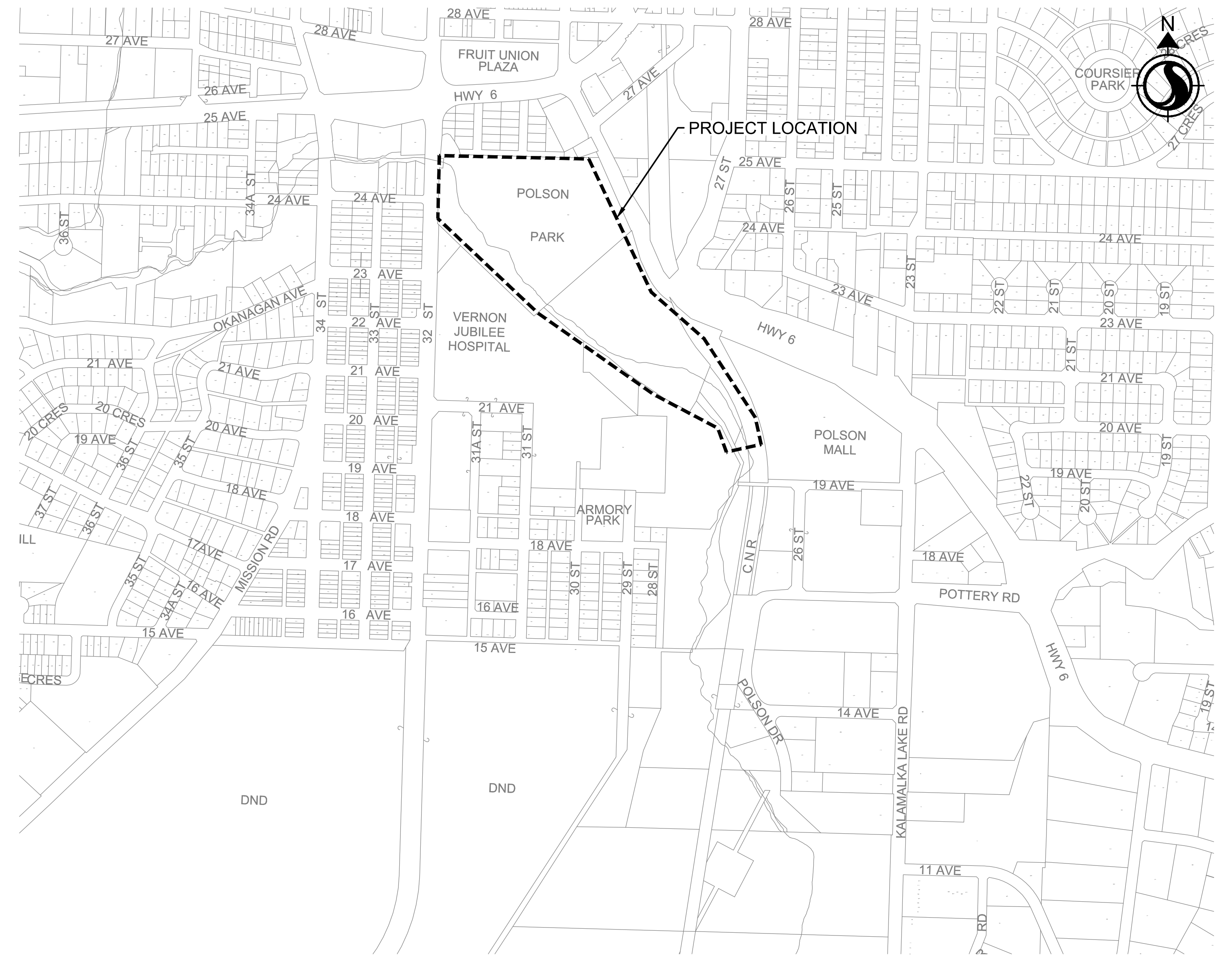
TRAFFIC MANAGEMENT PLAN

STRUCTURAL

- S101 BRIDGE GENERAL NOTES
- S102 16 METRE PEDESTRIAN BRIDGE
- S103 8 METRE MIXED USE BRIDGE

LANDSCAPE

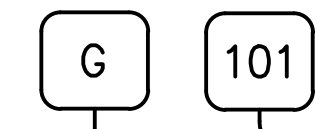
- L200 LANDSCAPE HYDROSEEDING KEY PLAN
- L201 LANDSCAPE PLANTING KEY PLAN
- L202 LANDSCAPE PLANTING CHANNEL PLAN - EAST
- L203 LANDSCAPE PLANTING CHANNEL PLAN - CENTRAL
- L204 LANDSCAPE PLANTING CHANNEL PLAN - WEST



LOCATION PLAN



DRAWING NUMBER DESIGNATION



DISCIPLINE DESIGNATORS

G	GENERAL
C	CIVIL
L	LANDSCAPE
I	IRRIGATION
E	ELECTRICAL

DRAWING SEQUENCE

000	- GENERAL (SYMBOLS, LEGEND, NOTES, ETC.)
100	- PLANS (HORIZONTAL VIEWS)
200	- ELEVATIONS (VERTICAL VIEWS)
300	- SECTIONS (TYPICAL SECTION VIEWS)
400	- GEOMETRIC VIEWS (DETAILED ROAD GEOMETRIC PLANS AND TABLES)
500	- SECTIONS AND DETAILS (SECTIONAL VIEWS, WALL SECTIONS, DETAILS)
600	- PAVEMENT MARKINGS AND SIGNAGE PLANS
700	- TRAFFIC MANAGEMENT PLANS

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01.02.2024

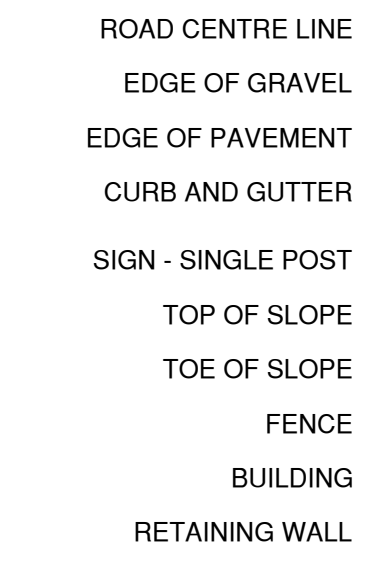
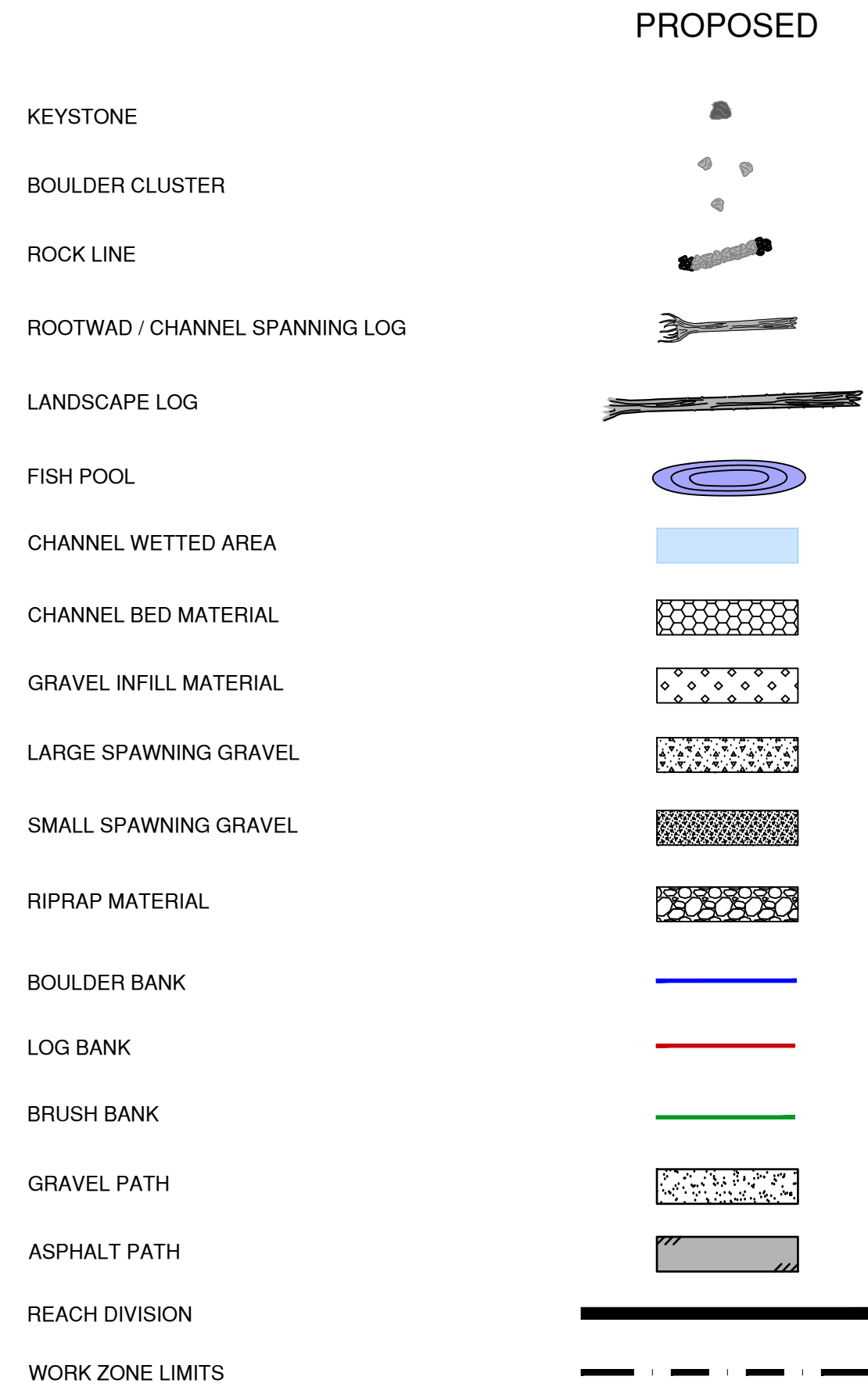
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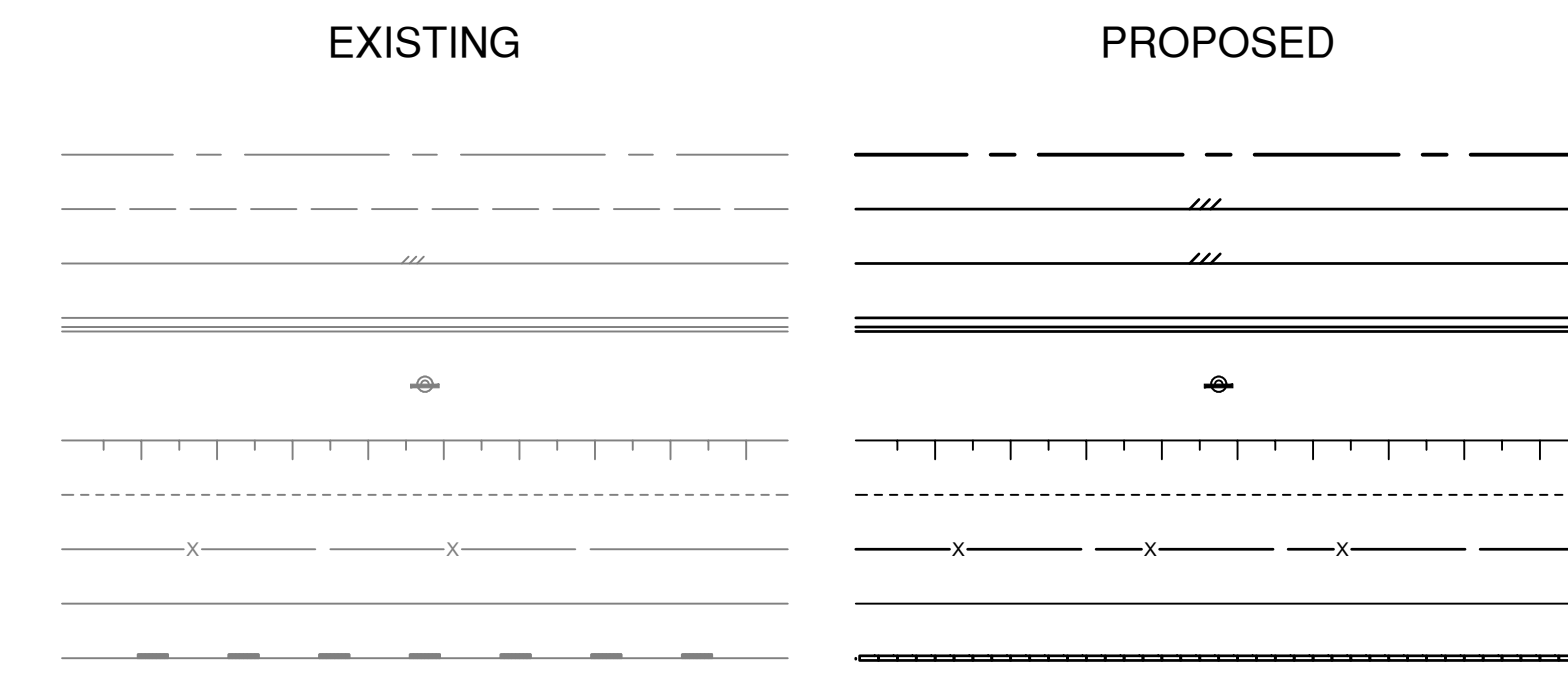
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SHEET	2 OF

TITLE	DRAWING LIST & PROJECT LOCATION
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TITLE	POLSON PARK NATURALIZATION PHASE 2
DRAWING NUMBER	G002

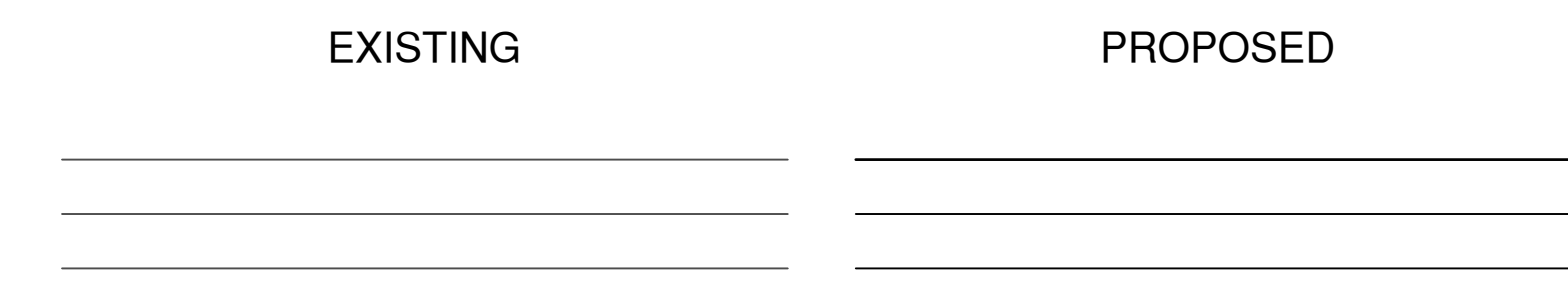
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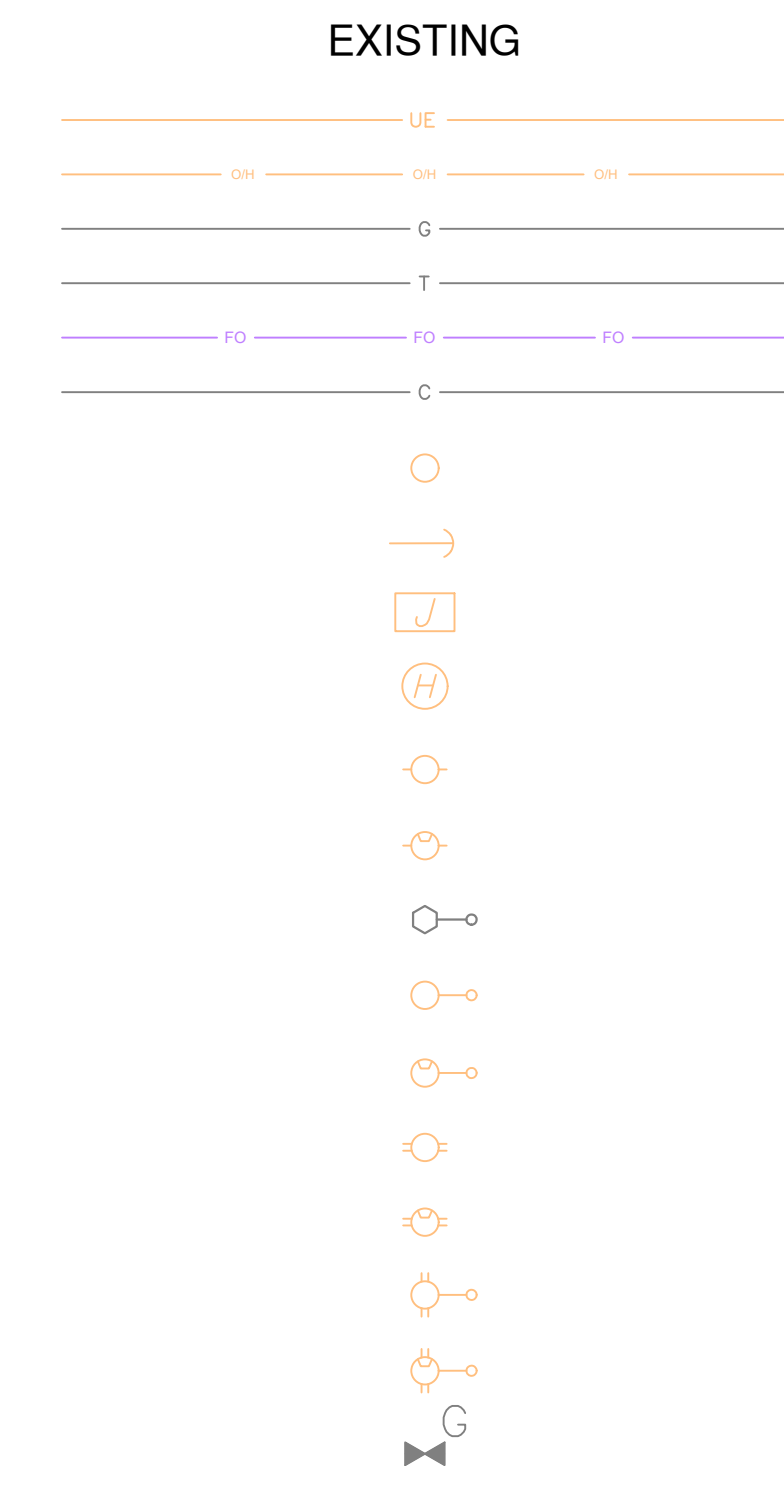
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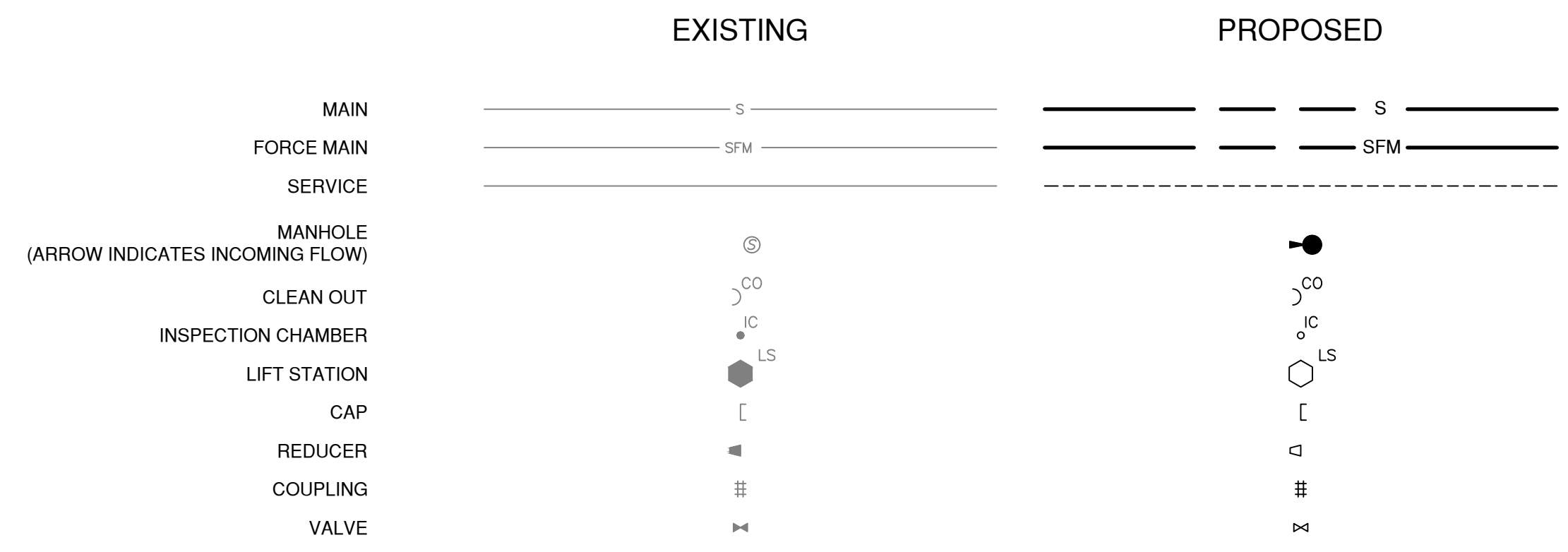
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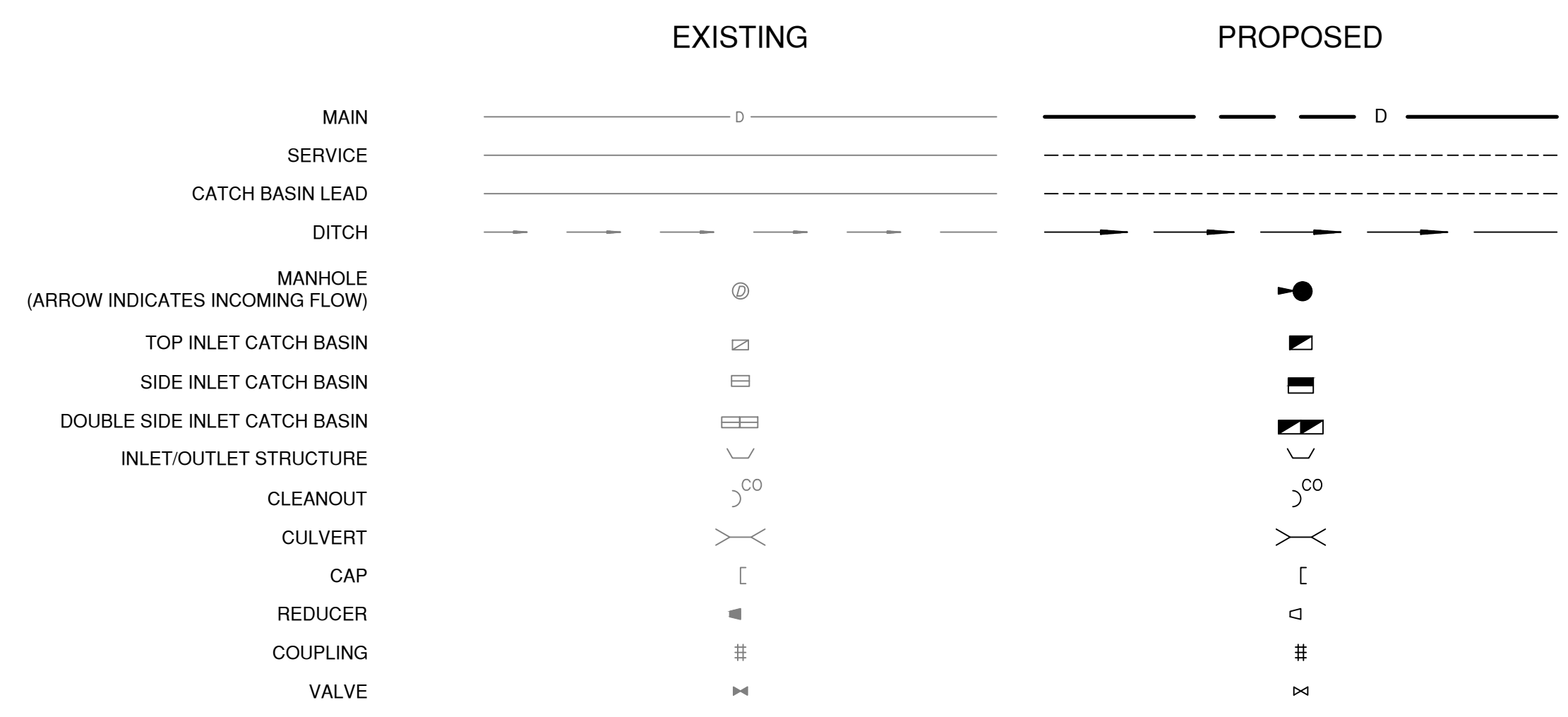
SHALLOW UTILITIES



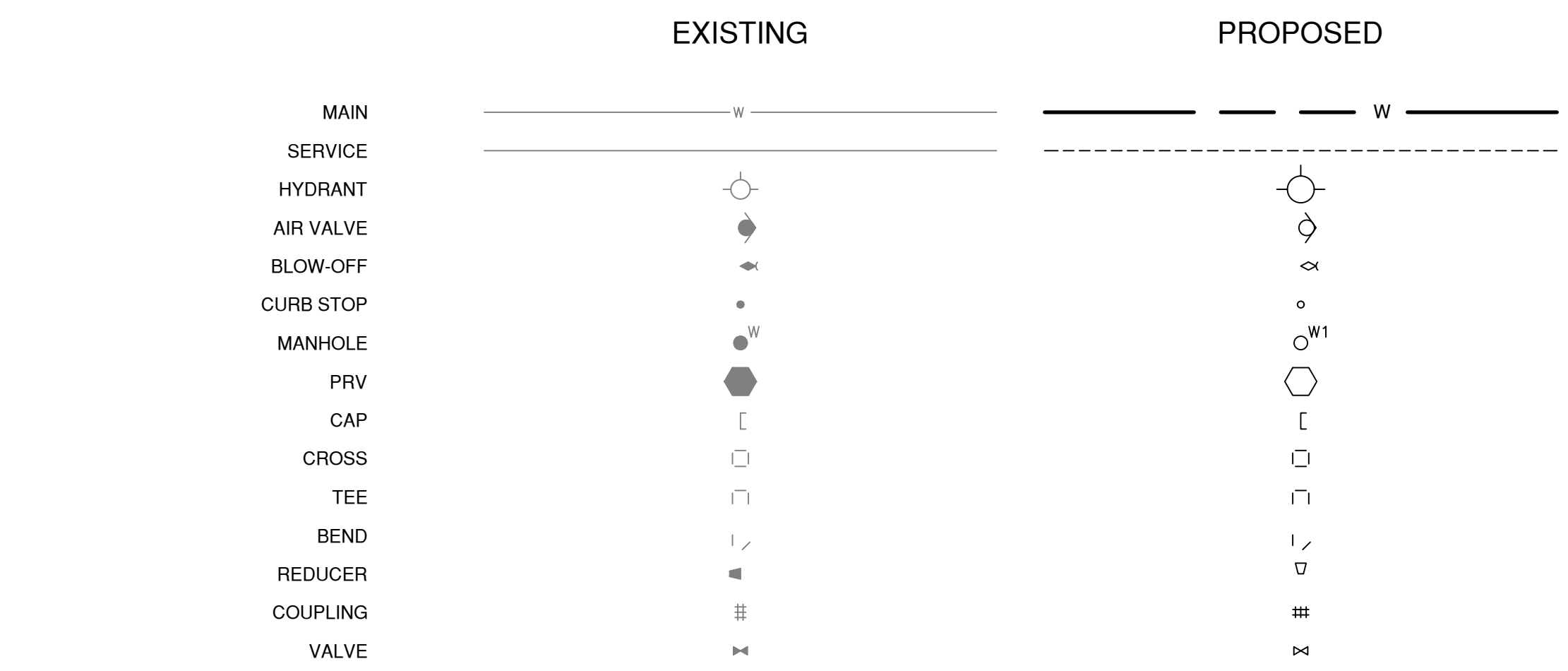
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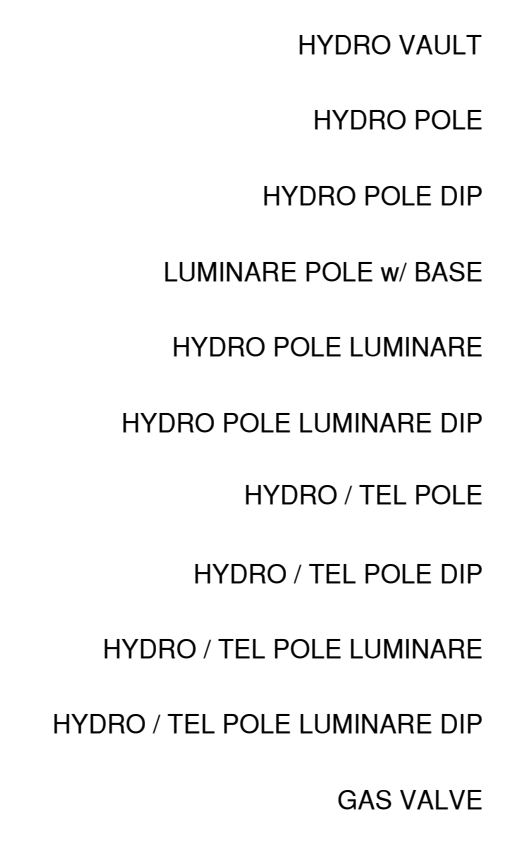
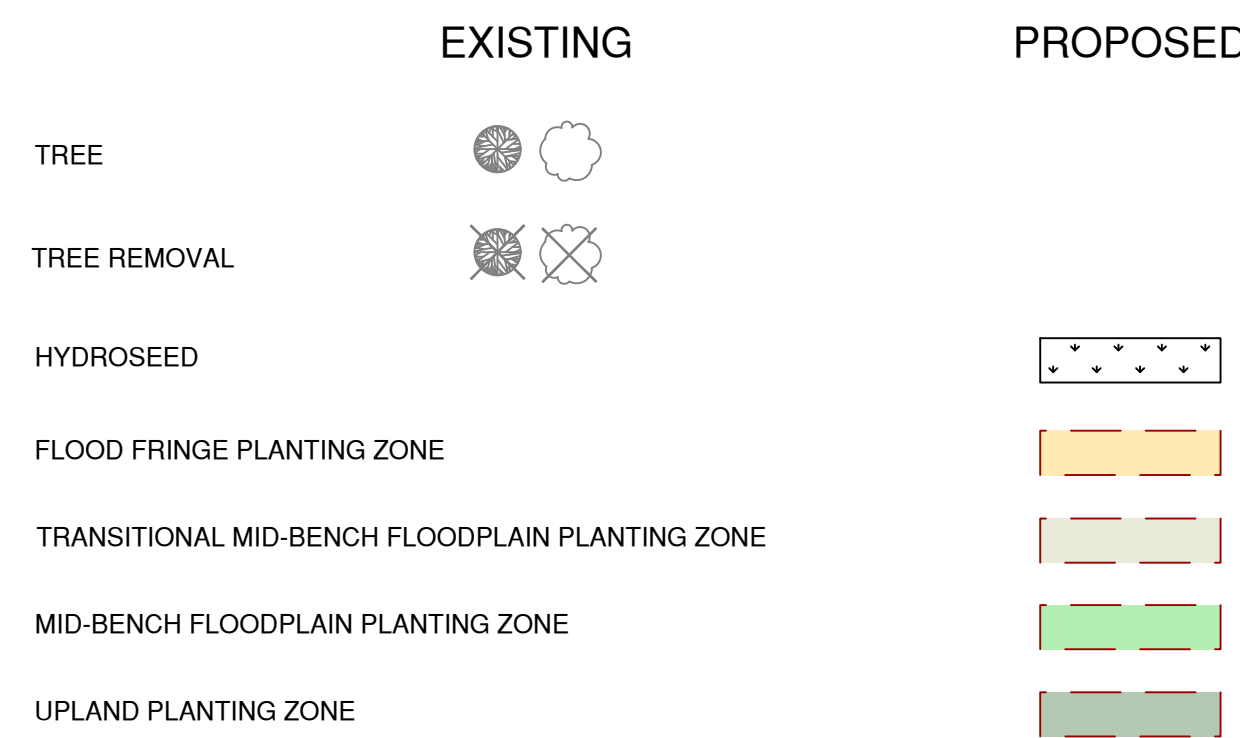
STORM



WATER



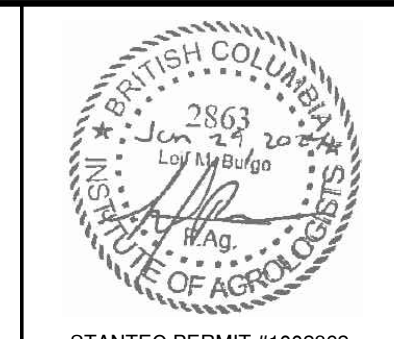
LANDSCAPE



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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
H: N/A
V: N/A

SHEET
3 OF

TITLE
LEGEND

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
G003

GENERAL CONSTRUCTION NOTES

- THESE DRAWINGS FORM PART OF A SET AND SHOULD NOT BE SEPARATED. THESE DRAWINGS ARE INTENDED TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THE SET, ALL NOTES AND SCHEDULES, ALL WRITTEN SPECIFICATIONS, APPROVED ADDENDA, CHANGE ORDERS AND TENDERING INFORMATION INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL DIMENSIONS ARE IN METRES AND MILLIMETRES UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- CONTRACTOR IS RESPONSIBLE TO CONFIRM THE LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION. VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK. CONTRACTOR IS RESPONSIBLE TO CALL FOR UTILITY LOCATES AND ANY COSTS TO REPAIR DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES SHALL BE BORNE BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND SHALL NOTIFY ALL UTILITY COMPANIES WITH UTILITIES ON SITE PRIOR TO THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL ADHERE TO ALL APPLICABLE LOCAL, PROVINCIAL AND/OR FEDERAL LAWS OR REGULATIONS.
- CONTRACTOR IS RESPONSIBLE TO ENSURE ALL SETBACKS FROM UTILITIES, APPURANCE, STRUCTURES AND HARDSCAPE ARE PER GOVERNING MUNICIPAL STANDARDS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING GRADES AND SITE CONDITIONS ON THE PROJECT SITE BY FIELD INSPECTION BEFORE SUBMITTING A BID. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF TREES, SHRUBS, AND PLANT MATERIAL WITHIN THE LIMITS OF WORK AREA THAT ARE TO REMAIN IN PLACE. ANY EXISTING PLANT MATERIAL DAMAGED WILL BE REPLACED BY THE CONTRACTOR WITH "AS-EQUAL" MATERIAL AS APPROVED BY THE CONTRACT ADMINISTRATOR.
- CONTRACTOR SHALL REPAIR ALL DAMAGE, TO AT MINIMUM A PRE-CONSTRUCTION CONDITION OR BETTER, TO ALL EXISTING FACILITIES/UTILITIES/STRUCTURES CAUSED BY THEIR WORK AT THEIR OWN EXPENSE. CONTRACTOR SHALL PROVIDE PROTECTION TO PRIVATE AND PUBLIC PROPERTY AND UNDERGROUND SERVICES. A DIGITAL PHOTO RECORD OF ALL EXISTING DAMAGE TO THE SITE PRIOR TO CONSTRUCTION IS TO BE SUBMITTED TO THE CONTRACT ADMINISTRATOR BEFORE COMMENCEMENT OF ANY WORK ON THE SITE.
- THE SECURITY OF THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION. DURING CRITICAL PERIODS, SUCH AS ENSURING FINISHED SURFACES AND LINE MARKINGS ARE NOT DRIVEN ACROSS OR OTHERWISE VANDALIZED, SITE SECURITY IS TO BE MAINTAINED.
- THE CONTRACTOR SHALL RESTORE ALL AREAS OF INTENTIONAL DISTURBANCE AS PER THE PLANTING PLAN DRAWINGS. AREAS OF UNINTENTIONAL DISTURBANCE ARE TO BE RESTORED AT A MINIMUM TO PRE-CONSTRUCTION CONDITIONS UNDER THE GUIDANCE OF A QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP).
- THE CONTRACTOR SHALL SUPPLY ALL MATERIAL, LABOR AND OTHER IN QUANTITIES SUFFICIENT TO COMPLETE WORK SHOWN WITH THESE DRAWINGS. ANY AMBIGUITY IN THE DRAWINGS, SPECIFICATIONS, OR DETAILS IS TO BE REPORTED PRIOR TO THE START OF ANY WORK. ANY DISCREPANCIES BETWEEN QUANTITIES SHOWN AND ACTUAL SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE GOVERNING MUNICIPALITY OR APPROVAL AUTHORITY PRIOR TO CONSTRUCTION FOR ALL ON-SITE AND OFFSITE IMPROVEMENTS OUTLINED WITHIN THIS SET OF PLANS AND/OR ANY OTHER ADDITIONAL WORK THEY MAY PERFORM IN THE INTEREST OF THIS PROJECT.
- ALL TESTING OF MATERIALS, COMPACTION TESTING AND ALL ASSOCIATED COSTS FOR TESTING ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE INDICATED IN THE CONTRACT DOCUMENTS. THE ITEMS REQUIRING TESTING ARE TO BE IDENTIFIED IN THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS. TEST RESULTS FOR THE PROJECT PROVING ALL REQUIREMENTS HAVE BEEN MET ARE TO BE SUBMITTED ELECTRONICALLY TO THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SURVEYING FOR THE PROJECT. AN ACCURATE LOG OF CONTROL AND SURVEY WORK IS TO BE MAINTAINED AS THE PROJECT PROGRESSES. PRIOR TO START OF CONSTRUCTION THE NAME AND ADDRESS OF THE SURVEYOR IS TO BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR APPROVAL. DURING CONSTRUCTION THE SURVEYOR MUST BE PREPARED TO SUBMIT DOCUMENTATION TO VERIFY ACCURACY OF FIELD ENGINEERING WORK SHOULD IT BE REQUESTED. ON COMPLETION OF THE PROJECT A CERTIFICATE IS TO BE SUBMITTED BY THE SURVEYOR TO CERTIFY THAT ELEVATIONS AND LOCATIONS OF COMPLETED WORK ARE IN CONFORMANCE OR NON-CONFORMANCE WITH THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS. IN AREAS OF NON-CONFORMANCE THIS CERTIFICATE IS TO IDENTIFY THE AREAS AND REASONS FOR NON-CONFORMANCE.
- NO DESIGN MODIFICATIONS SHALL BE MADE WITHOUT THE APPROVAL OF THE CONTRACT ADMINISTRATOR.
- IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS BETWEEN ITEMS COVERED IN SPECIFICATIONS AND NOTES ON THE DRAWINGS, OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE PROJECT CONTRACT ADMINISTRATOR SHALL BE NOTIFIED, AND THEY WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS. NO PART OF THE CONTRACT DOCUMENTS IS INTENDED TO BE IN VIOLATION OF CODES. IF DISCREPANCIES EXIST, CONTRACTOR TO NOTIFY CONTRACT ADMINISTRATOR IMMEDIATELY.
- CONTRACTOR IS TO MAINTAIN PUBLIC ACCESS TO ALL DRIVEWAYS THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR IS TO RE-USE APPROVED EXCAVATED TOPSOIL, GRAVEL, COBBLE AND BOULDER MATERIAL WITHIN THE SITE. ALL RE-USED MATERIAL MUST BE REVIEWED AND APPROVED BY THE CONTRACT ADMINISTRATOR.

ENVIRONMENTAL NOTES

- REFER TO THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP) FOR ENVIRONMENTAL MANAGEMENT REQUIREMENTS.
- ADVISE THE ENVIRONMENTAL MONITOR FOR ADDITIONAL MITIGATIONS REQUIRED IN THE EVENT THAT UNFORSEEN ENVIRONMENTAL RISKS ARISE.

PROTECTION OF EXISTING STRUCTURES NOTES

THESE NOTES ADDRESS RESPONSIBILITIES OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES, INCLUDING, BUT NOT LIMITED TO;

- WALKWAYS, ROADS AND PARKING AREAS WITHIN POLSON PARK
- HWY 97 CULVERT CROSSING
- 9009 CONCRETE STORM OUTFALL

- IT IS RECOMMENDED THAT WHILE CONDUCTING RECONSTRUCTION WORK WITHIN 5m OF ALL STRUCTURES, THE CONTRACTOR SHOULD COMPLETE A CRACK AND DAMAGE SURVEY WHICH WOULD CONSIST OF TWO PARTS. THE FIRST PART PRIOR TO CONDUCTING ANY RECONSTRUCTION ACTIVITIES SHALL INCLUDE A VISUAL INSPECTION, PHOTOGRAPHS, AND A WRITTEN REPORT DESCRIBING ANY EXISTING DEFECTS. THE SECOND PART WILL BE PERFORMED AFTER THE RESTORATION WORK IS COMPLETE AND SHALL ALSO INCLUDE A VISUAL INSPECTION, PHOTOGRAPHS, AND WRITTEN REPORT DESCRIBING ANY CHANGE IN THE STRUCTURE CONDITION. THE CONTRACT ADMINISTRATOR WILL COMPLETE A SIMILAR REVIEW ON BEHALF OF THE OWNER.
- PRIOR TO STARTING CONSTRUCTION, CONTROL POINTS ARE TO BE ESTABLISHED ON THE STRUCTURES. THE CONTRACTOR SHALL ENGAGE THEIR SURVEYOR TO CONDUCT A BASELINE ELEVATION SURVEY OF ALL STRUCTURES AND COMPLETE REGULAR SURVEY READINGS TO DETERMINE IF ANY SETTLEMENT OR MOVEMENT IS OBSERVED AT THE STRUCTURES. IF CHANGES ARE OBSERVED, STOP CONSTRUCTION AND CONSIDER IMPLEMENTING ALTERNATE CONSTRUCTION METHODS.
- CONTRACTOR TO COORDINATE CLOSURE OF BRIDGE AND WALKWAY STRUCTURES WITH THE CITY OF VERNON WHEN WORK IS BEING COMPLETED IN THEIR VICINITY.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING AND UNDERPINNING TO PREVENT DISTURBANCE TO THE STRUCTURES, AS REQUIRED. RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA TO COMPLETE ALL SHORING DESIGN WORK.

- PROVIDE CUTS IN THE EXISTING CONCRETE EMBANKMENT STABILIZATION AS OUTLINED IN THE PROJECT DOCUMENTS. CONTRACTOR SHALL NOT IMPACT OR UNDERMINE CONCRETE EMBANKMENT STABILIZATION ADJACENT TO STRUCTURE FOOTINGS WHEN REMOVING OTHER SECTIONS.

TREE PROTECTION NOTES

- ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR DIRECTED BY CONTRACT ADMINISTRATOR.

TREE PROTECTION FENCING

- TREE PROTECTION FENCING MAY BE REQUIRED FOR ALL TREES AND/OR SIGNIFICANT STANDS OF EXISTING TREES WITHIN 6.0m OR LESS FROM THE LIMITS OF CONSTRUCTION.
- PROTECTIVE FENCE IS TO BE INSTALLED PRIOR TO DEMOLITION OR OTHER SITE WORK AND MAINTAINED THROUGHOUT CONSTRUCTION UNTIL LANDSCAPE CONSTRUCTION IS FINISHED.
- IF REQUIRED, TREES ARE TO BE PROTECTED WITH TEMPORARY FENCING CONSISTING OF 1.5m HIGH ORANGE PLASTIC CONSTRUCTION FENCE MOUNTED ON STEEL "T"-BARS @ 1.5m O.C. DRIVEN INTO GROUND A MINIMUM OF 0.6m. THE TREE PROTECTION ZONE (TPZ) WILL BE A MINIMUM DISTANCE OF 4.0m FROM THE TRUNK OF THE TREE OR TO THE DRIPLINE, WHICHEVER IS GREATER. THE CANOPY OF THE TREE SHALL BE PROTECTED TO THE DRIPLINE.

TREE PROTECTION ZONE (TPZ)

- TREE PROTECTION ZONES (TPZ) WILL BE IDENTIFIED BY CONTRACTOR AND VERIFIED IN FIELD BY PROJECT ENGINEER AND FENCED.
- AREAS WITHIN THE DRIPLINE OF THE TREES ARE NOT TO BE USED FOR ANY TYPE OF STORAGE (E.G. STORAGE OF DEBRIS, SURPLUS SOILS). THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT PLANT AND ROOT SYSTEMS FROM DAMAGE, COMPACTION AND CONTAMINATION RESULTING FROM THE CONSTRUCTION TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
 - DO NOT STORE EQUIPMENT OR CONSTRUCTION MATERIALS WITHIN THE TPZ.
 - DO NOT STORE SOIL, CONSTRUCTION WASTE, OR DEBRIS WITHIN THE TPZ.
 - DO NOT PERMIT VEHICLE, EQUIPMENT, OR PEDESTRIAN ACCESS THROUGH THE TPZ, UNLESS EXPRESSLY PERMITTED FOR THE MAINTENANCE OF THE TREES WITHIN THE AREA.
 - DO NOT ALTER OR DISTURB THE GRADE WITHIN THE TPZ.
 - DO NOT PERFORM TRENCHING OR TUNNELING WITHIN THE DRIPLINE OF TREES DESIGNATED FOR PROTECTION, UNLESS OTHERWISE SPECIFIED OR APPROVED BY THE CONTRACT ADMINISTRATOR.
 - DO NOT ATTACH OR WRAP ANY RIGGING CABLES OR HARDWARE OF ANY KIND AROUND PROTECTED TREES, WITHOUT APPROVAL FROM CONTRACT ADMINISTRATOR.
 - ALL SUPPORTS AND BRACING FOR PROTECTIVE FENCING IS TO BE INSTALLED OUTSIDE THE TPZ. ALL SUPPORTS AND BRACING SHALL MINIMIZE DAMAGE TO TREE ROOTS OUTSIDE OF THE TPZ.
 - DO NOT DUMP ANY POTENTIAL CONTAMINANTS WITHIN THE TPZ OR WHERE THEY MAY ENCOUNTER THE FEEDER ROOTS OF THE TREES.
 - DO NOT DISPOSE OF LIQUIDS WITHIN THE TPZ.
- IF PROTECTION TO THE EDGE OF DRIPLINE IS NOT FEASIBLE TREE PROTECTION MEASURES TO BE REVIEWED ON SITE WITH THE CONTRACT ADMINISTRATOR. AT MINIMUM FENCING TO BE INSTALLED 2.0m FROM TREE TRUNK.
- PROTECTIVE BARRIER FENCING WILL REMAIN STANDING AND IN GOOD CONDITION UNTIL CONSTRUCTION COMPLETION.
- THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT PLANT AND ROOT SYSTEMS FROM DAMAGE, COMPACTION AND CONTAMINATION RESULTING FROM THE CONSTRUCTION TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.

PRUNING OF PROTECTED TREES

- IN THE EVENT THAT IT IS NECESSARY TO REMOVE LIMBS OR PORTIONS OF TREES TO ACCOMMODATE CONSTRUCTION, CONTRACT ADMINISTRATOR IS TO BE INFORMED AND THE REMOVAL IS TO BE EXECUTED CAREFULLY AND IN ACCORDANCE WITH PROPER ARBORICULTURAL TECHNIQUES BY A CERTIFIED ARBORIST. ON-SITE APPROVAL BY PROJECT ENGINEER IS REQUIRED PRIOR TO REMOVAL OPERATIONS.
- DURING EXCAVATION OPERATIONS IN WHICH ROOTS ARE AFFECTED, THE CONTRACTOR IS TO PRUNE ALL EXPOSED ROOTS CLEANLY. PRUNED ENDS TO POINTED OBLIQUELY DOWNWARDS. DO NOT ALLOW EXPOSED ROOTS TO DRY OUT. THE CONTRACTOR SHALL DISCUSS WATERING OF THE ROOTS WITH THE CONTRACT ADMINISTRATOR SO THAT OPTIMUM SOIL MOISTURE IS MAINTAINED DURING CONSTRUCTION AND BACK FILLING OPERATIONS, SO AS NOT TO INTERFERE WITH CONSTRUCTION OPERATIONS.

COMMUNICATION PLAN

- THE CONTRACTOR IS TO IMPLEMENT A COMMUNICATION PLAN TO ENSURE TREE PROTECTION REQUIREMENTS ARE FOLLOWED.
- THE CONTRACT ADMINISTRATOR WILL OVERSEE TREE PROTECTION REQUIREMENTS. THE CONTRACT ADMINISTRATOR WILL BE PROVIDED CONTACT INFORMATION FOR THE SITE SUPERVISOR AND ALL REPLACEMENTS SHOULD THE MAIN SITE SUPERVISOR NOT BE AVAILABLE.
- FOR ALL TREE RELATED ISSUES THE CONTRACT ADMINISTRATOR WILL BE NOTIFIED IMMEDIATELY TO DISCUSS THE ISSUES AND REQUIRED MITIGATION.
- THE CONTRACTOR IS TO MONITOR TREE CONDITION DURING CONSTRUCTION. ENSURE TREES ARE NOT DAMAGED OR SHOWING SIGNS OF DECLINE.
- IF GRADES WITHIN THE DRIPLINE OF AN EXISTING TREE ARE TO BE CHANGED REFER TO GRADING NOTES.

CREEK DIVERSION NOTES

- CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY, INSTALLATION, MAINTENANCE AND MODIFICATION OF THE ISOLATION AND CREEK DIVERSION MEASURE REQUIRED TO FACILITATE CONSTRUCTION.
- THE CITY HAS IDENTIFIED TWO FEASIBLE OPTIONS FOR CREEK DIVERSION.
 - DAM THE CREEK IMMEDIATELY UPSTREAM OF THE WORKS AND INSTALL A GRAVITY DIVERSION CONSISTING OF PIPE AND LINED CHANNEL, THROUGH THE WORK AREA TO THE DOWNSTREAM END OF THE WORK AREA.
 - DAM THE CREEK IMMEDIATELY UPSTREAM OF THE WORKS, INSTALL PUMPS TO DRAW THE WATER ABOVE THE CHANNEL BANK TO CARRY DIVERTED WATER PAST THE WORK AREA AND RELEASE IT DOWNSTREAM OF THE WORK AREA.
- HISTORICALLY, THE MEAN PEAK CREEK DISCHARGE IN AUGUST IS 0.93 m³/s. THE HISTORIC 10-YEAR AUGUST FLOW IS 2.17 m³/s.
- THE CONTRACTOR IS RESPONSIBLE FOR THE SIZING OF THE PUMPS, PIPES, DIVERSION DAMS AND RELATED COMPONENTS REQUIRED TO FACILITATE THE WORKS.
- CREEK ISOLATION AND DIVERSION MEASURES TO BE EXECUTED IN ACCORDANCE WITH THE REGULATORY APPROVALS.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING FLOW DISPERSION FEATURES AT THE OUTLET TO ENSURE THAT THE VELOCITY OF THE DIVERTED FLOW DOES NOT CREATE EROSION, DAMAGE THE RESTORED CREEK, OR DAMAGE DOWNSTREAM INFRASTRUCTURE.
- ALL PIPE MUST BE PRESSURE-WASHED TO REMOVE ALL DUST AND DEBRIS PRIOR BEING DELIVERED TO THE SITE.
- ALL DIVERSION PIPE MUST BE SUPPORTED DURING CONSTRUCTION IN ORDER TO ENSURE ITS INTEGRITY WITH EXTRA CARE TAKEN AT EQUIPMENT CROSSING LOCATIONS.
- A DIVERSION ROUTE SHALL BE DETERMINED BY THE CONTRACTOR TO MAXIMIZE THE EFFICIENCY OF THE PROJECT WHILE ADHERING TO THE SPECIFICATIONS DEFINED HEREIN WITH REGARDS TO SAFETY, TRAFFIC AND EXISTING INFRASTRUCTURE.

- THE CONTRACTOR IS RESPONSIBLE FOR MONITORING CREEK FLOWS UPSTREAM OF THE SITE. IF THE IMPOUNDED DEPTH OF WATER MEETS OR EXCEEDS 1.2m, CONTRACTOR IS TO NOTIFY THE CONTRACT ADMINISTRATOR AND TAKE MEASURES TO ENSURE THE SAFETY OF THE SITE AND CONSTRUCTION AREA.

- CONTRACTOR IS TO MONITOR THE INLET OF THE DIVERSION SYSTEM FOR DEBRIS AND BLOCKAGES ON A REGULAR BASIS. ANY DEBRIS OR BLOCKAGES ARE TO BE CLEARED.

GRADING NOTES

- ESTABLISH POSITIVE DRAINAGE THROUGHOUT THE SITE.
- REHABILITATED SOFT LANDSCAPE AREAS SHALL HAVE A GRADIENT NO LESS THAN 2.0% AND NO MORE THAN 33% - UNLESS OTHERWISE NOTED ON DRAWINGS
- IF GRADES WITHIN THE DRIPLINE OF AN EXISTING TREE ARE TO BE CHANGED, THE CONTRACTOR SHALL BE REQUIRED TO CONTACT THE CONTRACT ADMINISTRATOR PRIOR TO GRADING WITHIN THE DRIPLINE SO THAT PRECAUTIONS TO PRESERVE THE TREE CAN BE DETERMINED.
- PRIOR TO SITE GRADING REVIEW ON SITE WITH THE CONTRACT ADMINISTRATOR, THE IMPACT OF GRADING AROUND EXISTING TREES TO REMAIN.
- FIELD FIT GRADING ADJACENT TO EXISTING TREES TO PRESERVE AND MAINTAIN EXISTING GRADE MINIMUM 2.0m FROM TRUNK WHERE FEASIBLE.
- WHERE GRADING CHANGES WITHIN THE DRIPLINE, THE INTENT IS TO MAINTAIN THE TREE FOR FISH HABITAT ENHANCEMENTS. IF SITE WORKS EXPOSE ROOTS REFER TO TREE PROTECTION NOTES FOR ROOT PRUNING TECHNIQUES.
- DURING THE MAINTENANCE PERIOD IF STRUCTURAL INTEGRITY OF TREES WITH GRADING COMPLETED WITHIN THE DRIPLINE IS DEEMED UNSAFE BY A DANGER TREE ASSESSOR, THE TREE IS TO BE FELLED AND REMOVED FROM SITE BY A CERTIFIED PROFESSIONAL IN A MANNER TO ENHANCE FISH HABITAT.

ROCK/MATERIAL PLACEMENT NOTES

- PLACE RIPRAP BEDDING, RIPRAP AND BOULDER AT THE LOCATIONS, AND TO THE LINES, GRADES, AND ELEVATION SPECIFIED IN THE DRAWINGS.
- RECEIVING SURFACES ARE TO CONSIST OF NATIVE GRAVELS. IF THIS IS NOT THE CASE, THE CONTRACTOR IS TO OVER-EXCAVATE 100mm AND PLACE 100mm OF GRAVEL INFILL MATERIAL BEFORE PLACING CHANNEL BED MATERIAL.
- CONCRETE AND OTHER DELETERIOUS MATERIALS MUST BE REMOVED FROM RECEIVING SURFACES.
- DO NOT PLACE CHANNEL BED MATERIAL UNTIL THE RECEIVING SURFACES HAVE BEEN INSPECTED BY THE CONTRACT ADMINISTRATOR. RECTIFY DEFECTS UNTIL THE RECEIVING SURFACES MEET THE REQUIREMENTS OF THE CONTRACT.
- PLACE BY BACKHOE WITH A THUMB, OR SIMILAR LIFTING EQUIPMENT. DO NOT END DUMP AND PUSH CHANNEL BED MATERIAL INTO PLACE ON THE SLOPES.
- DO NOT CAUSE SEGREGATION, PARTICLE DAMAGE, BREAKDOWN, OR EXCESSIVE DISPLACEMENT OF THE PREVIOUSLY PLACED CHANNEL BED MATERIAL. REPLACE OR REPAIR DAMAGED OR DISPLACED MATERIAL.
- OBTAIN THE SPECIFIED DISTRIBUTION OF THE VARIOUS SIZES OF PARTICLES THROUGHOUT BY USING SELECTIVE LOADING AT THE SOURCE OR STOCKPILE.
- COMMENCE PLACEMENT OF CHANNEL BED MATERIAL FROM THE TOE OF THE SLOPE AND PROCEED UP THE SLOPE.
- PLACE CHANNEL BED MATERIAL TO ITS FULL THICKNESS IN ONE OPERATION. COMPACTION IS NOT REQUIRED.
- PLACE CHANNEL BED MATERIAL IN A CLOSELY PACKED ARRANGEMENT SUCH THAT SMALLER ROCKS FILL THE VOIDS BETWEEN LARGER ROCKS AND THERE ARE NO UNFILLED SPACES THAT WOULD PERMIT THE ESCAPE OF UNDERLYING LAYERS OF PLACED MATERIALS. INTERLOCK PARTICLE AND DRESS SLOPES AS REQUIRED.
- REARRANGE ROCKS TO ELIMINATE ANY TENDENCY OF THE ROCKS TO MOVE OR SLIDE AFTER PLACEMENT.
- DO NOT BREAK INDIVIDUAL CHANNEL BED MATERIAL PARTICLES AFTER PLACEMENT.
- FILL THE CHANNEL BED MATERIAL VOIDS WITH GRAVEL INFILL MATERIAL OR TOPSOIL IN AREAS WHERE SPECIFIED IN THE CONTRACT.
- PLACE LARGE AND SMALL SPANNING GRAVELS AS SPECIFIED ON THE DRAWINGS.
- PROVIDE A COMPLETED CHANNEL BED MATERIAL SURFACE THAT IS SMOOTH, REGULAR, UNIFORM WITH SOME EMERGENT BOULDERS AS DIRECTED BY THE CONTRACT ADMINISTRATOR.
- ALL LOGS PLACED IN THE CHANNEL ARE TO BE UNTREATED.

GRAVEL INFILL MATERIAL WASHING NOTES

- GRAVEL IN VOIDS IS TO BE INSTALLED IN 50mm LIFTS WITH EACH LIFT BEING "WASHED" IN TO FILL THE VOIDS BETWEEN THE ROCKS.
- REFER TO WATER SUPPLY NOTES FOR WASH WATER SOURCE WITH BEST PRACTICES BEING UTILIZED (e.g. FISH SCREEN ON INTAKE, REMOVAL DEBRIS FROM SCREEN, ETC.).
- CONTRACTOR TO ENSURE THAT THE WASHING PROCESS DOES NOT GENERATE RUNOFF THAT IMPACTS THE CREEK OUTSIDE THE WORK AREA.
- SEDIMENT-LADEN WATER MUST NOT BE RELEASED OUTSIDE THE WORK AREA. PUMPING OF SEDIMENT LADEN WATER AND REMOVAL FROM SITE VIA TANKER TRUCK MAY BE REQUIRED. REFER TO ESC MEASURES OUTLINED IN THE CEMP.
- ONCE VOIDS HAVE BEEN FILLED, CONTRACTOR IS TO TEST THE VOIDS BY ADDING WATER ATOP THE FINISHED SURFACE. AREAS WHERE WATER FLOWS ON THE SURFACE AND NOT SEEP THROUGH THE VOIDS IN THE ROCKS WILL BE CONSIDERED TO HAVE ADEQUATE VOIDS FILLED. AREAS WHERE WATER FLOW ENTERS THE ROCK VOIDS ARE TO BE INFILLED WITH ADDITIONAL GRAVEL AND RETESTED. THE PROJECT ENGINEER SHALL BE IN ATTENDANCE FOR THESE TESTS AND SHALL PROVIDE APPROVAL OF AREAS.

WATER SUPPLY NOTES

- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE NECESSARY WATER REQUIRED TO MEET THE MOISTURE CONDITIONS OF ALL BACKFILL MATERIALS, LANDSCAPING AND PROVIDE DUST CONTROLS AT ALL TIMES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO THE CURRENT POLICIES SET FORTH BY THE PROVINCE WITH RESPECT OF WITHDRAWAL FROM WATER BODIES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING WATER TO MEET THE PROJECT REQUIREMENTS, ANY ASSOCIATED COSTS, PERMITS OR APPROVALS IS CONSIDERED INCIDENTAL TO THE CONTRACT.

MATERIAL SIZING

BOULDER CLUSTER MATERIAL

PERCENT FINER	GRAIN SIZE (mm)
100	450
0	400

ROCK LINES

PERCENT FINER	GRAIN SIZE (mm)
100	715
0	600

CHANNEL BED / COBBLE BOULDER MATERIAL

PERCENT FINER	GRAIN SIZE (mm)
100	450
85	380
50	260
15	120

GRAVEL INFILL MATERIAL

PERCENT FINER	GRAIN SIZE (mm)
100	152
85	102
50	76
25	25
15	13
5	2
0	0.0625

SMALL SPANNING GRAVEL

PERCENT FINER	GRAIN SIZE (mm)
100	75
75	50
0	19

LARGE SPANNING GRAVEL

PERCENT FINER	GRAIN SIZE (mm)
100	100
75	75
0	50

CLASS 50 KG RIPRAP

PERCENT FINER	GRAIN SIZE (mm)
100	565
85	475
50	330
15	155

CLASS 250 KG RIPRAP

PERCENT FINER	GRAIN SIZE (mm)
100	965
85	815
50	565
15	260

ROOTWADS

- FIR LOG WITH ROOT ATTACHED, 5m LONG, DIAMETER 250-350mm. ROOT WAD MINIMUM OF 800mm DIAMETER.

LOGS

- FIR LOG WITHOUT ROOT OR BRANCHES ATTACHED, 10m LONG, DIAMETER 250-350mm.

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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE	H: N/A V: N/A
SHEET	4 OF

TITLE	GENERAL NOTES & MATERIAL SIZING
TITLE	POLSON PARK NATURALIZATION PHASE 2
DRAWING NUMBER	G004

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JJ	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:750
V: N/A

SHEET
4 OF

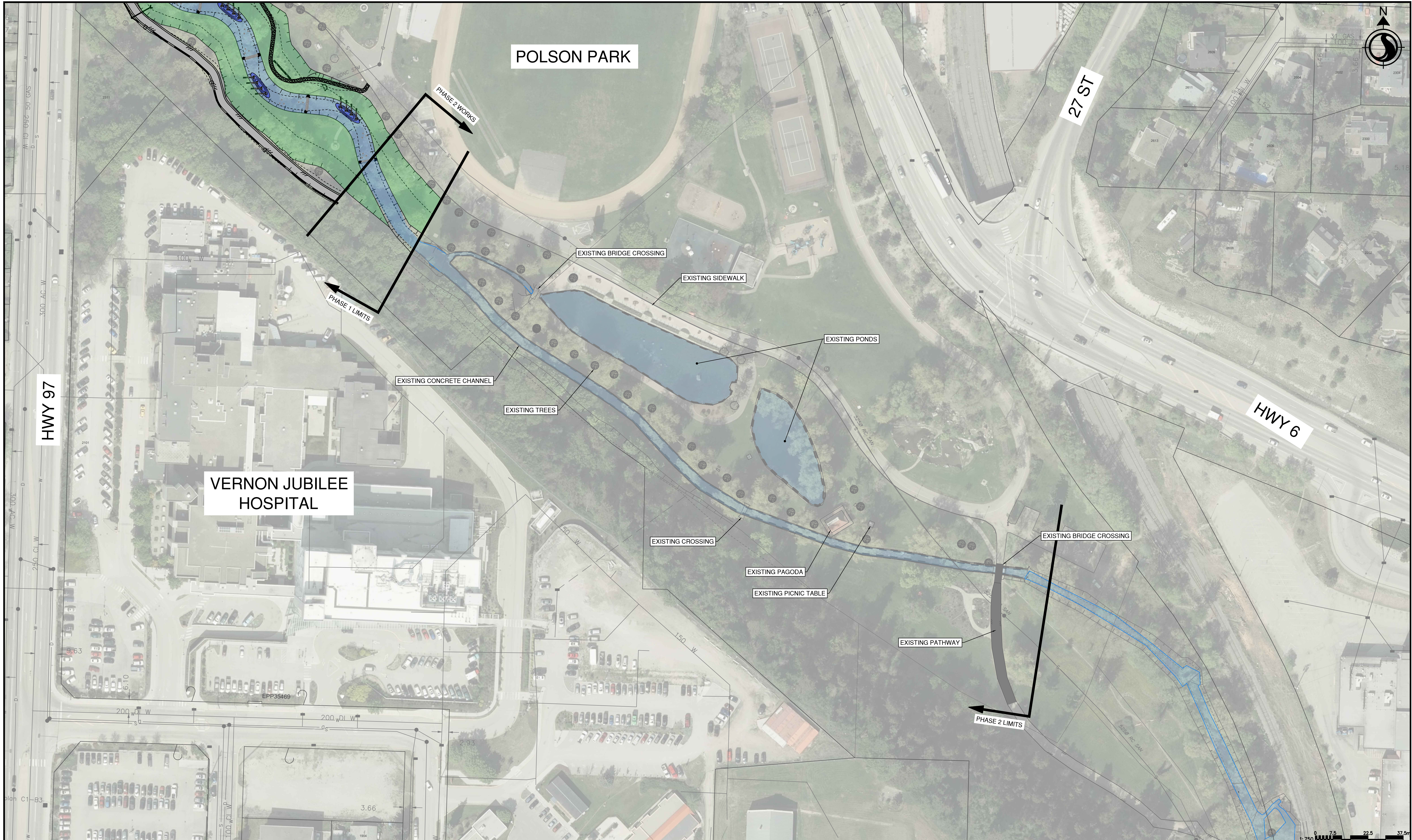
TITLE
KEY PLAN

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C104

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JJ	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:750
V: N/A

SHEET
5 OF

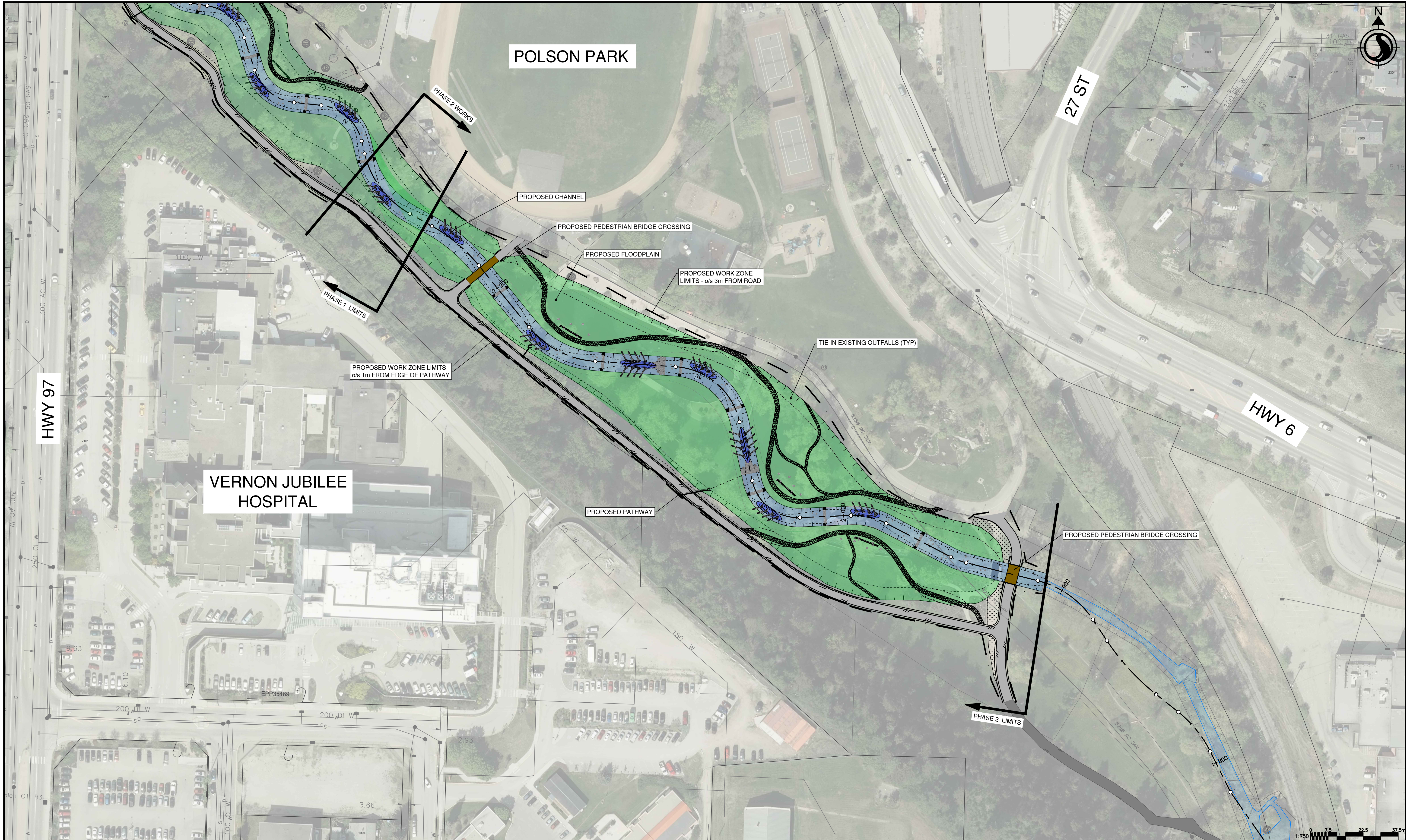
TITLE
EXISTING CONDITIONS SITE PLAN

**POLSON PARK NATURALIZATION
PHASE 2**

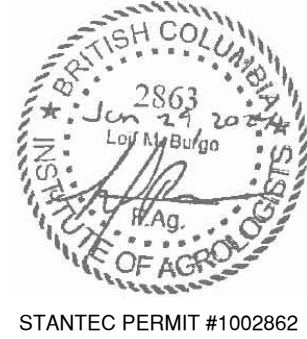
DRAWING NUMBER
C105

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JJ	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:750
V: N/A

SHEET
6 OF

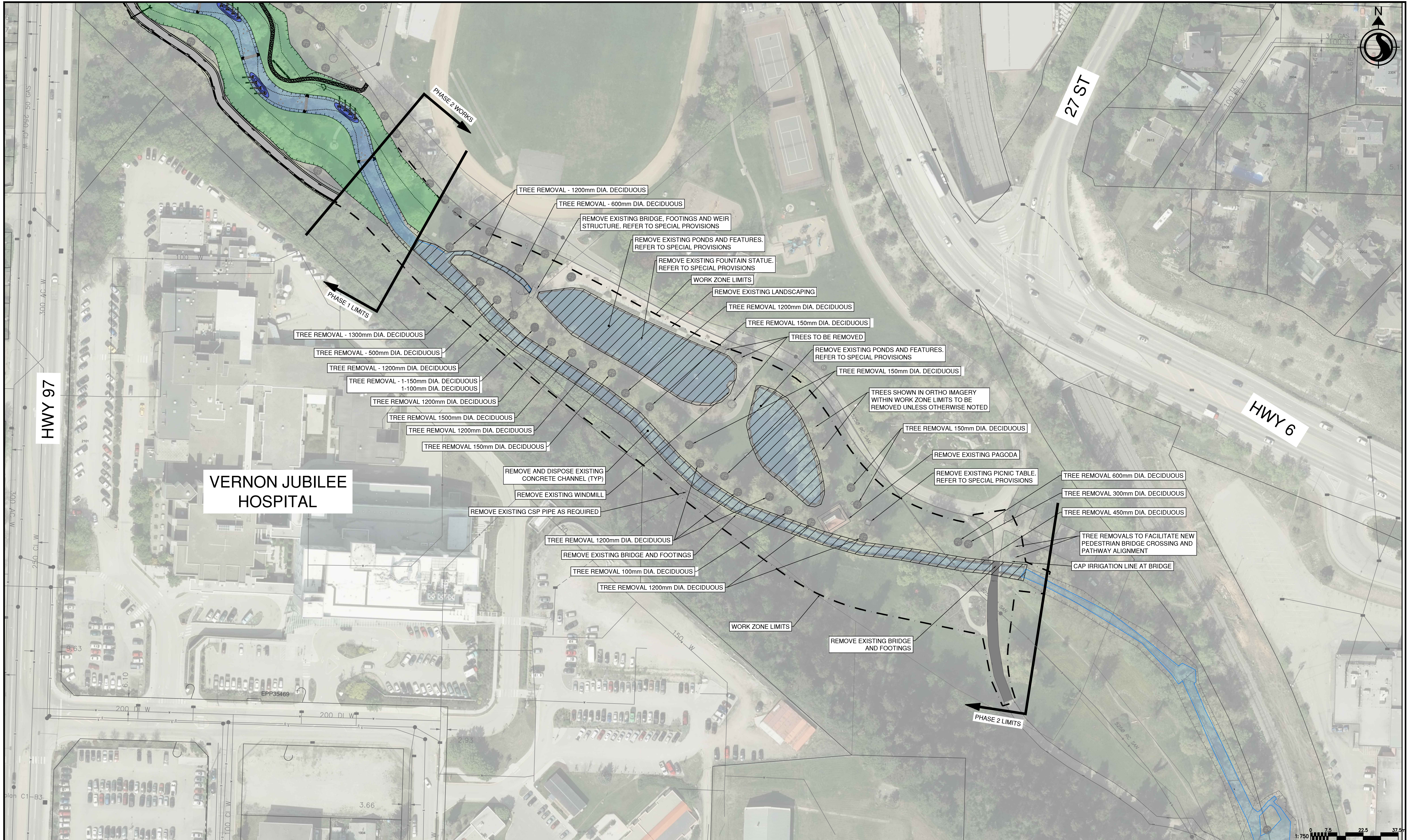
TITLE
PROPOSED SITE PLAN

**POLSON PARK NATURALIZATION
PHASE 2**

DRAWING NUMBER
C106

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JJ	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:750
V: N/A

SHEET
7 OF

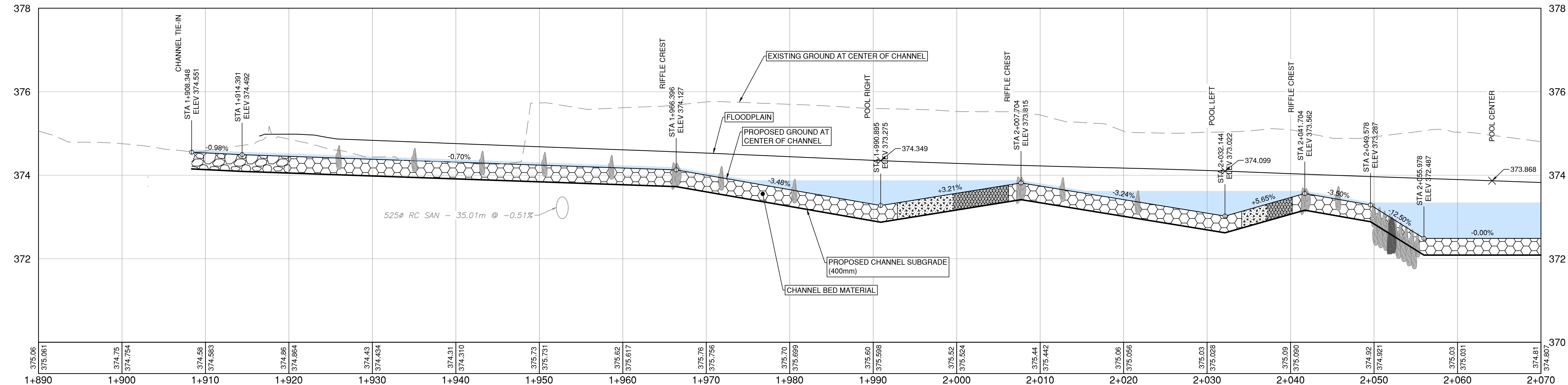
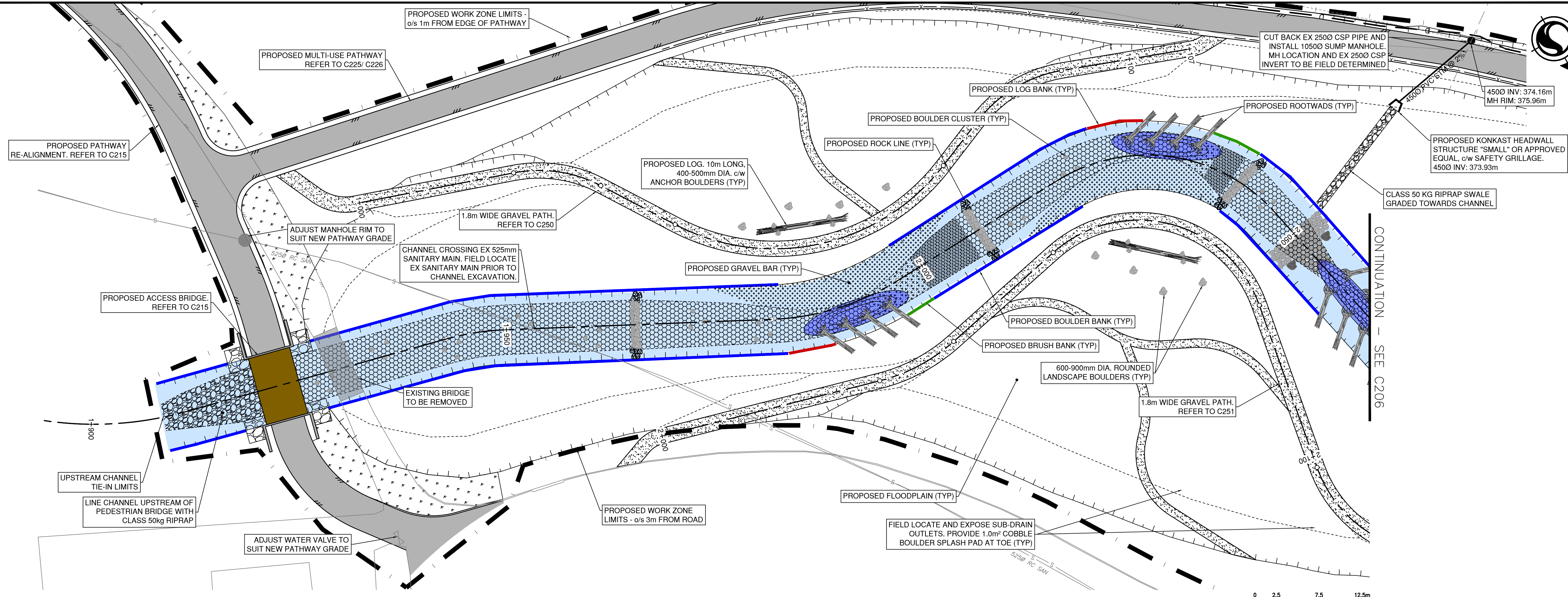
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REMOVALS PLAN

**POLSON PARK NATURALIZATION
PHASE 2**

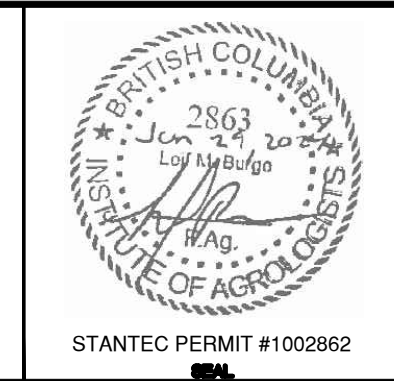
DRAWING NUMBER
C112

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JJ	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:250
V: 1:50

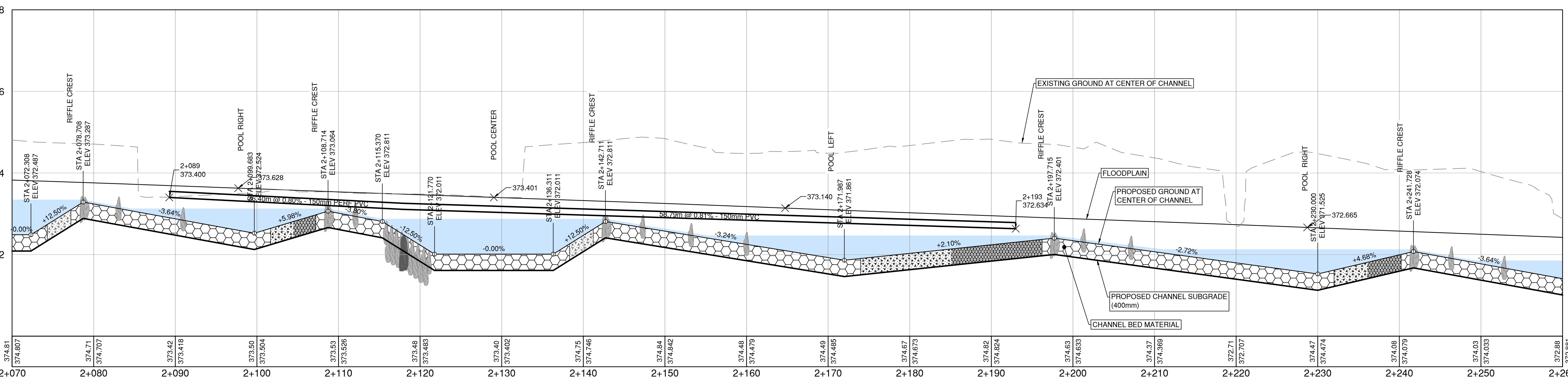
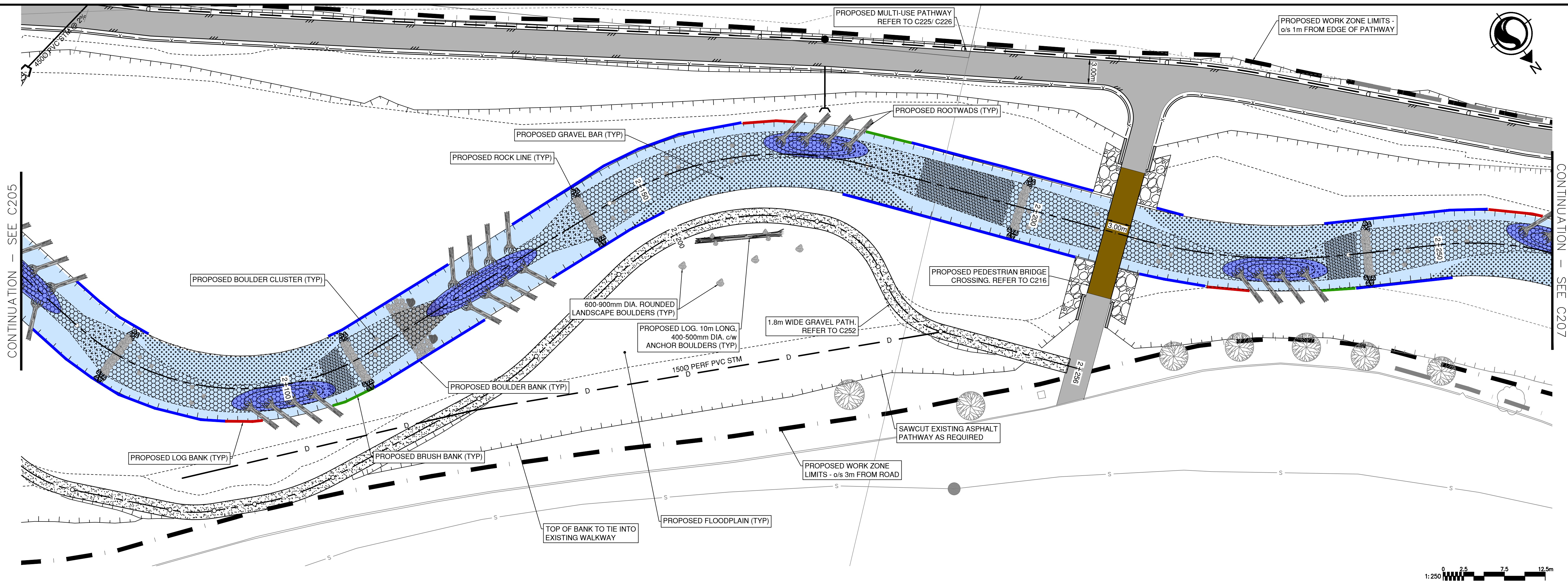
SHEET
9 OF

TITLE
CHANNEL PLAN/PROFILE
STA 1+900 - 2+070
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C205

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL

CITY OF VERNON
ENGINEERING AND GIS SERVICES

SCALE
H: 1:250
V: 1:50

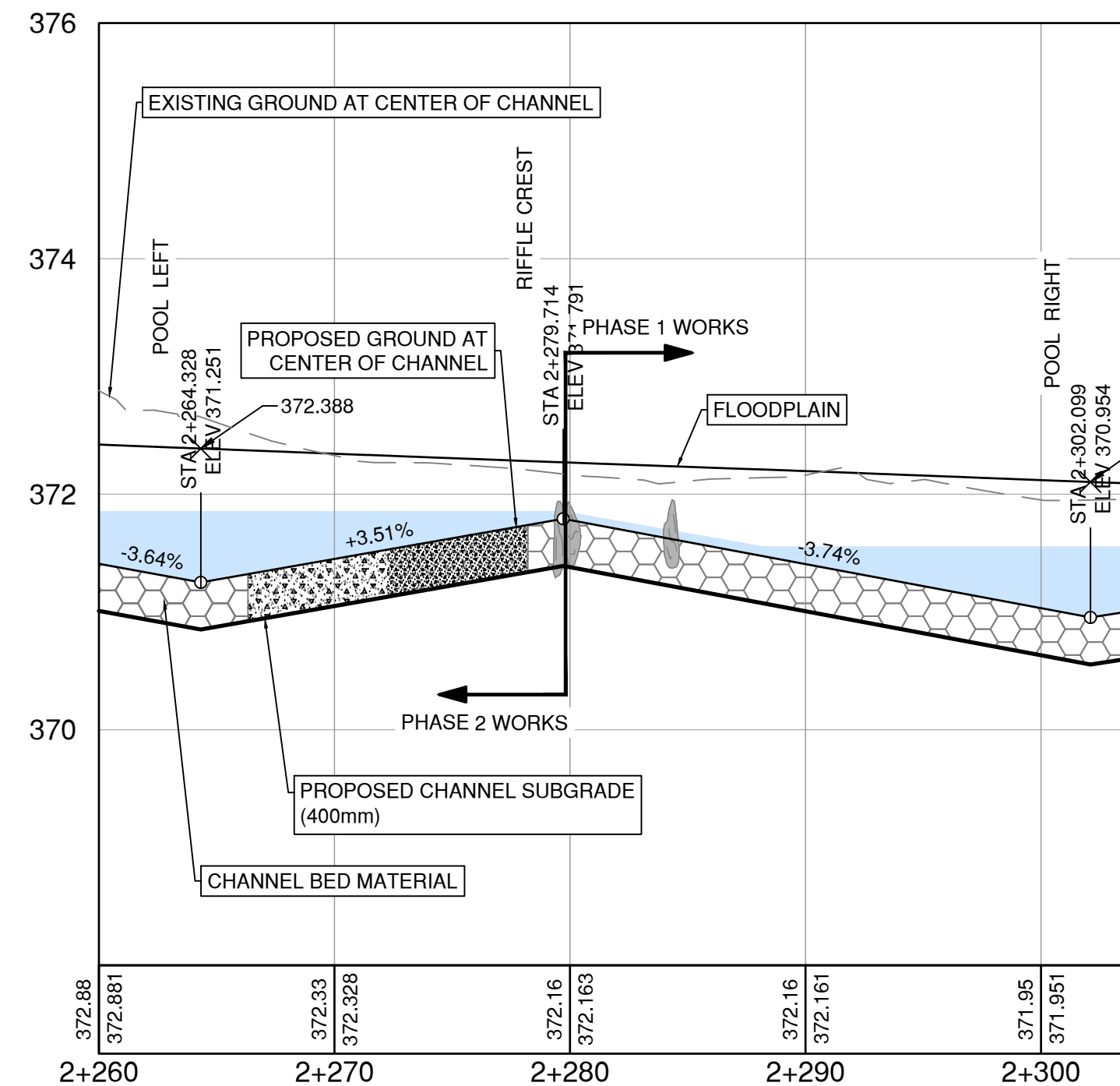
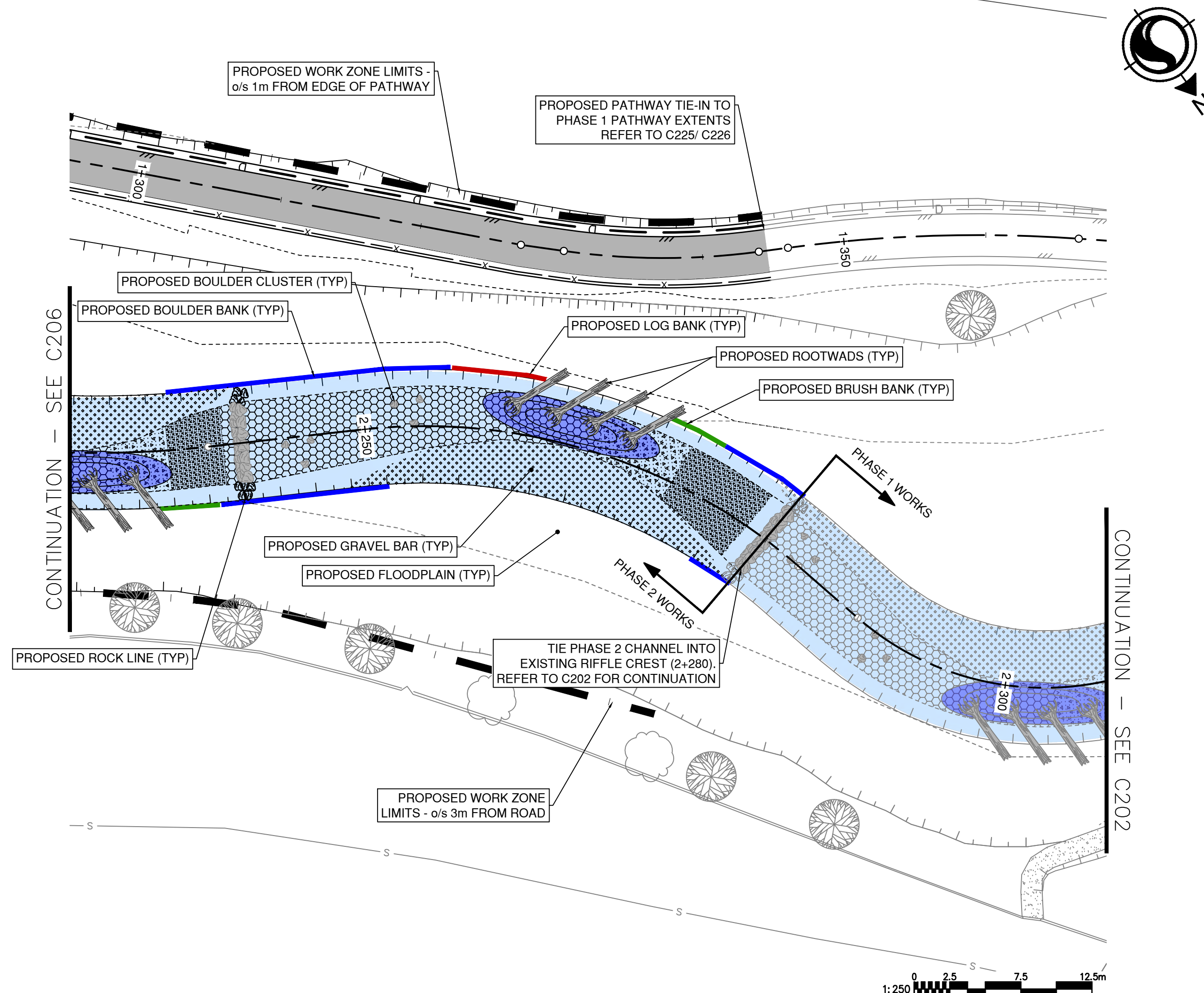
SHEET
10 OF

TITLE
CHANNEL PLAN/PROFILE
STA 2+070 - 2+260
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C206

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28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:250
V: 1:50

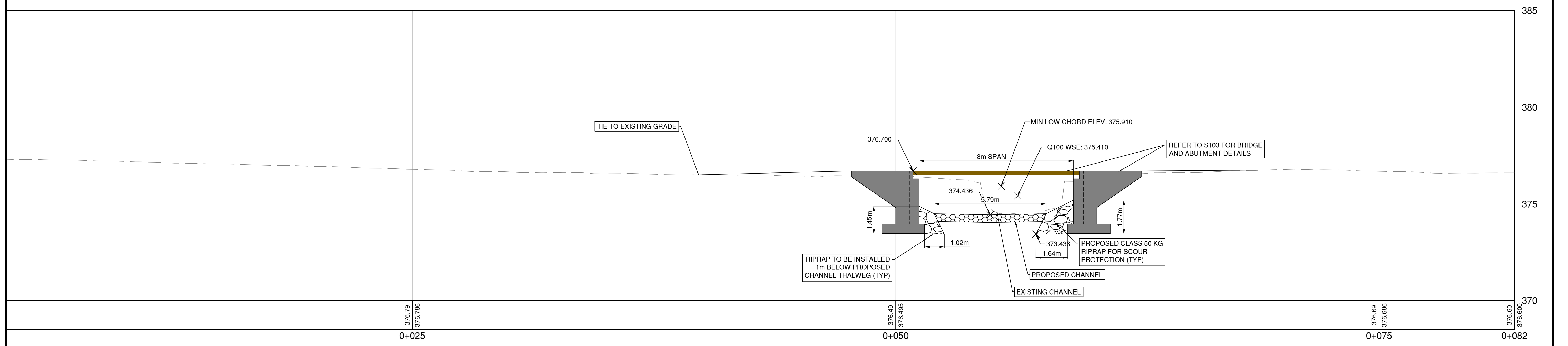
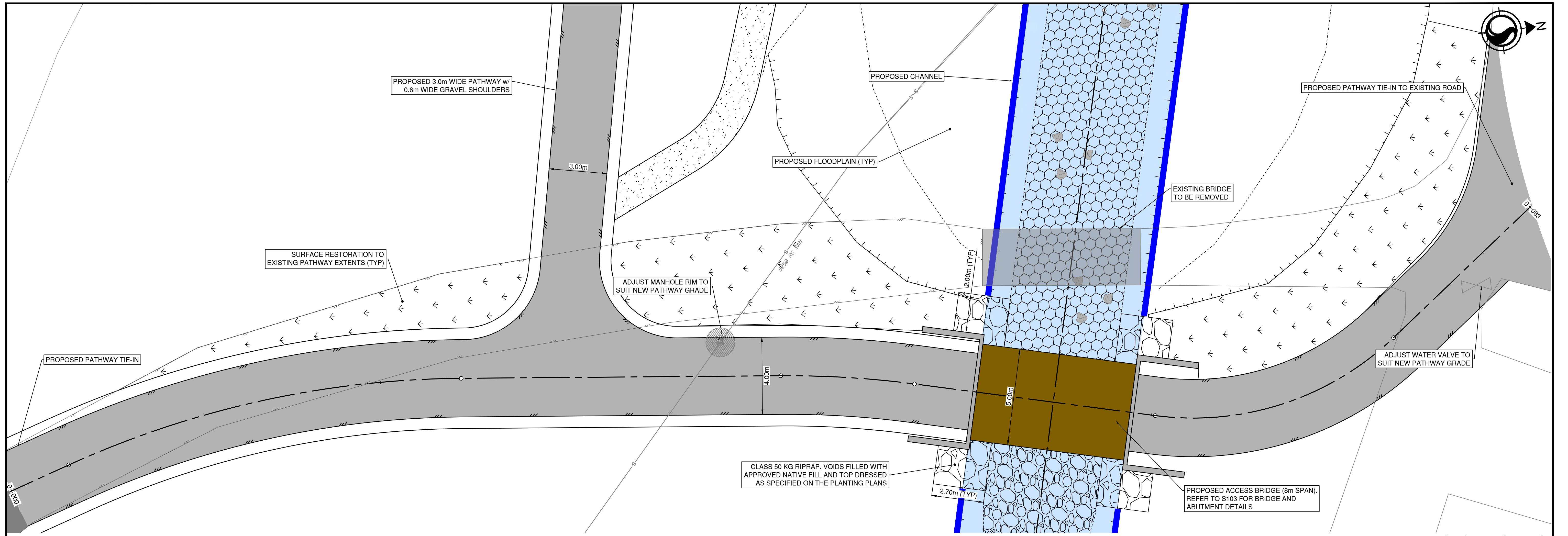
SHEET
11 OF

TITLE
CHANNEL PLAN/PROFILE
REACH 2 DOWNSTREAM CHANNEL TIE-IN
POLSON PARK NATURALIZATION
PHASE 2

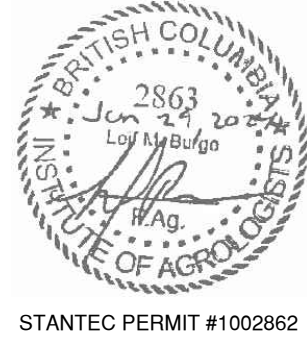
DRAWING NUMBER
C207

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01.02.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL

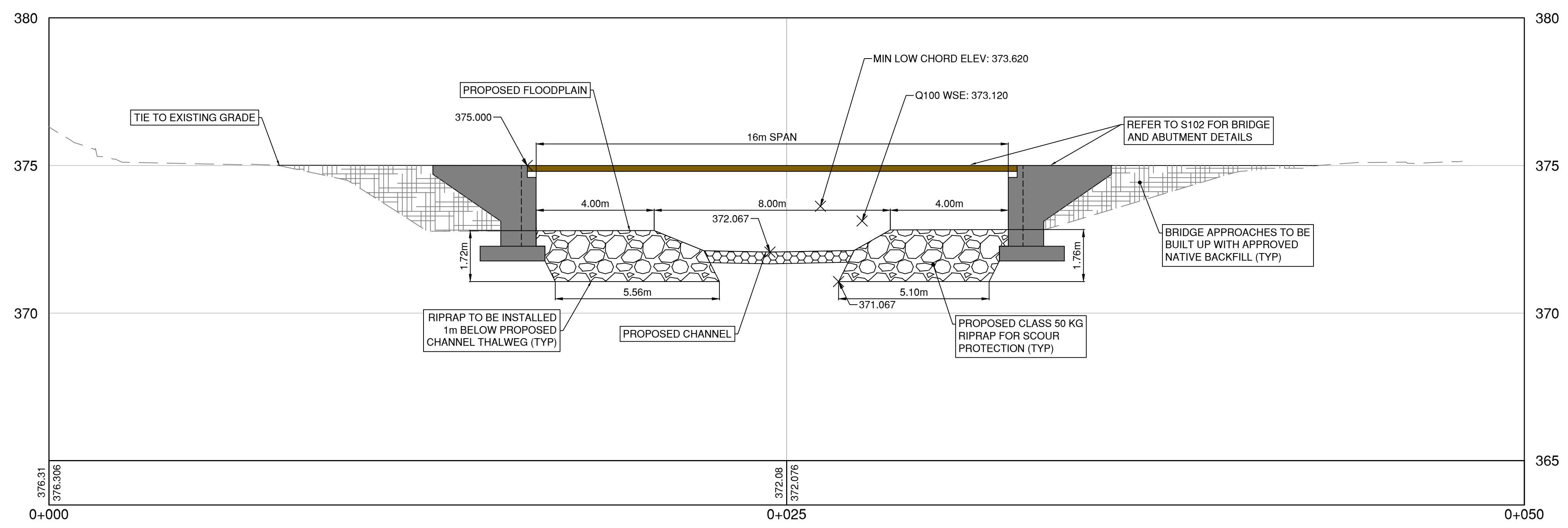
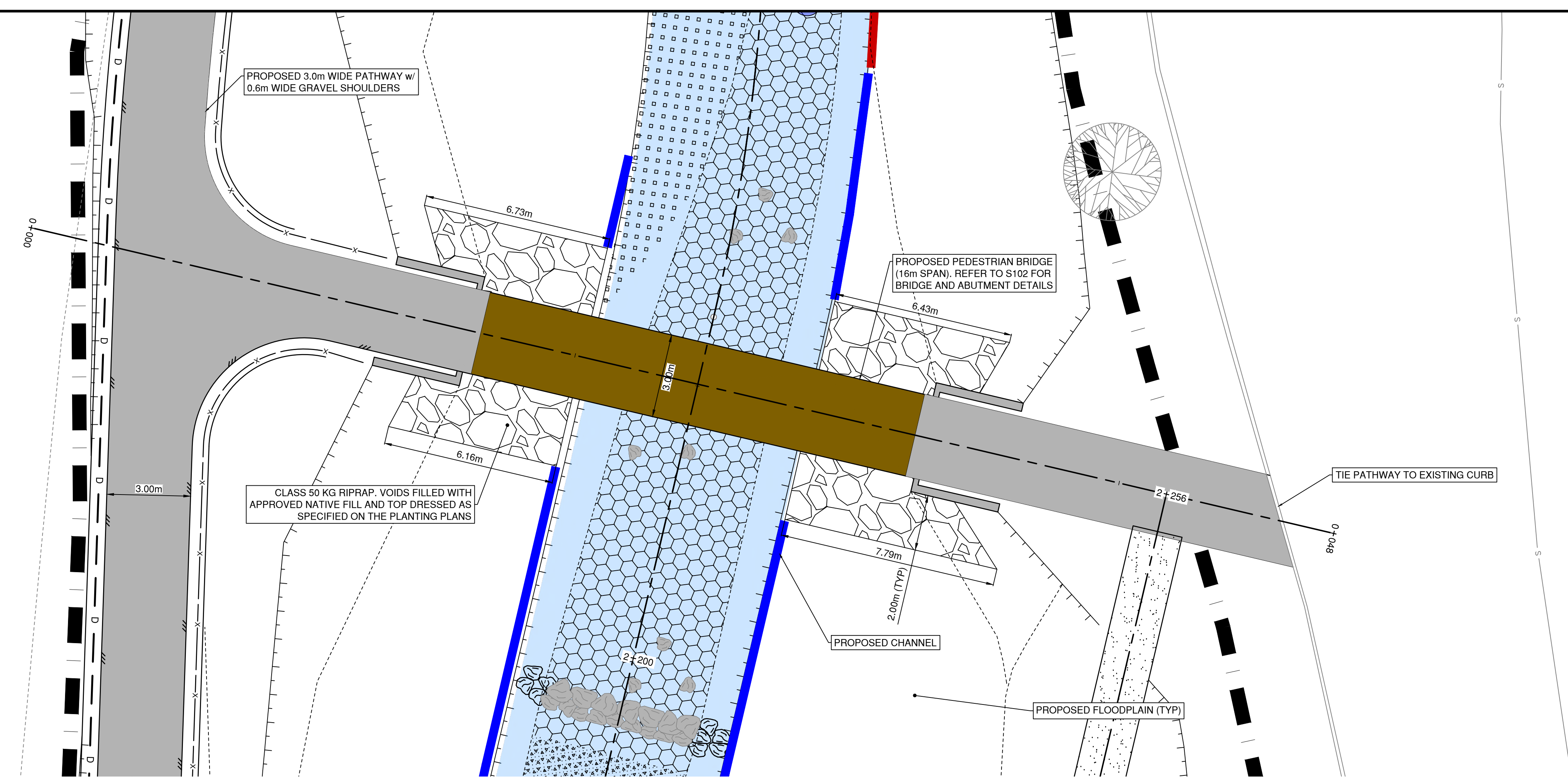
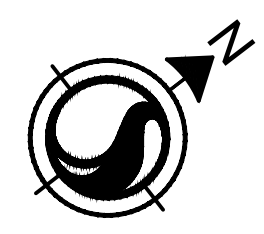


SCALE
H: 1:100
V: 1:100

SHEET
12 OF

TITLE
ACCESS BRIDGE PLAN/PROFILE
STA 1+922
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C215



\\C:\0047-PPFSS01\WORKGROUP\01117\active\11170119\4_drawing\02_sheets\C201_Phase2.dwg

01.02.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL

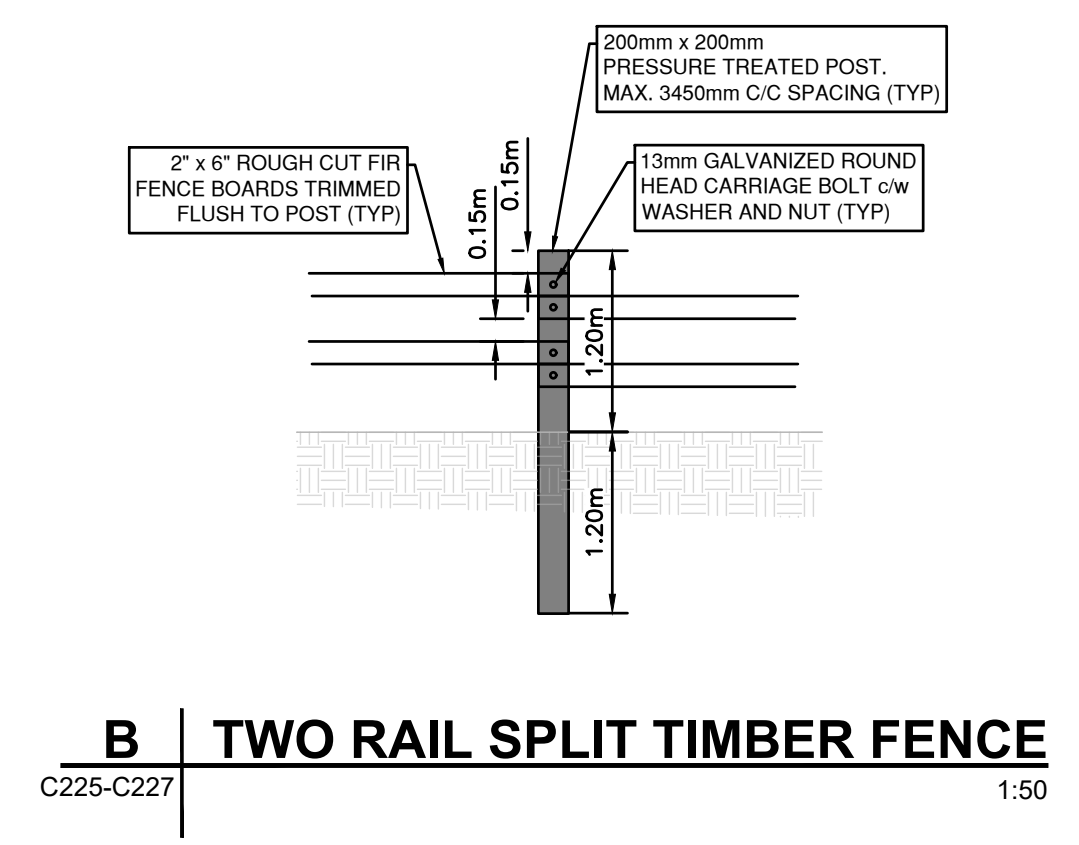
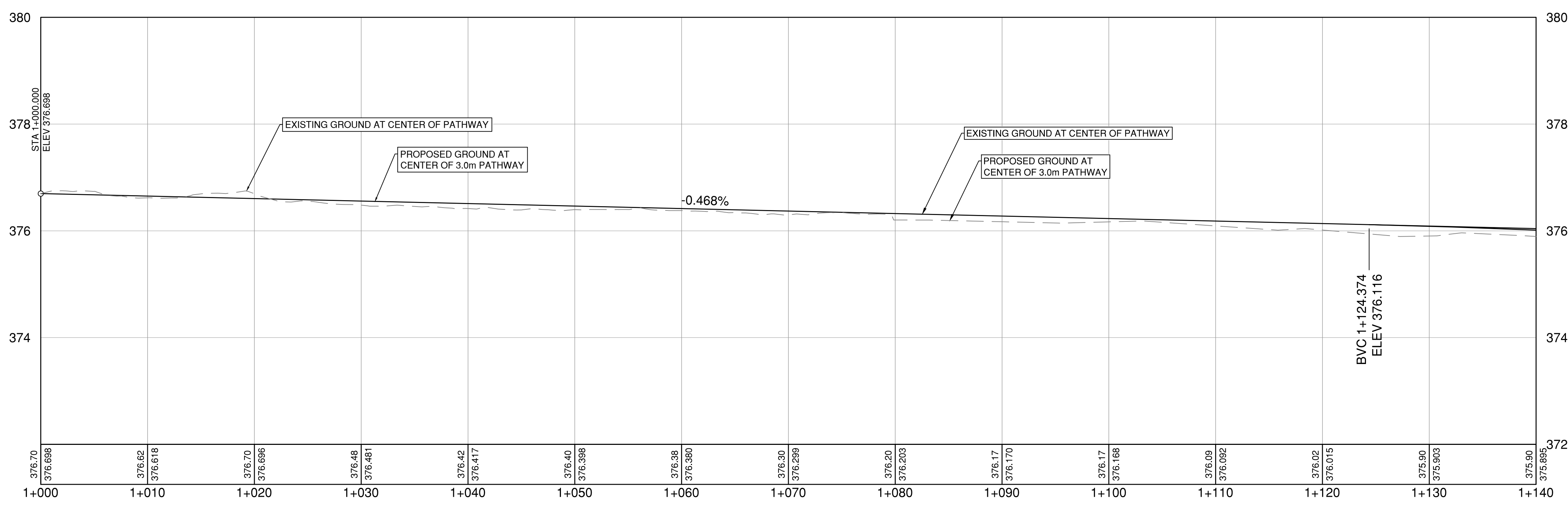
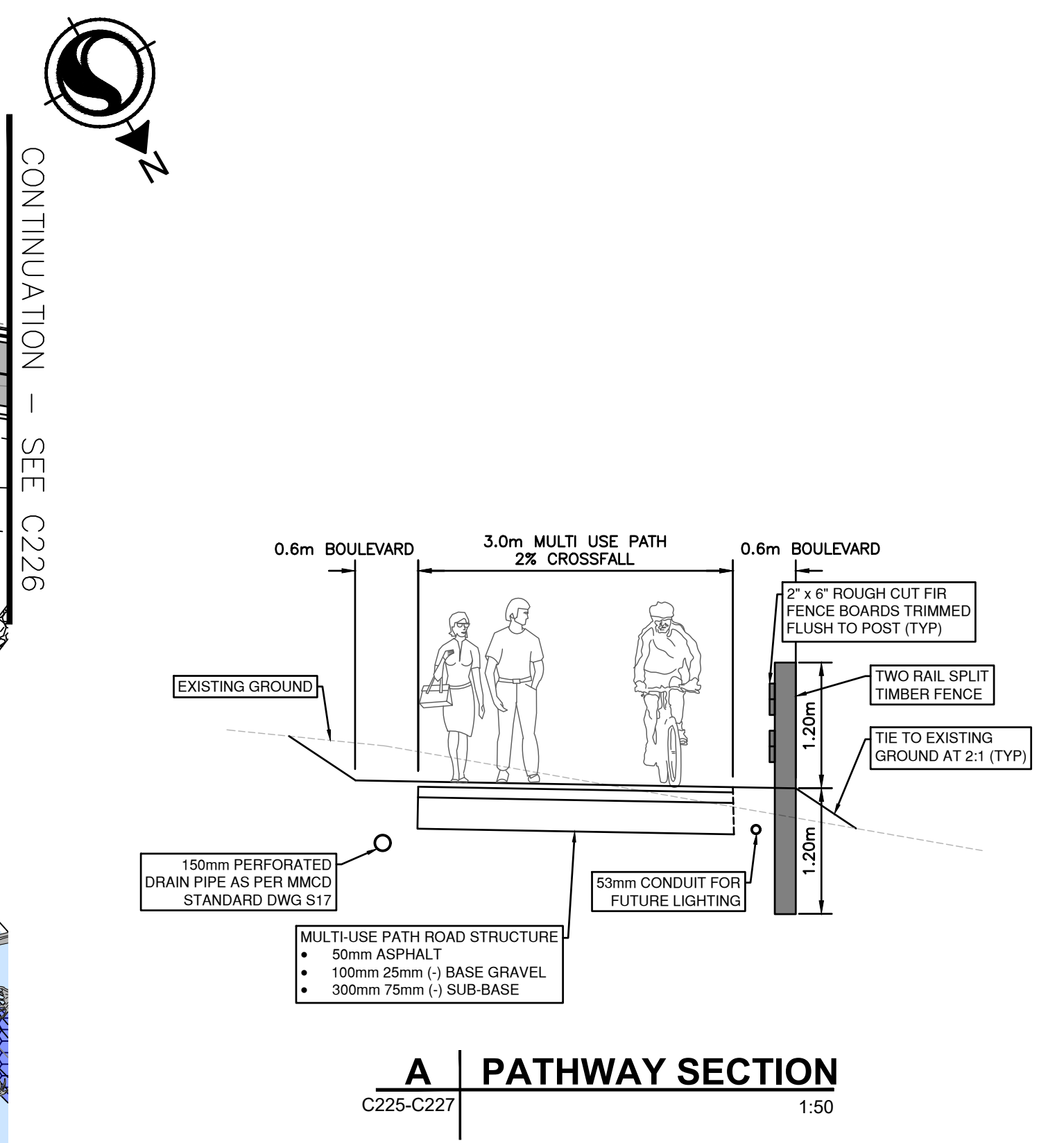
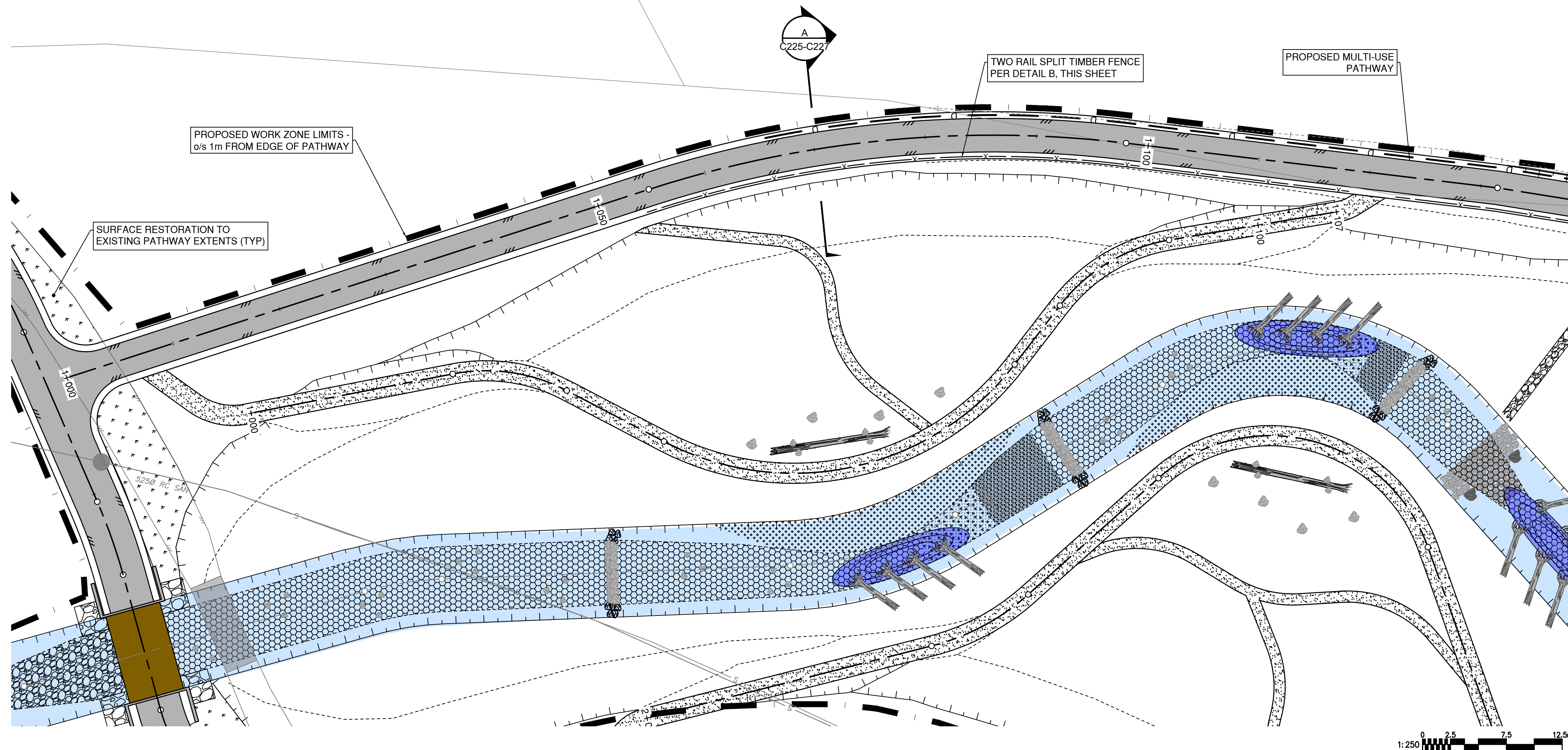


SCALE
H: 1:100
V: 1:100

SHEET
13 OF

TITLE
PEDESTRIAN BRIDGE PLAN/PROFILE
STA 2+210
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C216



28.01.2024 \\C:\0047-PPFSS01\WORKGROUP\01117\active\11170119\4_drawings\02_sheets\C201_Phase2.dwg

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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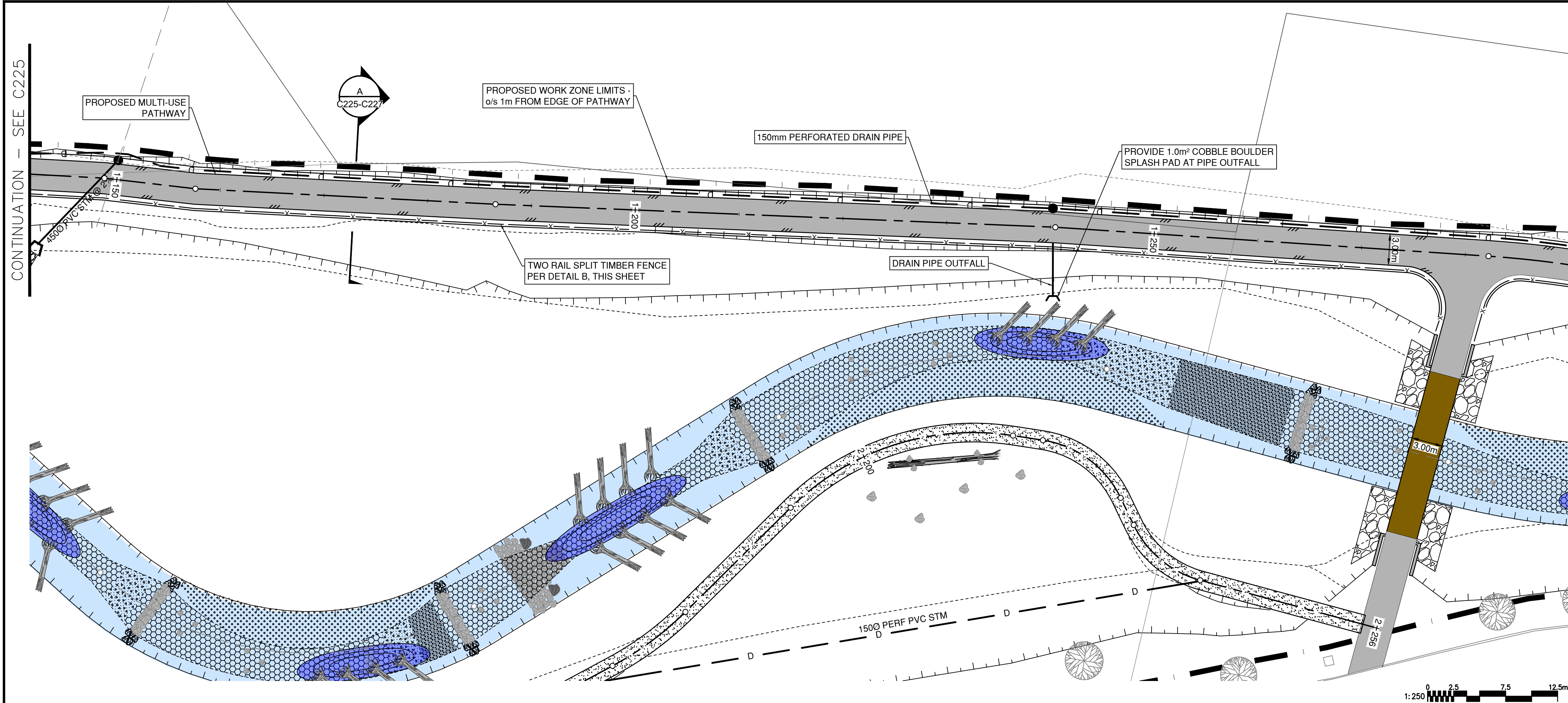


SCALE
H: 1:250
V: 1:50

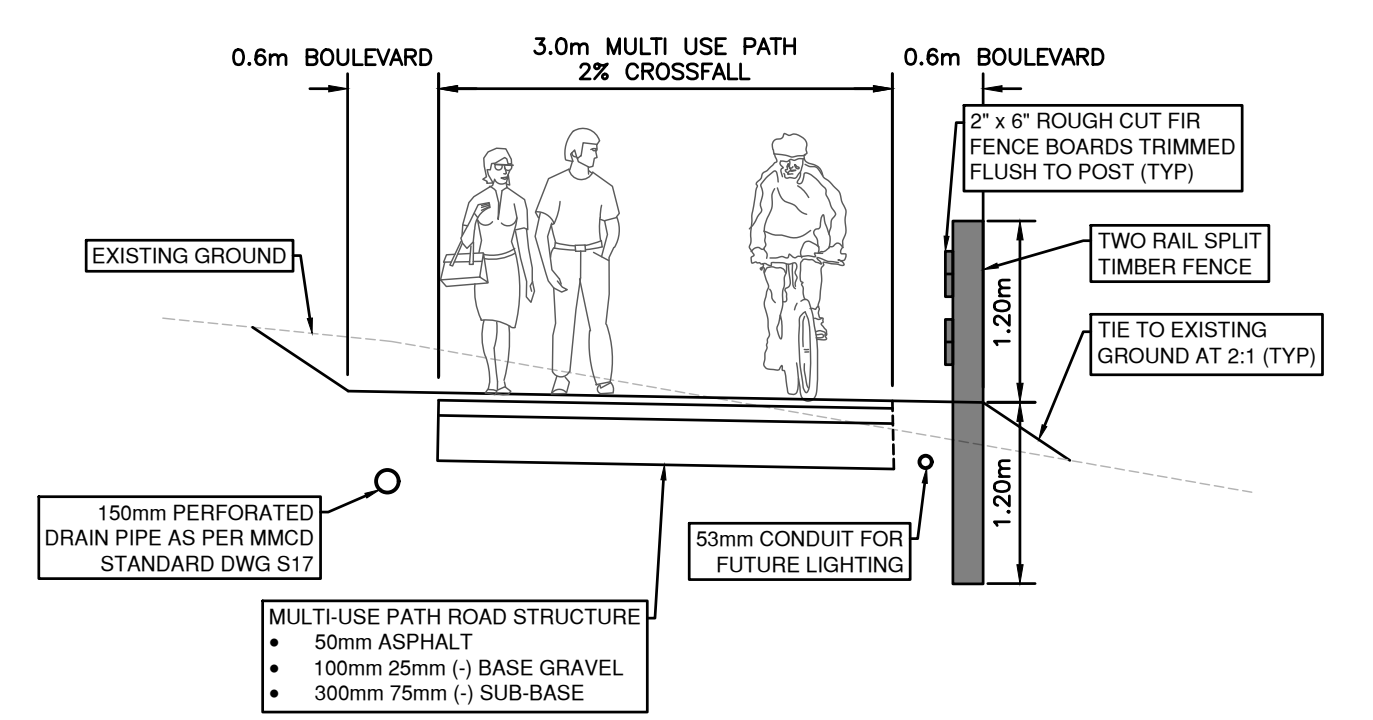
SHEET
14 OF

TITLE
MULTI-USE PATHWAY PLAN/PROFILE
STA 1+000 - 1+140
POLSON PARK NATURALIZATION
PHASE 2

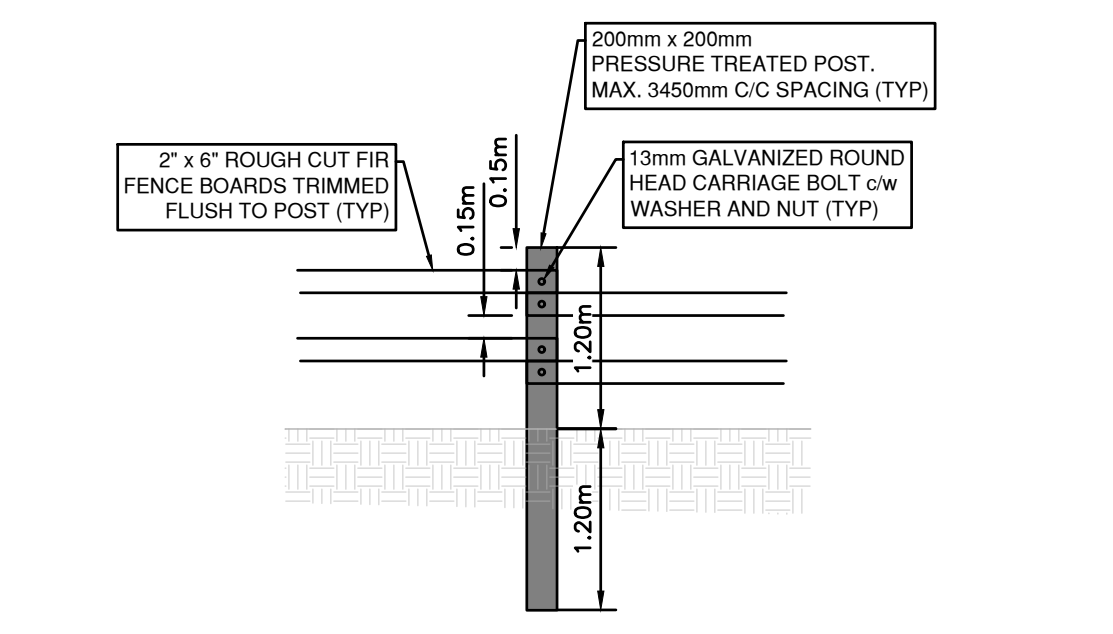
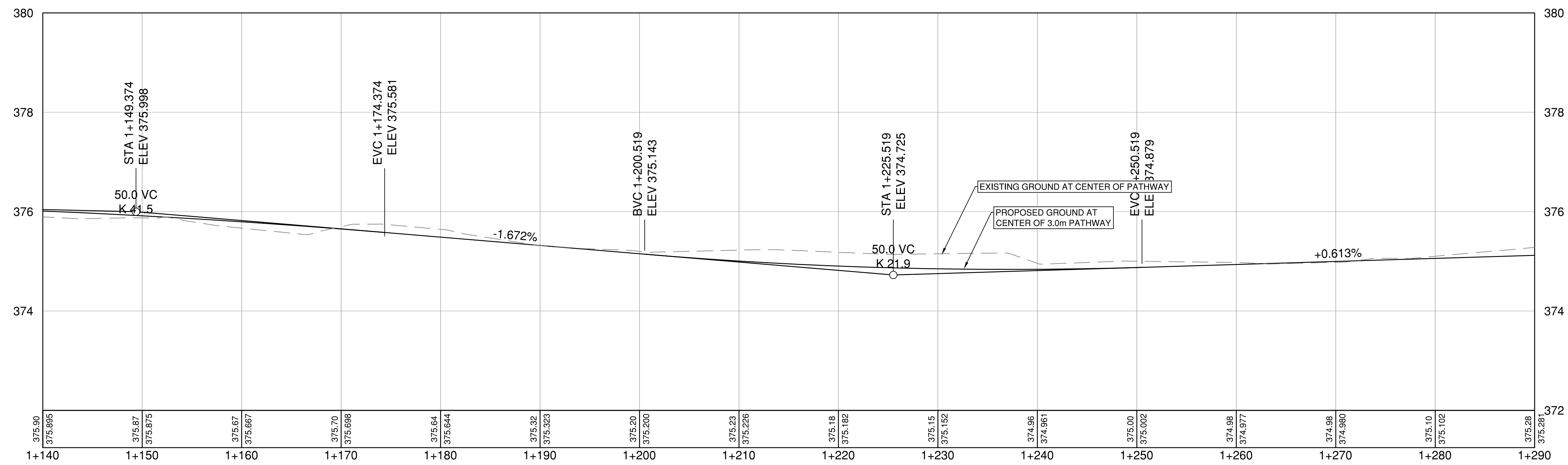
DRAWING NUMBER
C225



CONTINUATION - SEE C227



A | PATHWAY SECTION
C225-C227 1:50



B | TWO RAIL SPLIT TIMBER FENCE
C225-C227 1:50

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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL

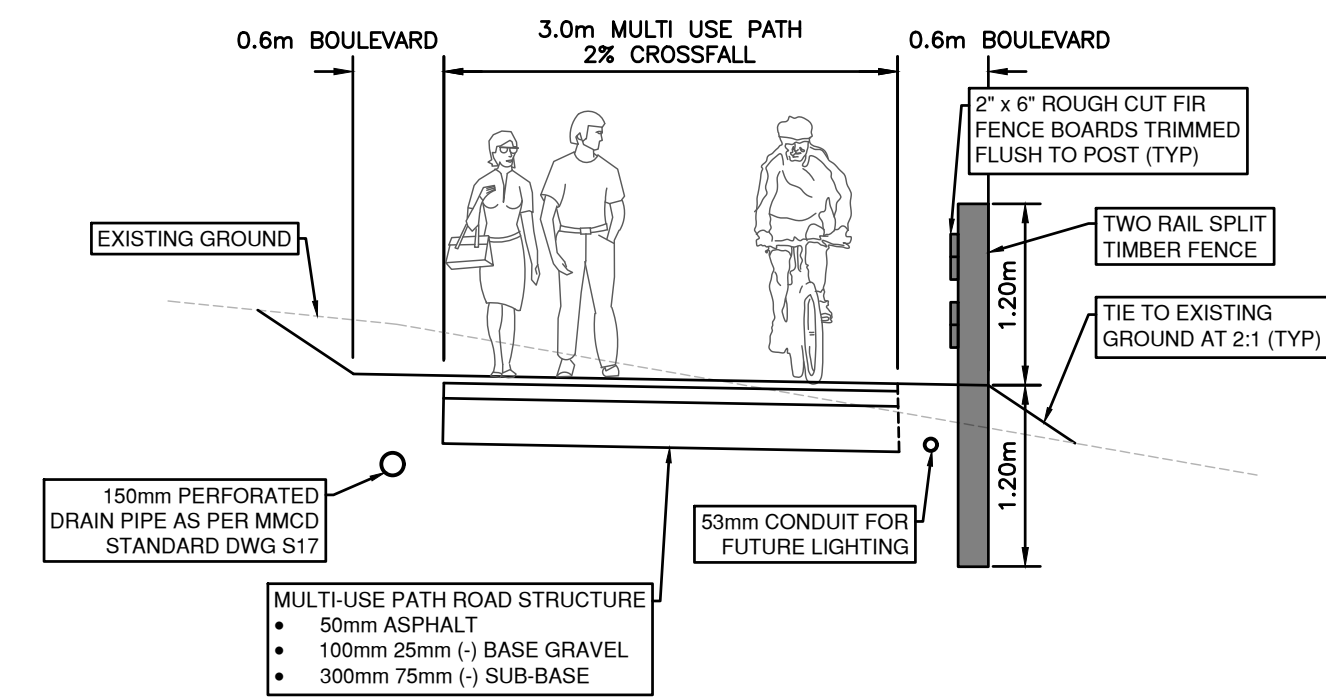
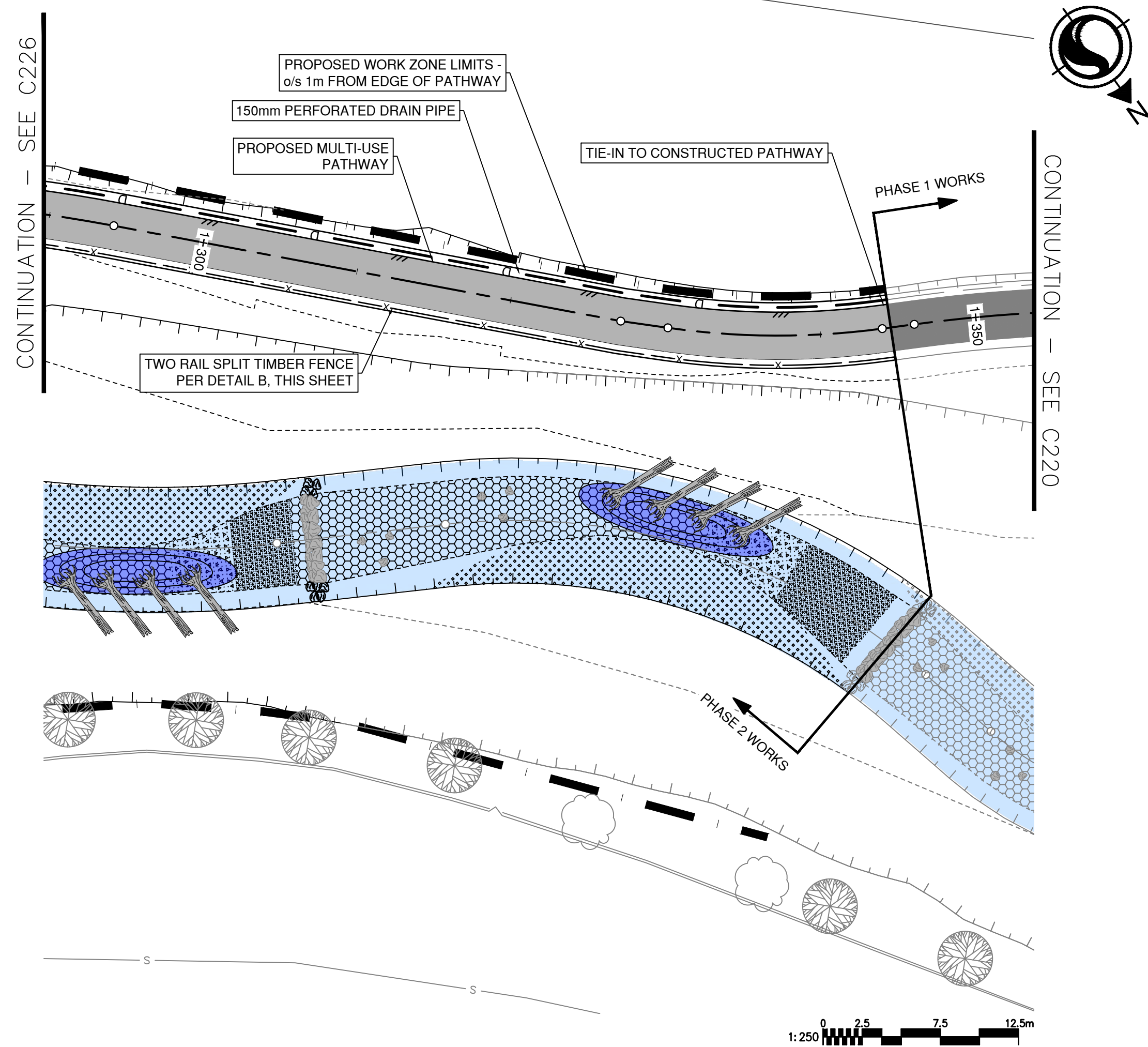


SCALE
H: 1:250
V: 1:50

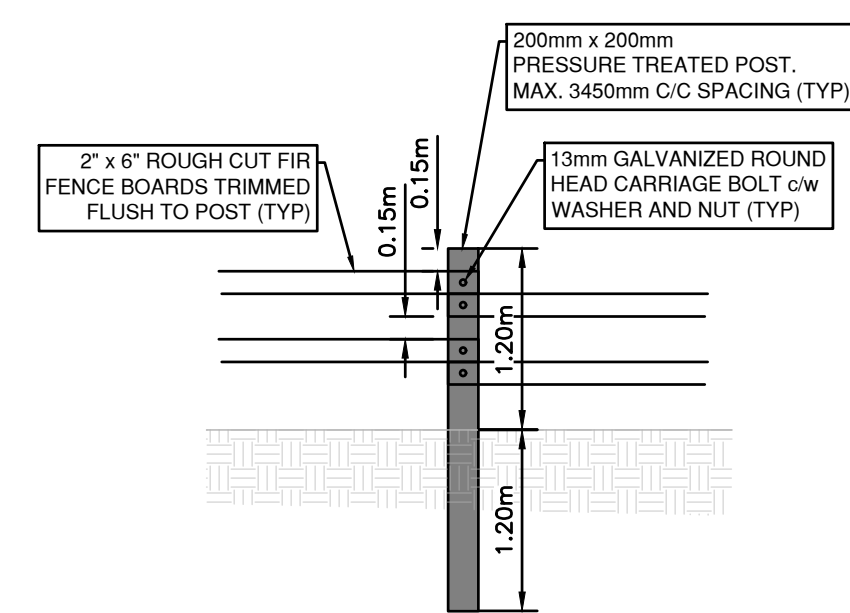
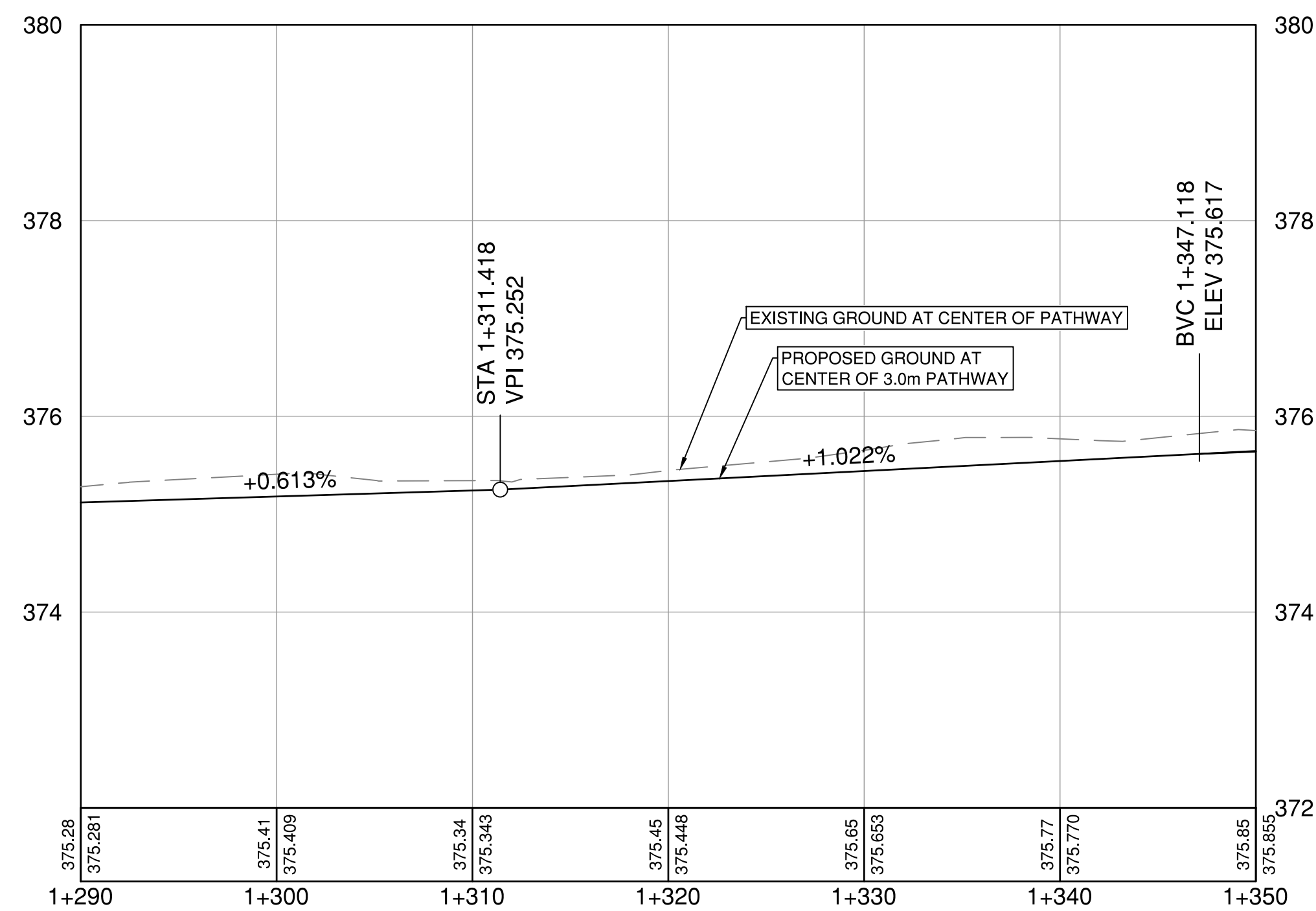
SHEET
15 OF

TITLE
MULTI-USE PATHWAY PLAN/PROFILE
STA 1+140 - 1+290
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C226



A PATHWAY SECTION
C225-C227 1:50



B TWO RAIL SPLIT TIMBER FENCE
C225-C227 1:50

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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:250
V: 1:50

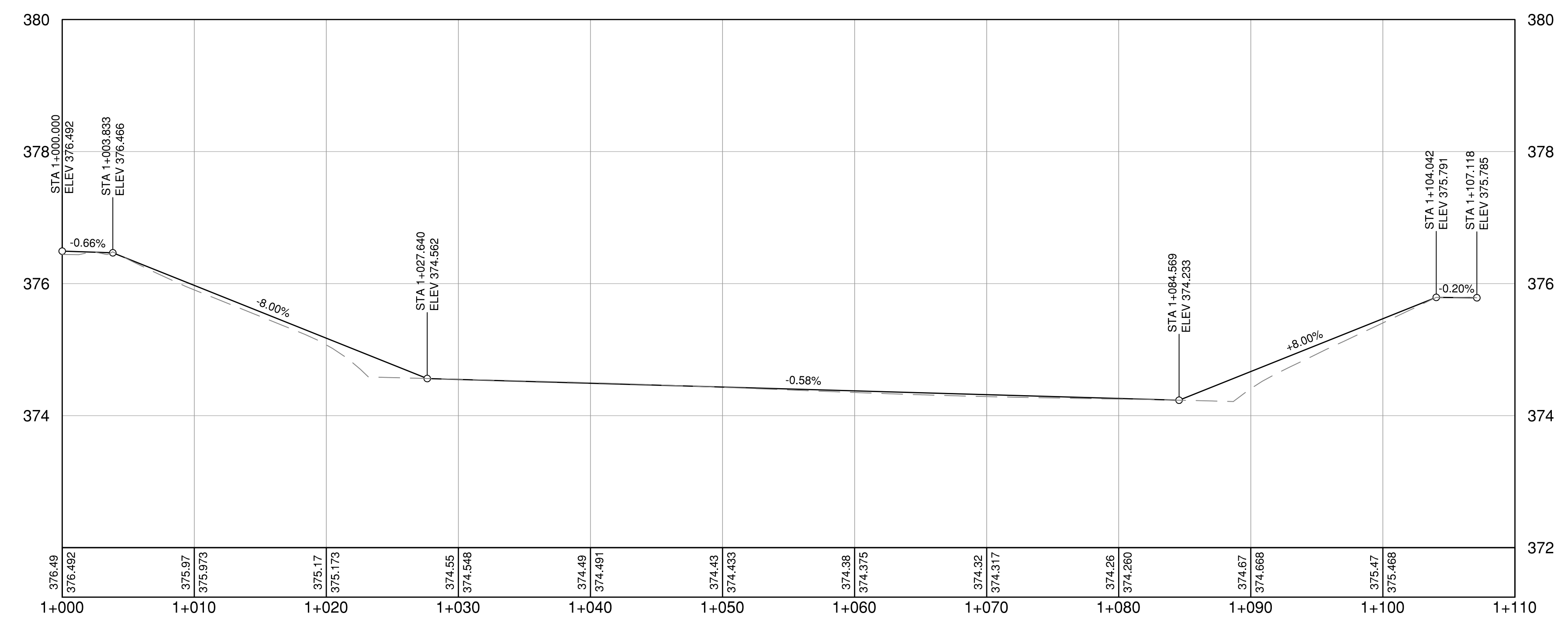
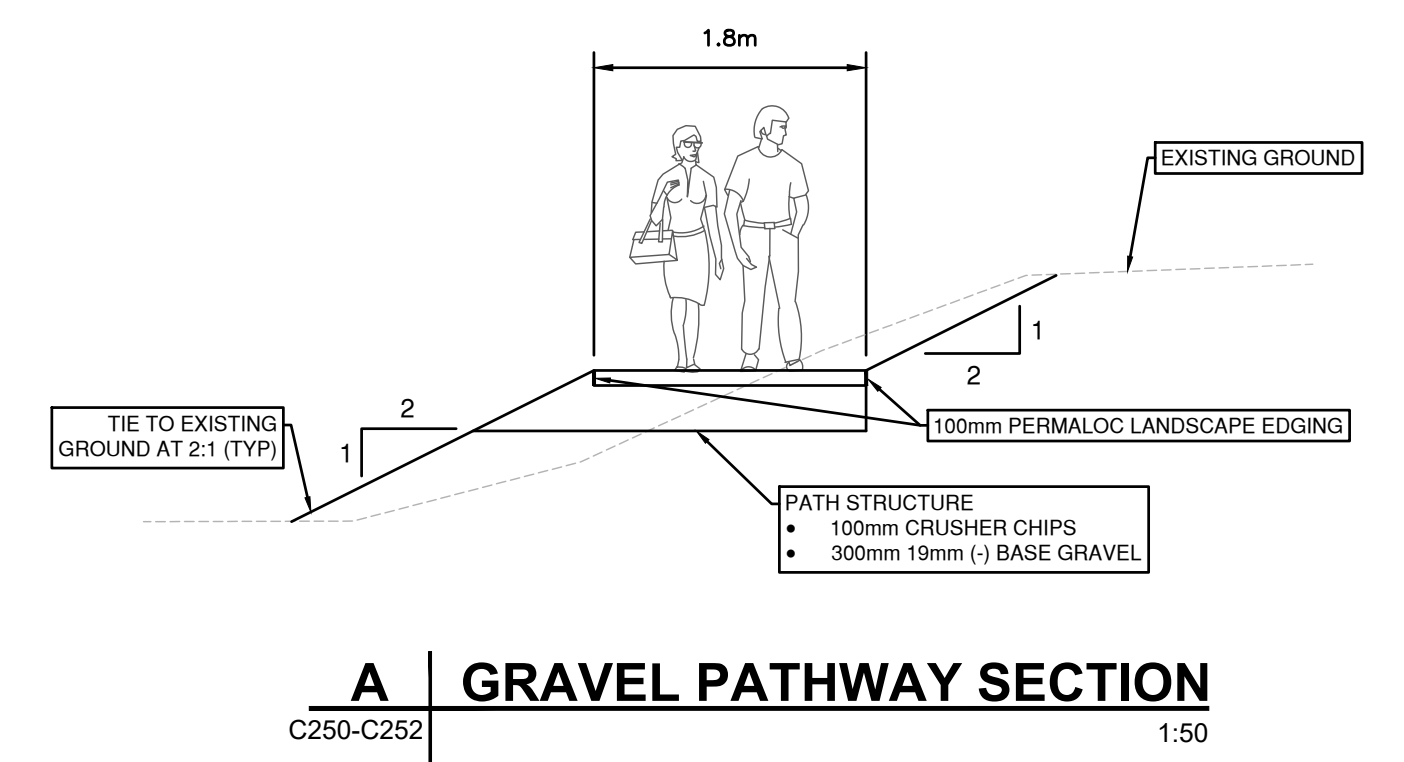
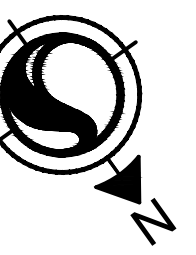
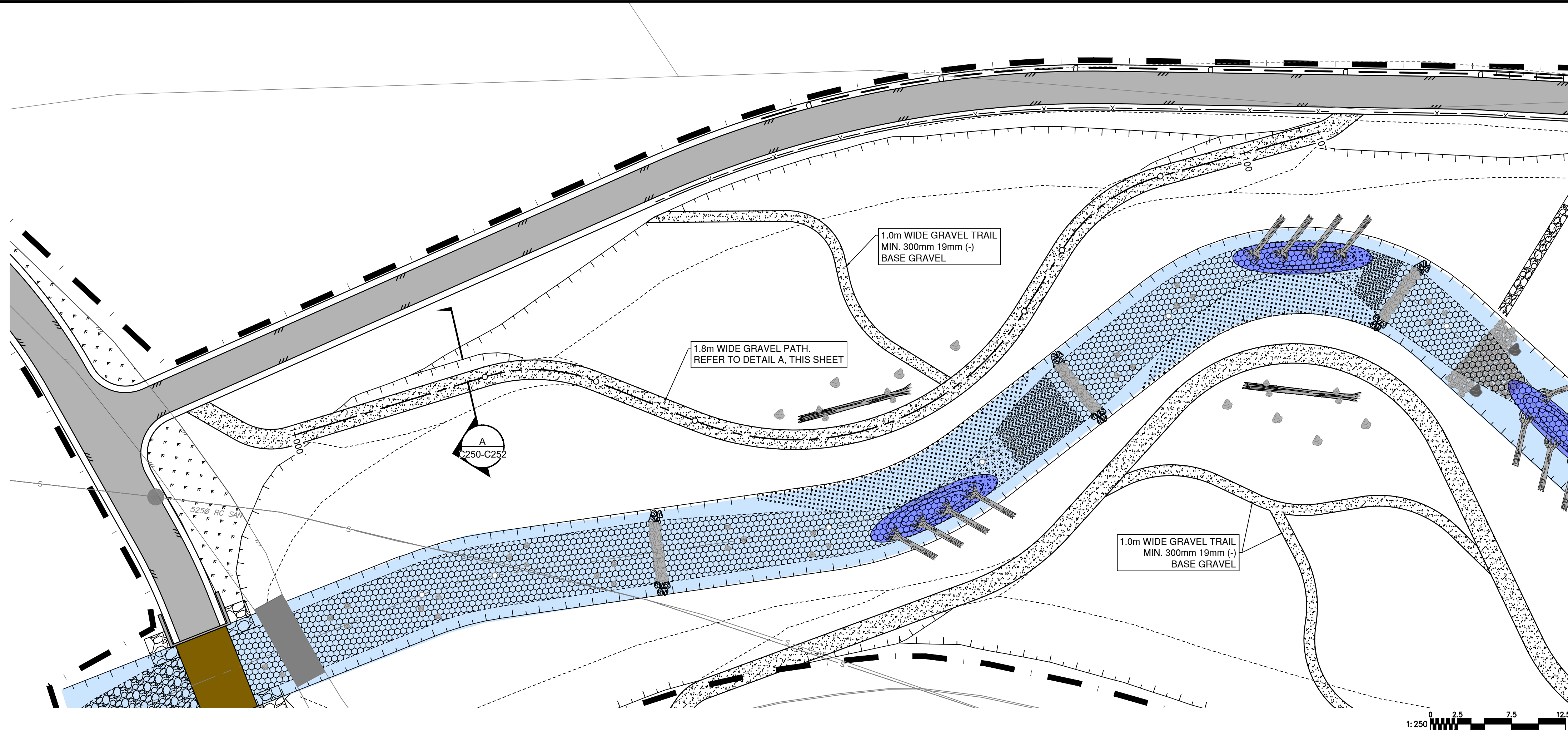
SHEET
16 OF

TITLE
MULTI-USE PATHWAY PLAN/PROFILE
STA 1+290 - 1+345
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C227

\\C:\0047-PPFSS01\WORKGROUP\01117\active\111710119\4_drawings\02_sheets\C201_Phase2.dwg

28.01.2024



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL

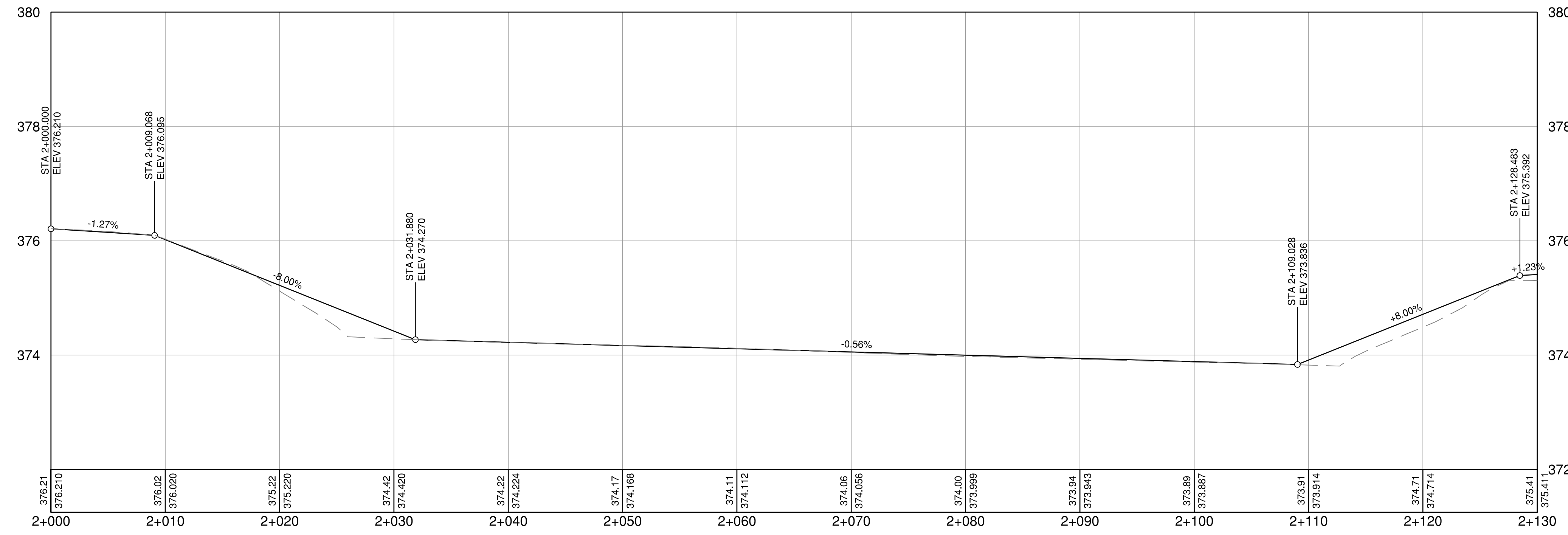
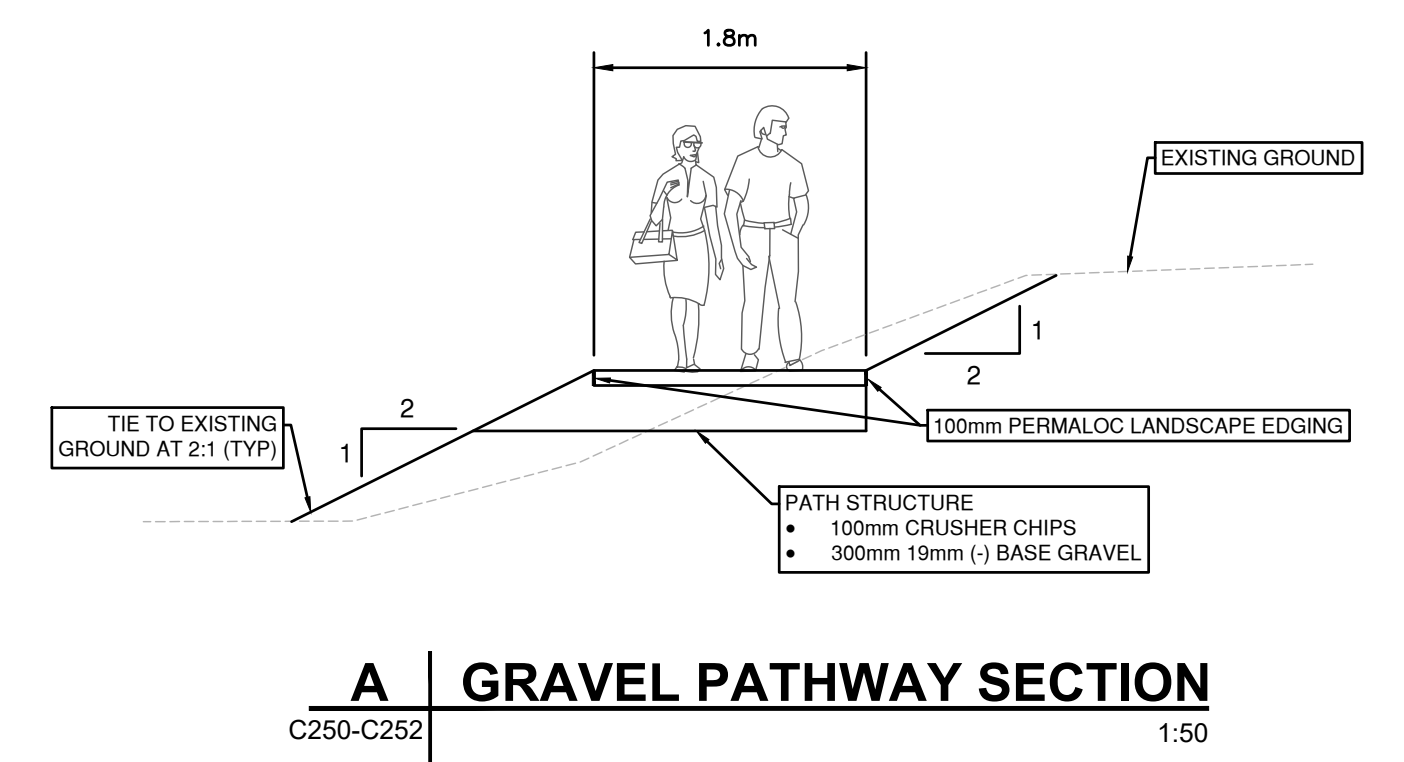
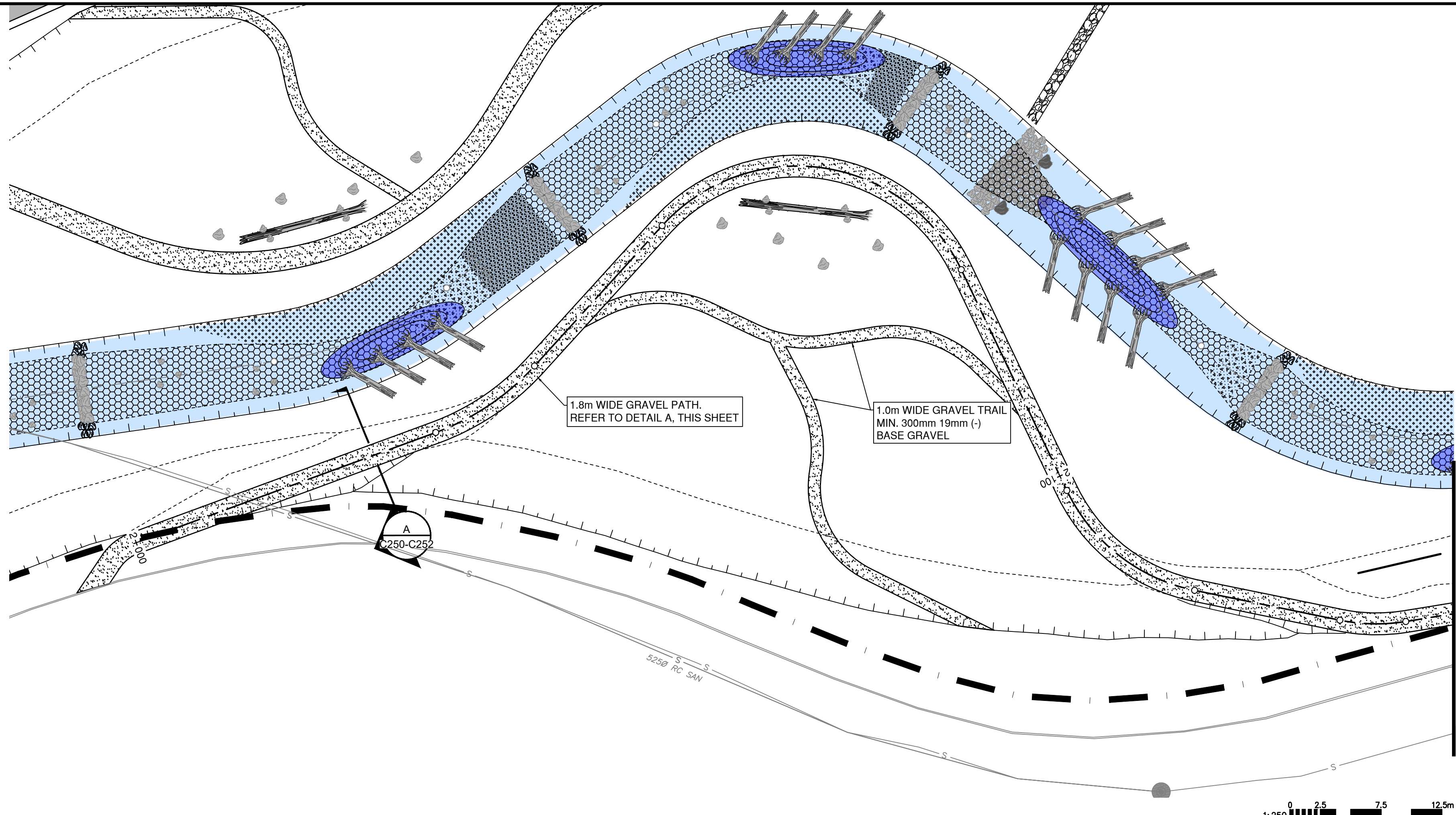


SCALE
H: 1:250
V: 1:50

SHEET
- OF

TITLE
GRAVEL PATHWAY PLAN/PROFILE
STA 1+000 - 1+110
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C250



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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL

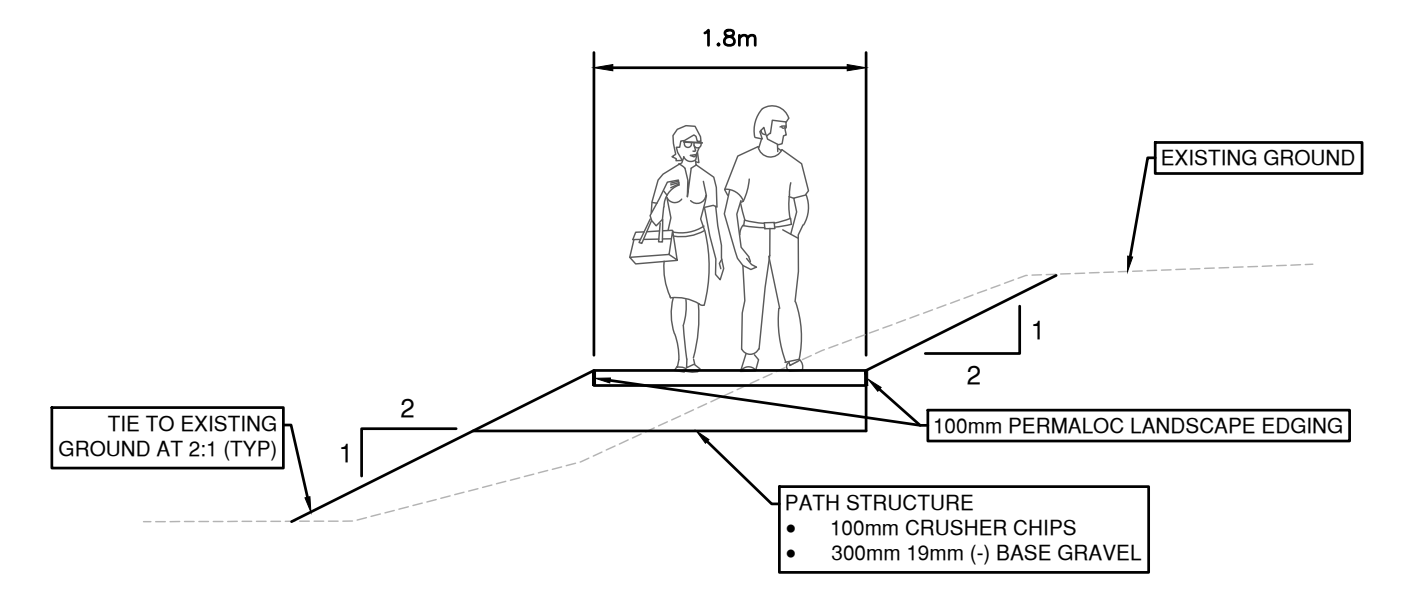
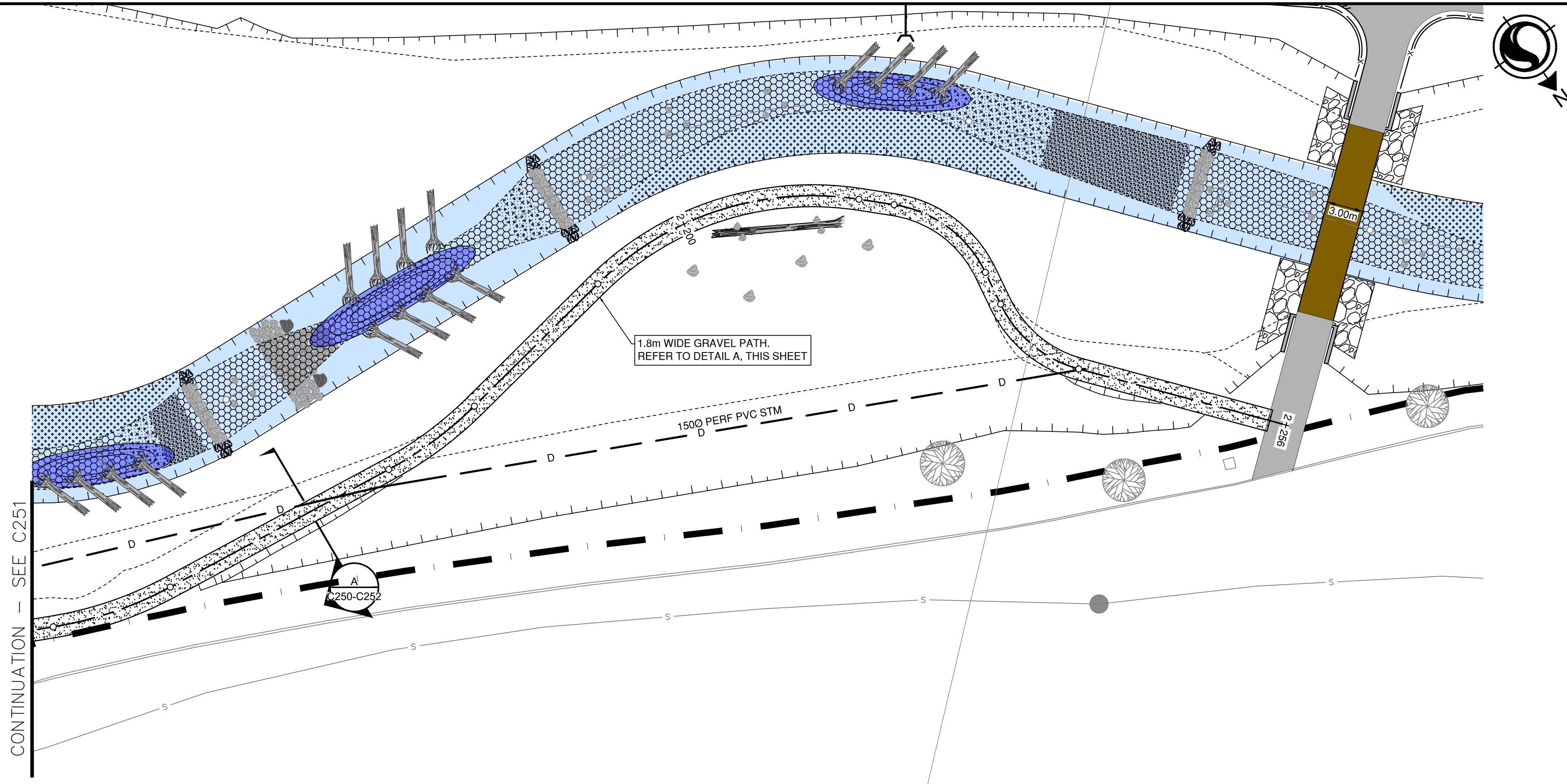


SCALE
H: 1:250
V: 1:50

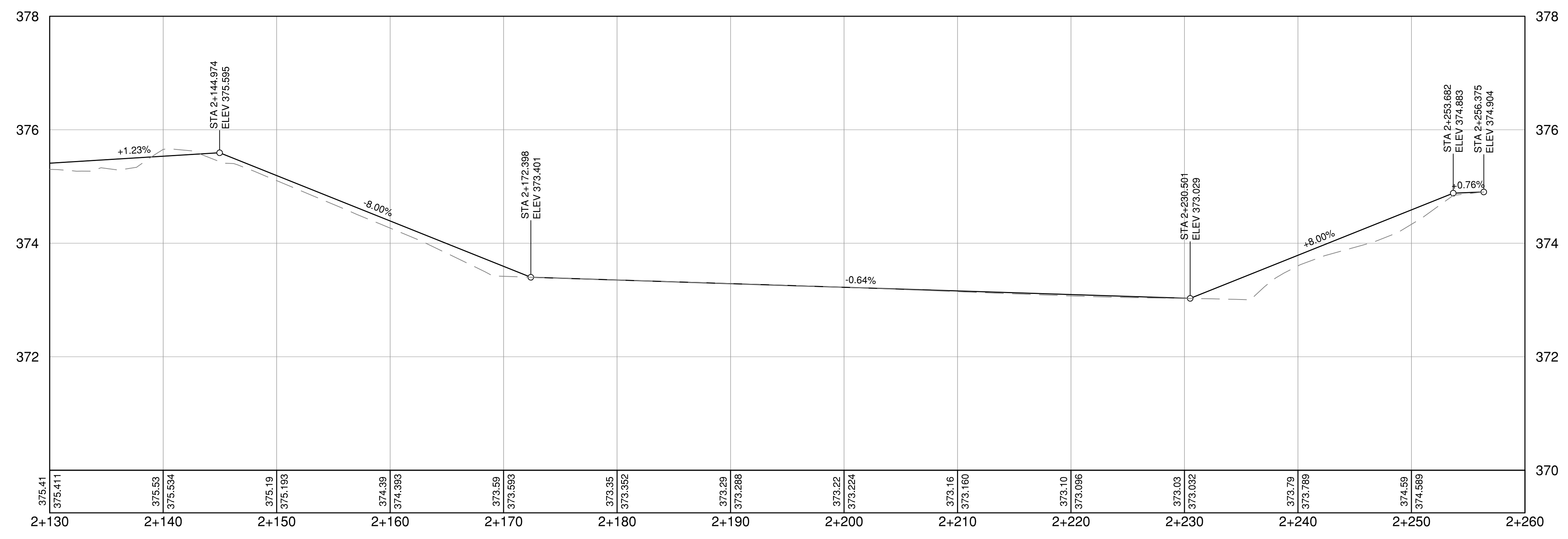
SHEET
- OF

TITLE
GRAVEL PATHWAY PLAN/PROFILE
STA 2+000 - 2+130
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C251



A | **GRAVEL PATHWAY SECTION**
C250-C252 | 1:50



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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
H: 1:250
V: 1:50

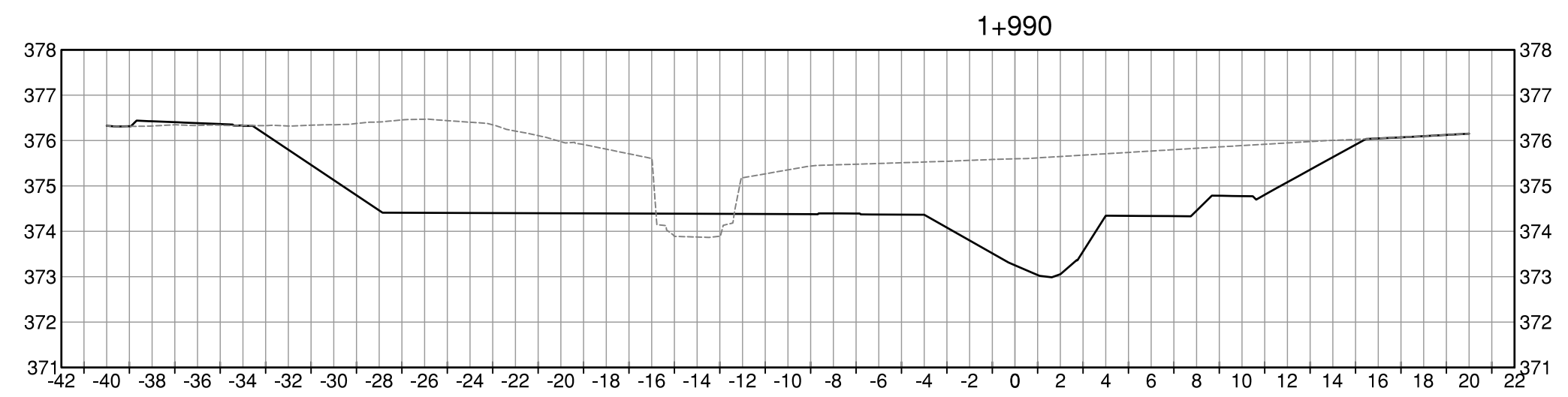
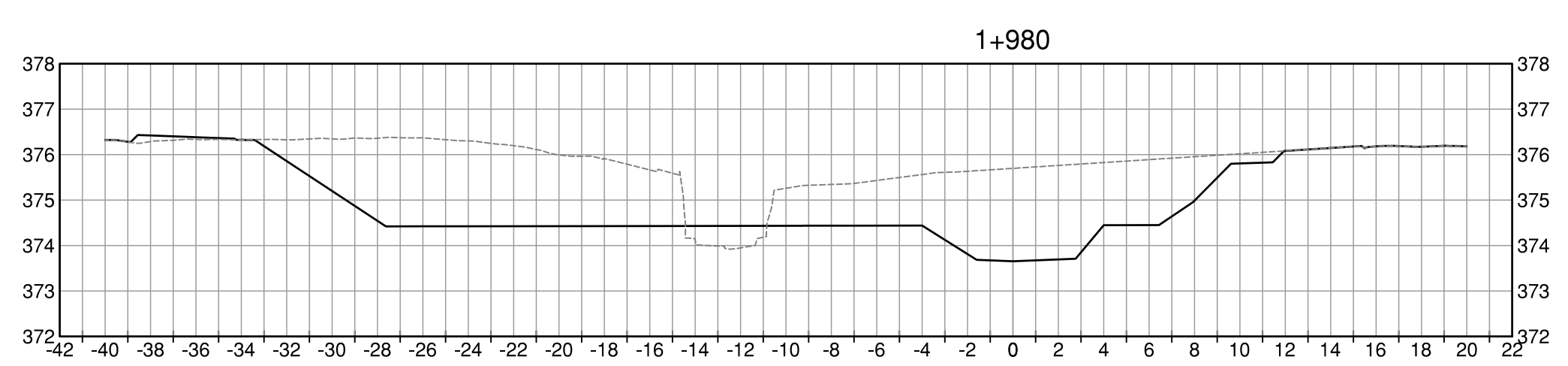
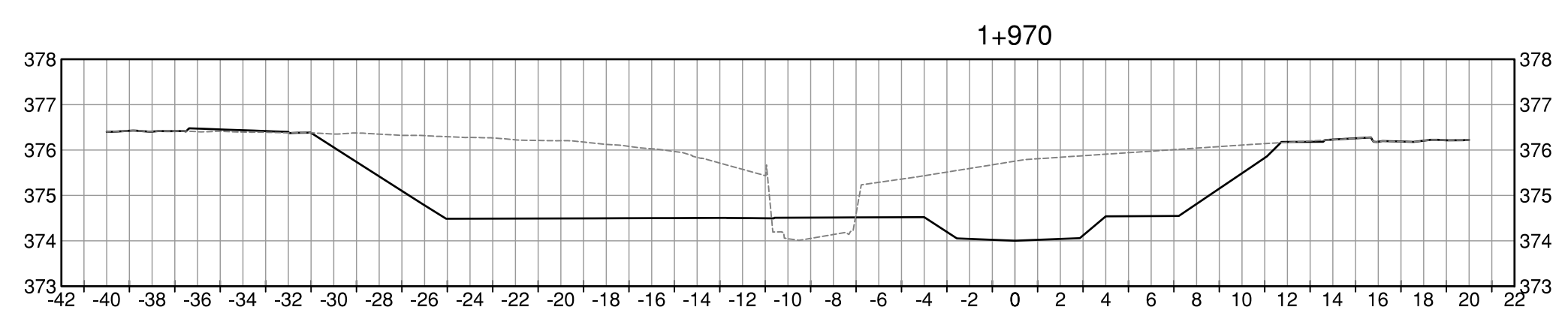
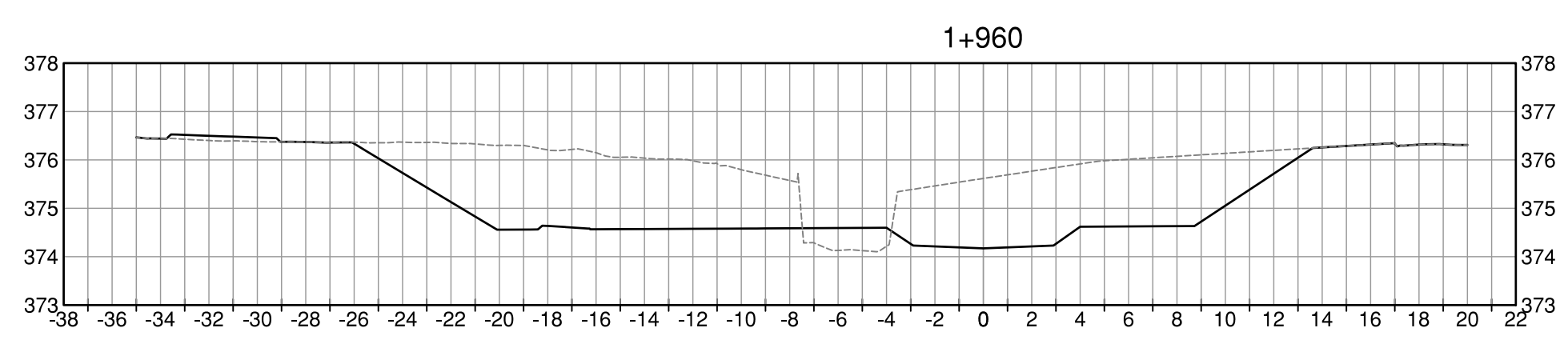
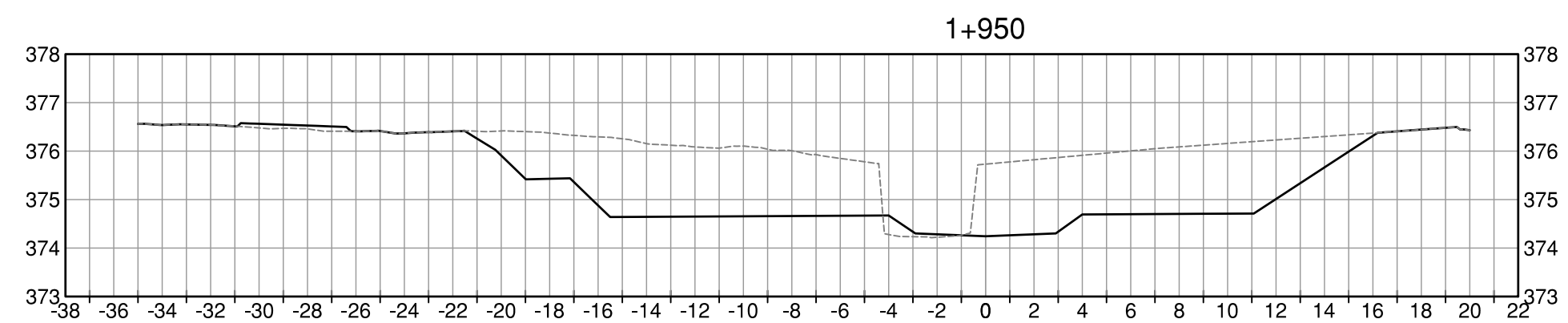
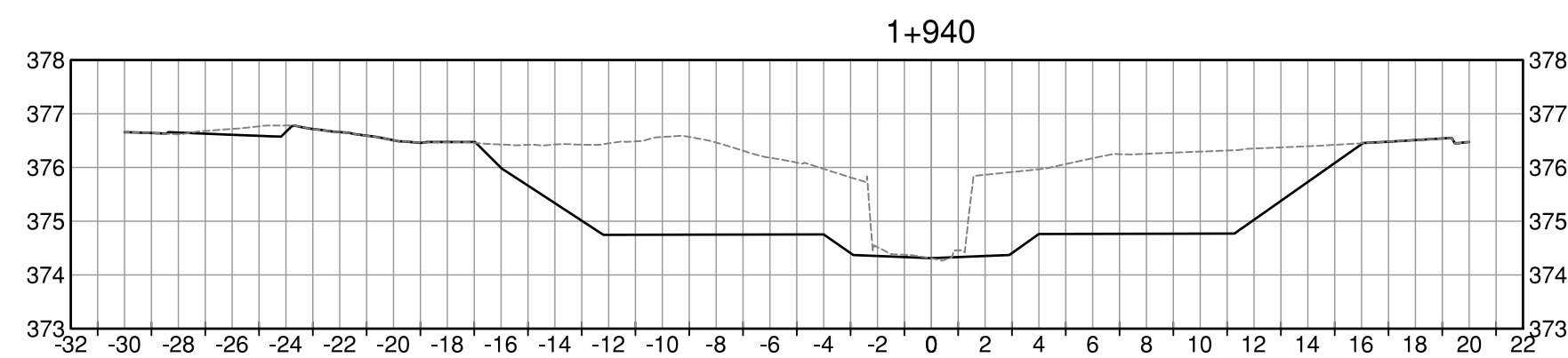
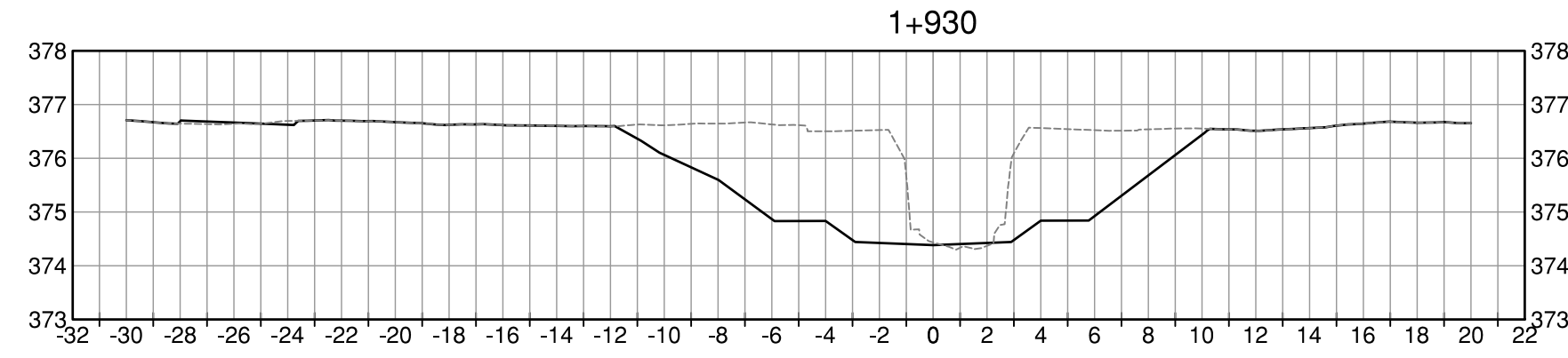
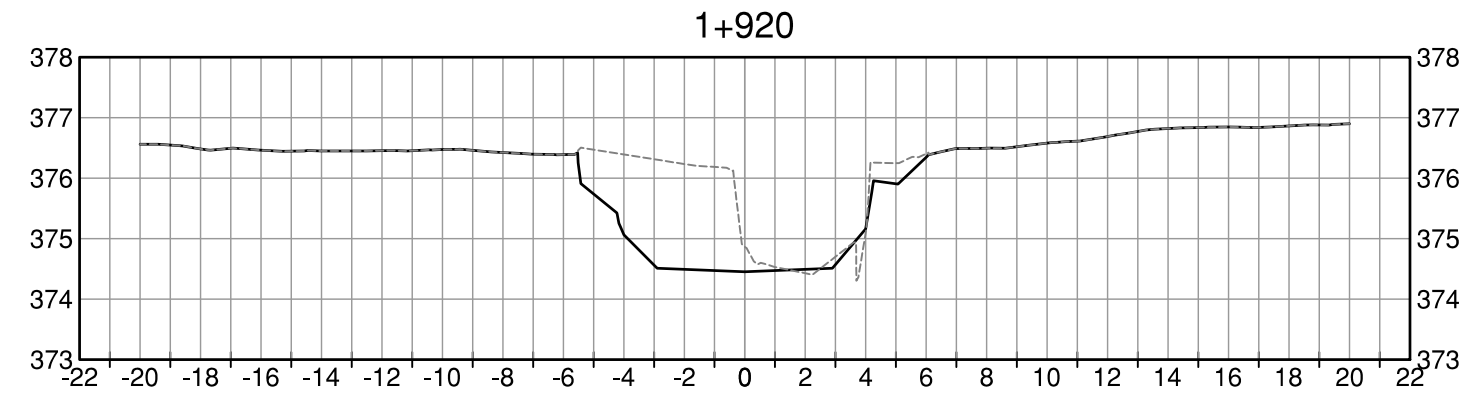
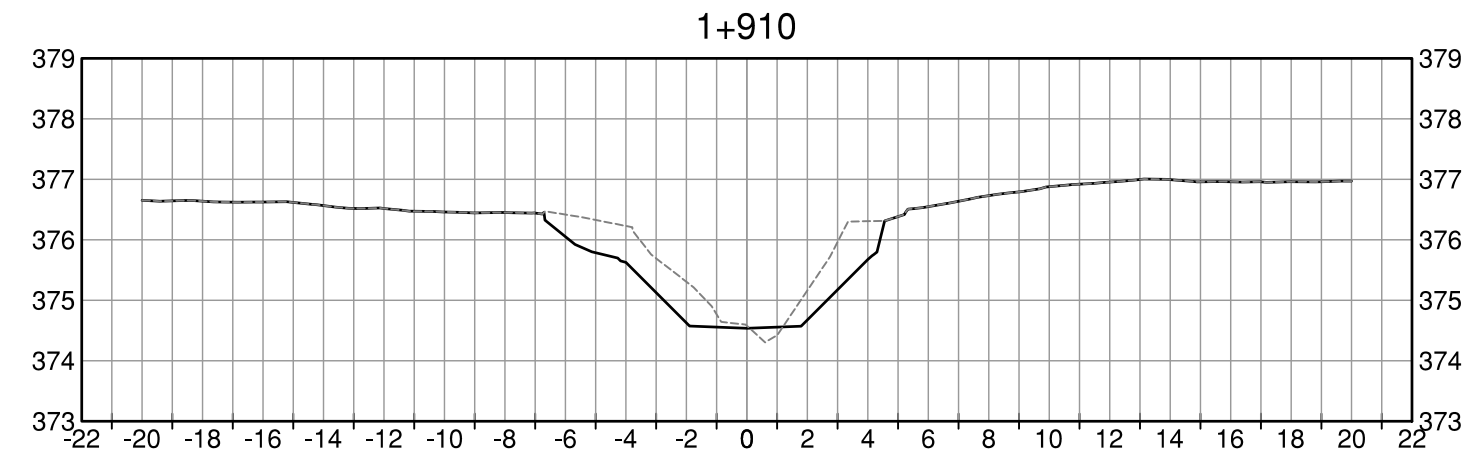
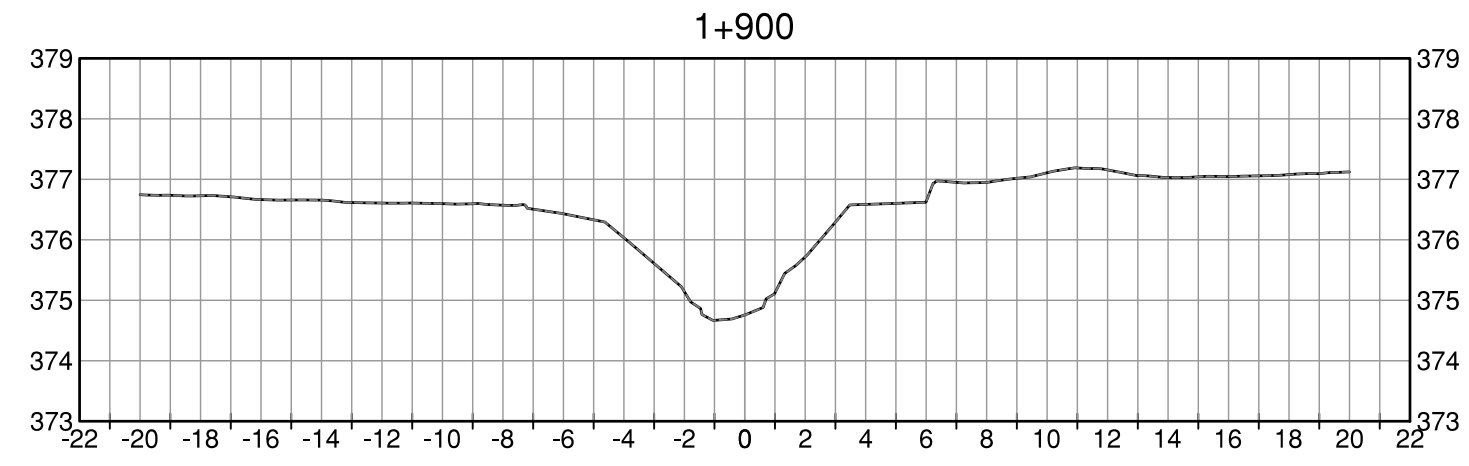
SHEET
- OF

TITLE
GRAVEL PATHWAY PLAN/PROFILE
STA 2+130 - 2+260
POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C252

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28.01.2024



LEGEND

ORIGINAL GROUND - - - - -
 FINISHED GROUND _____

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



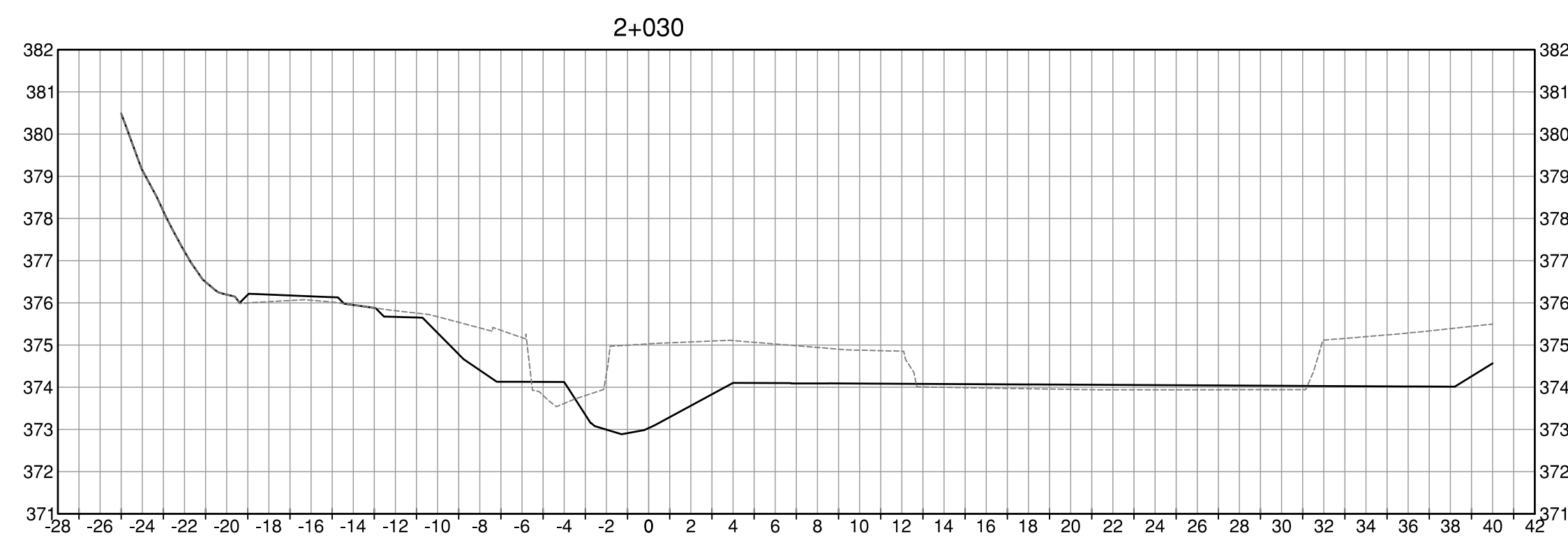
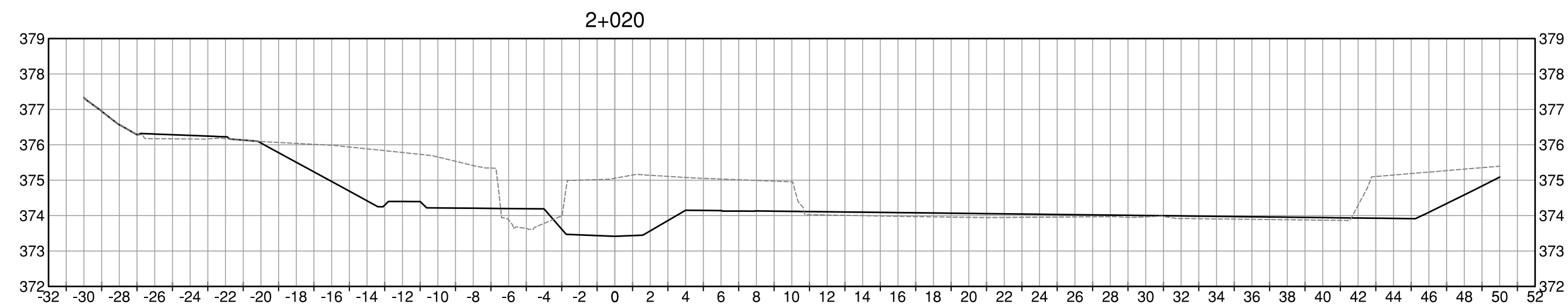
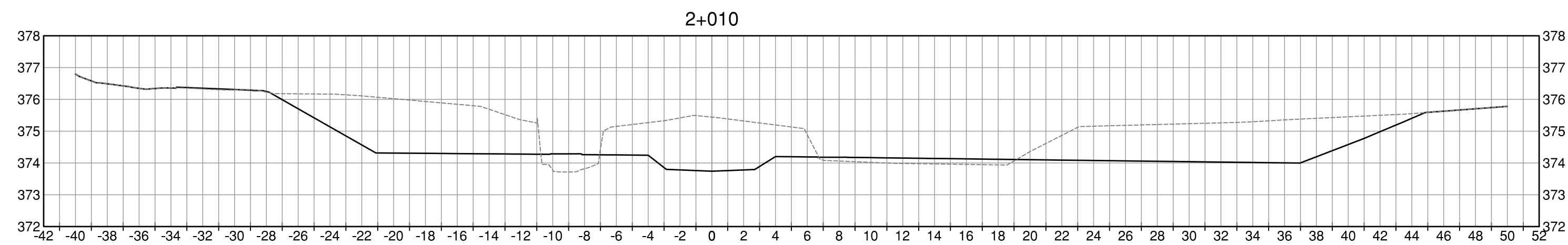
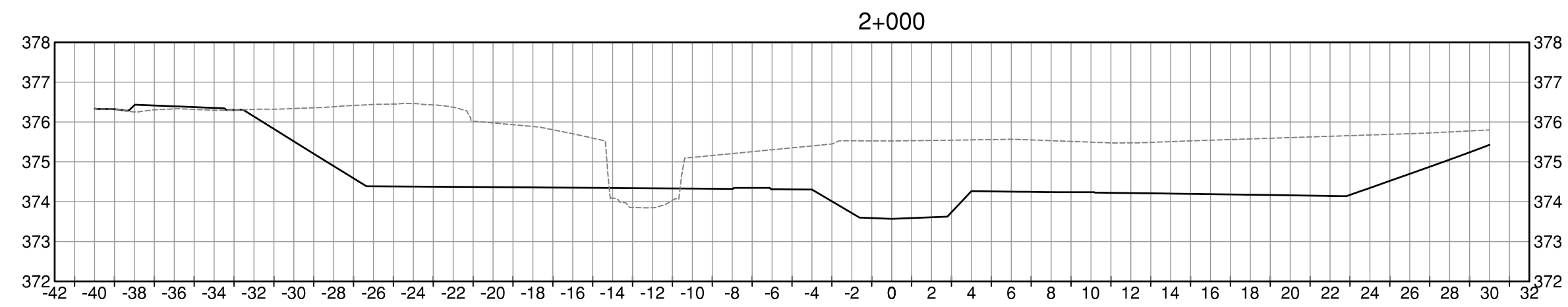
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SHEET
 17 OF

TITLE
SECTIONS

**POLSON PARK NATURALIZATION
 PHASE 2**

DRAWING NUMBER
C310



LEGEND

ORIGINAL GROUND - - - - -
 FINISHED GROUND _____

\\CA0047-PPFSS01\WORKGROUP\01117\active\111710118\4_drawing\02_sheets\CS01_Phase2.dwg

28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



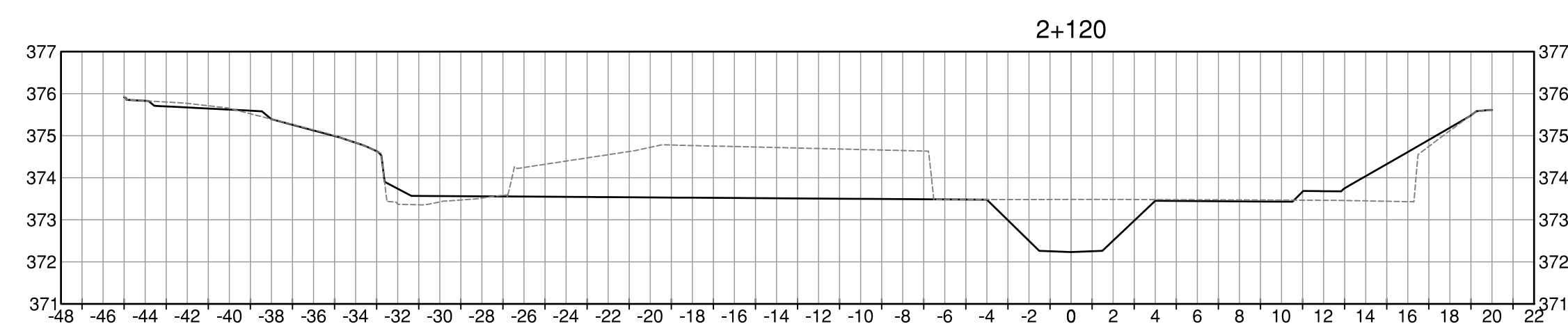
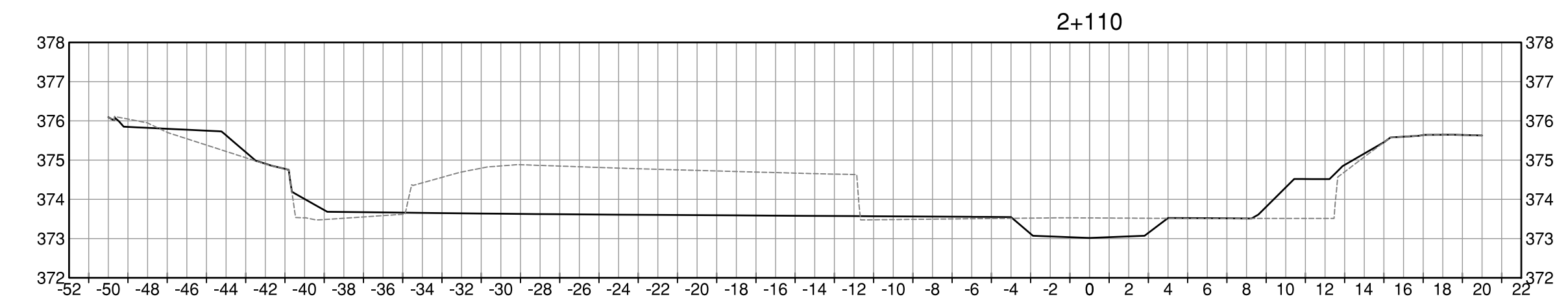
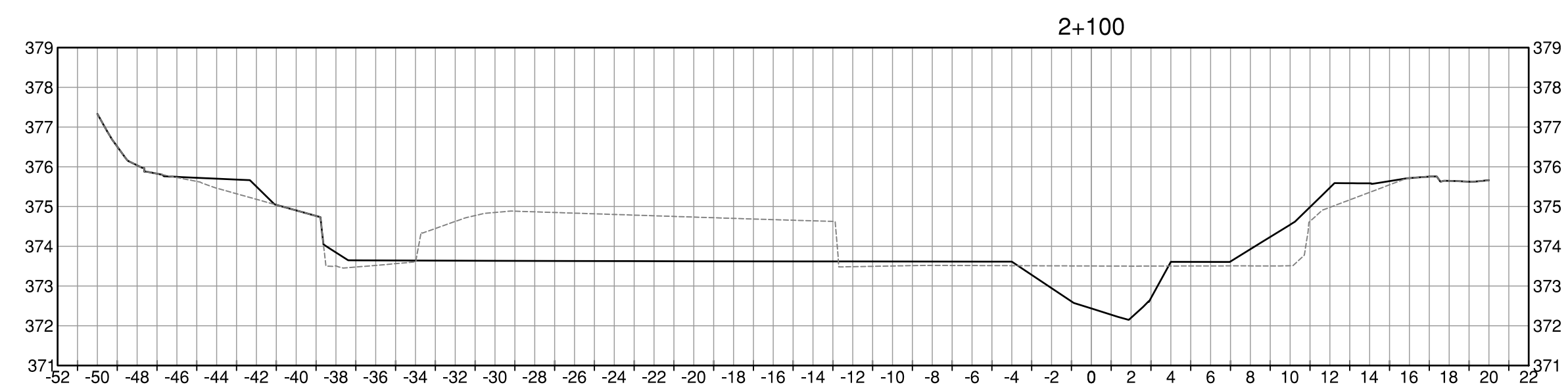
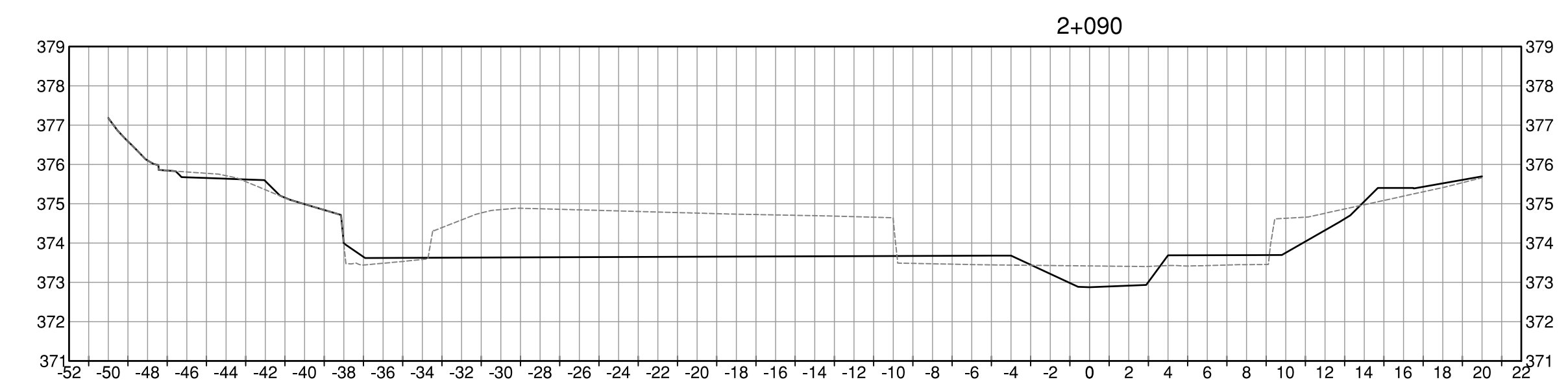
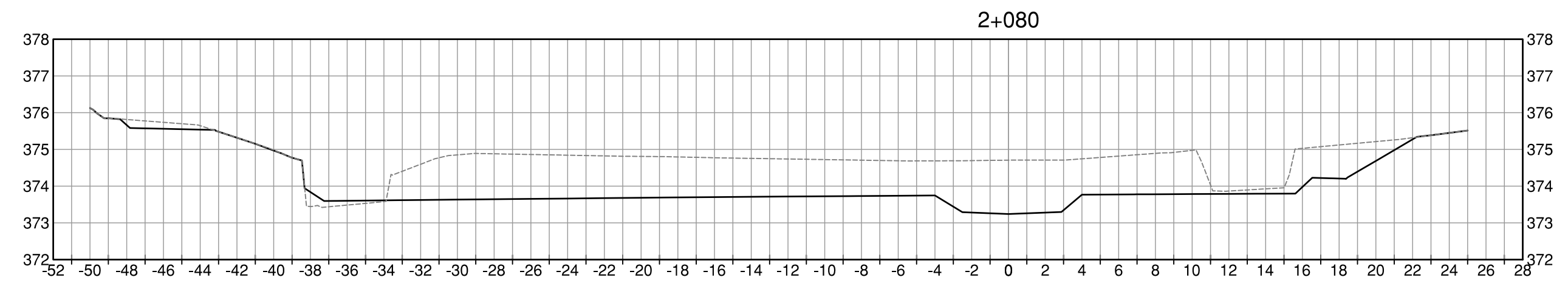
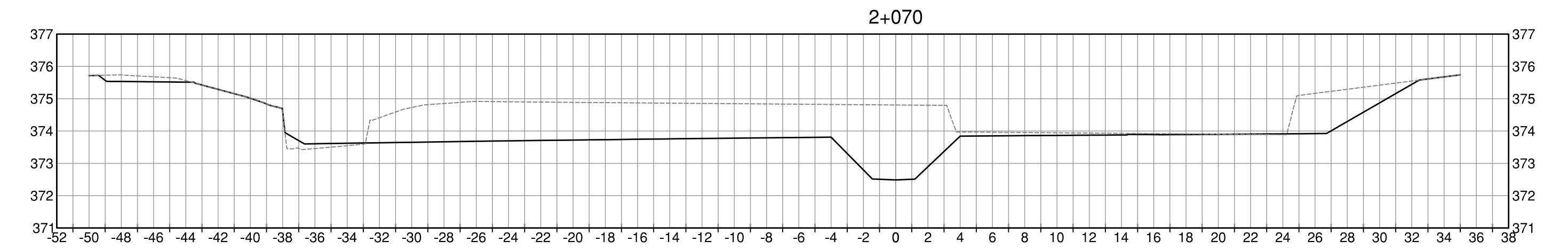
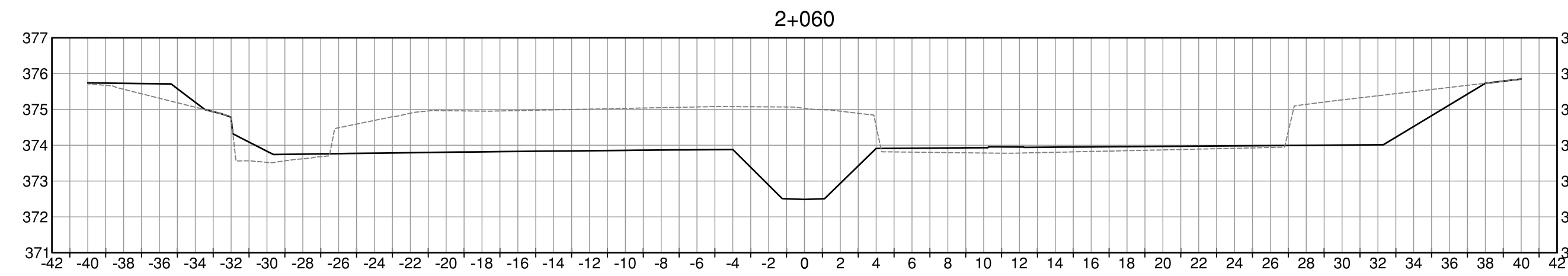
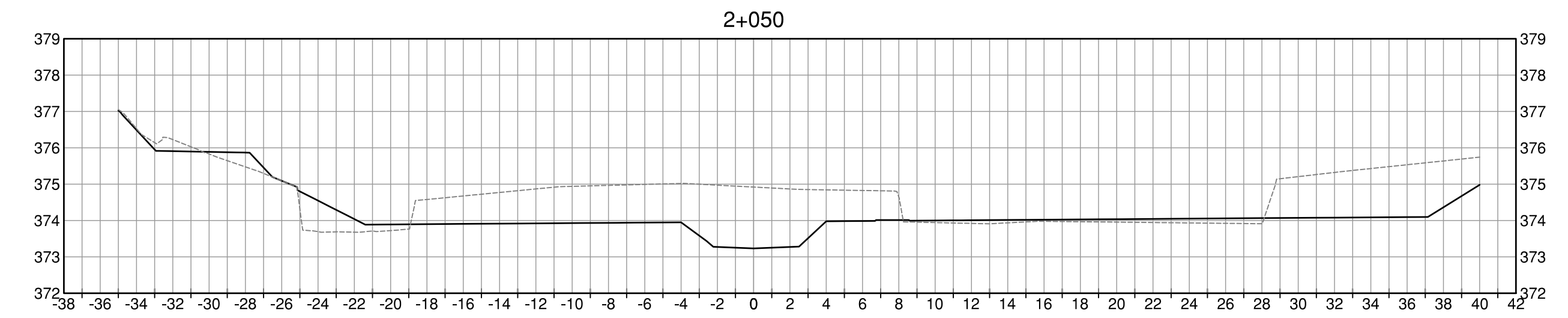
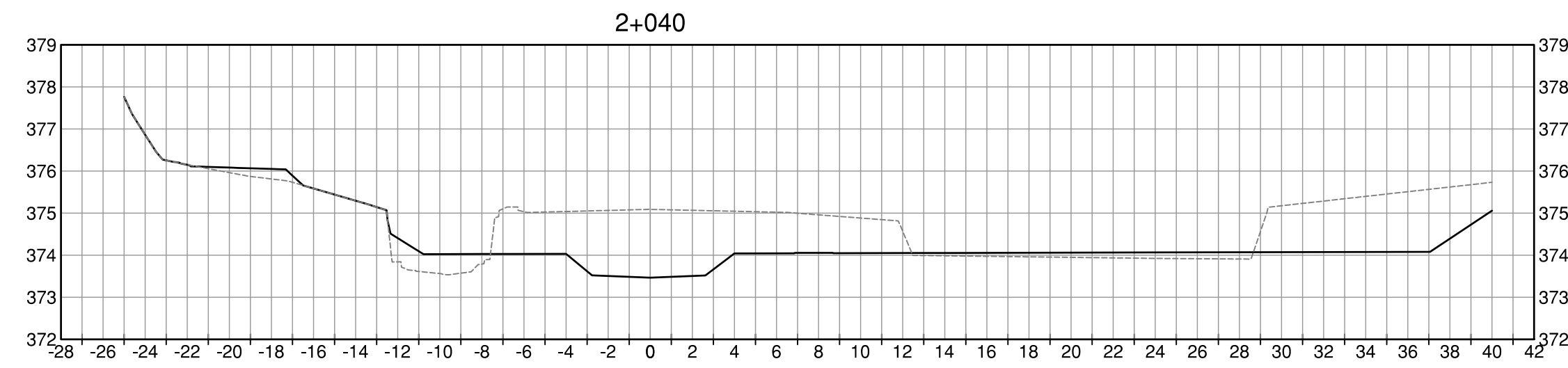
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SHEET
 18 OF

TITLE
SECTIONS

**POLSON PARK NATURALIZATION
 PHASE 2**

DRAWING NUMBER
C311



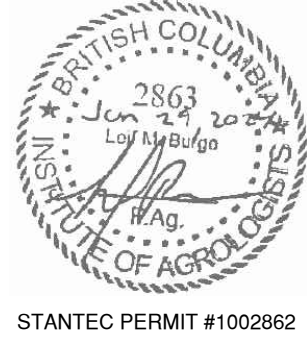
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ORIGINAL GROUND
 FINISHED GROUND

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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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SHEET
19 OF

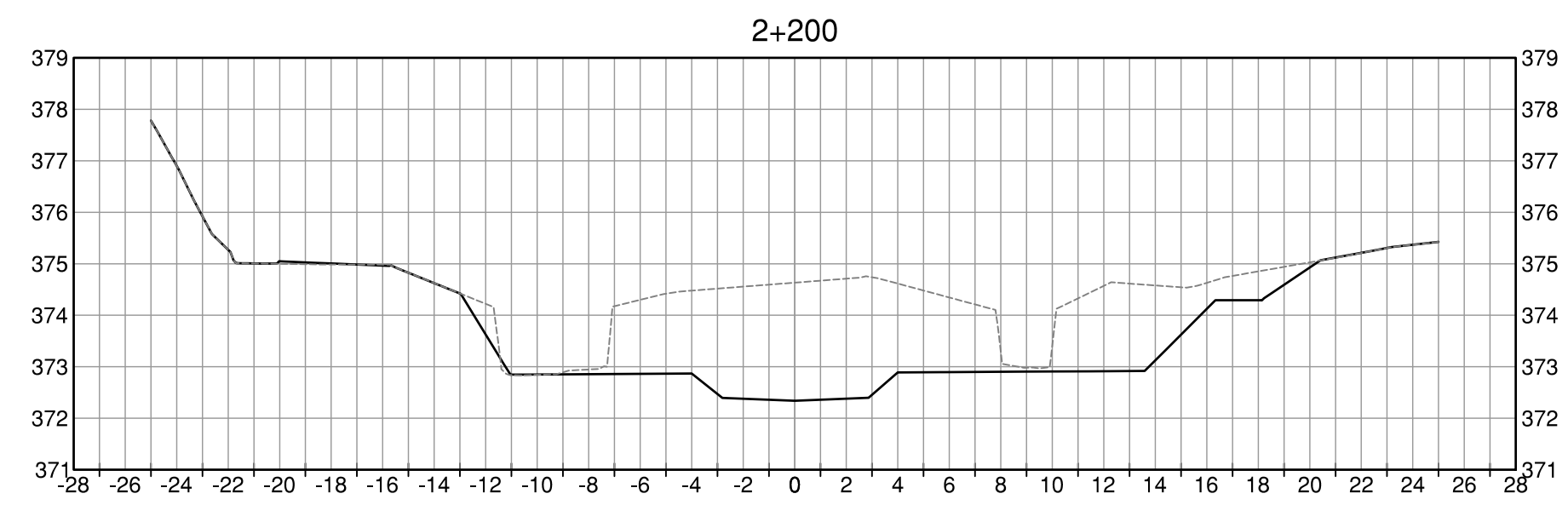
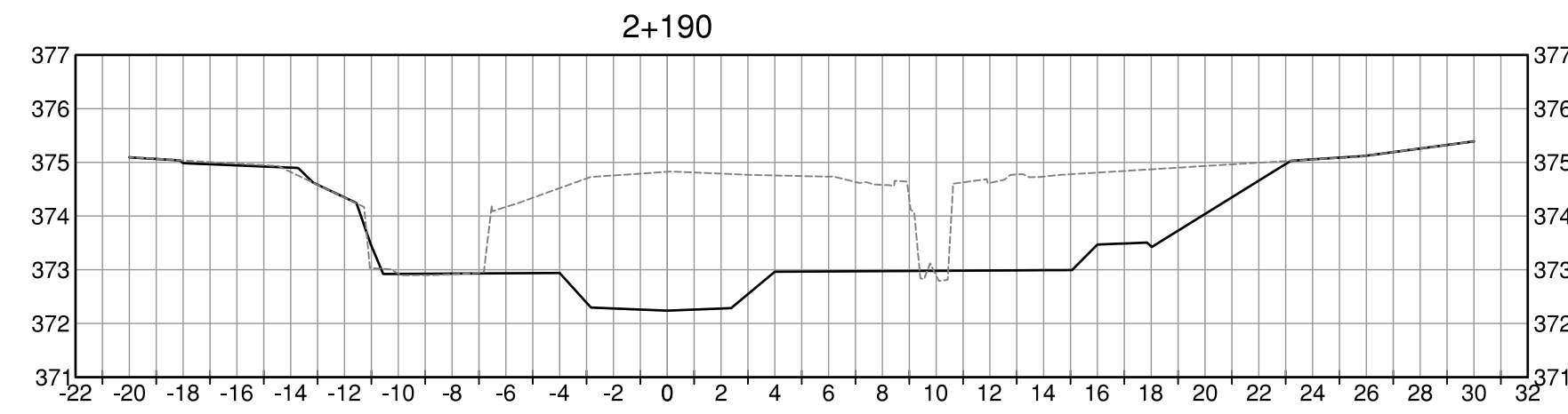
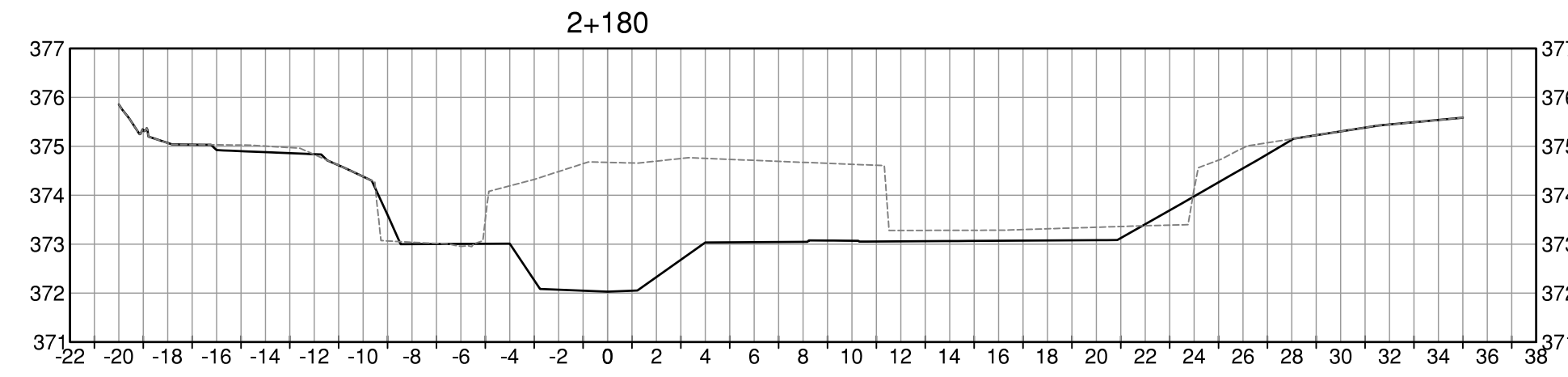
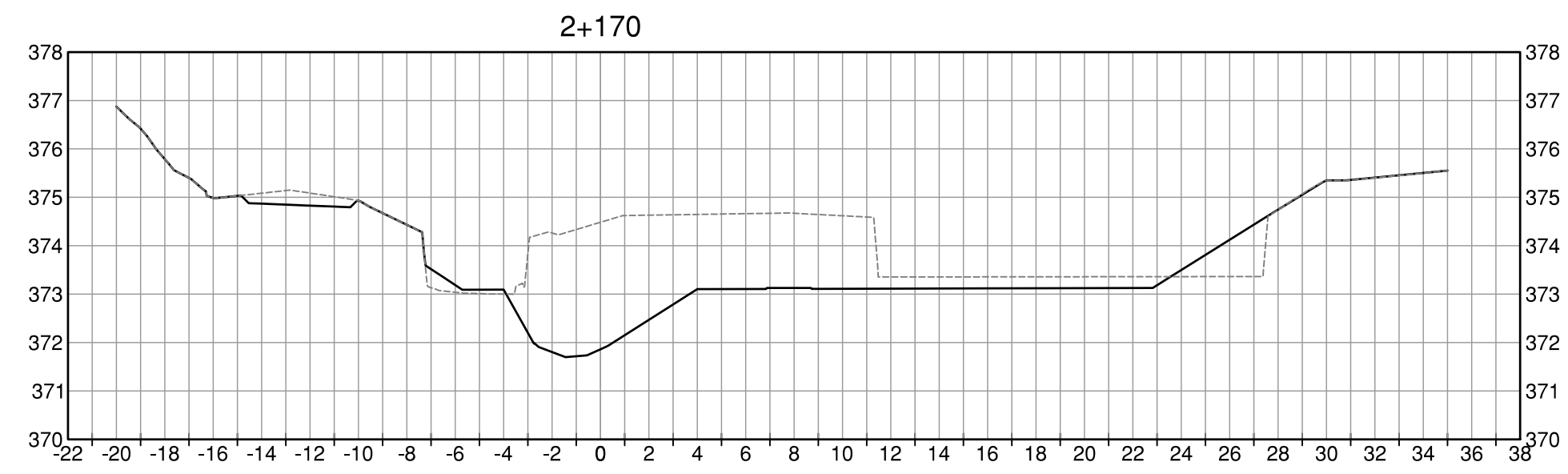
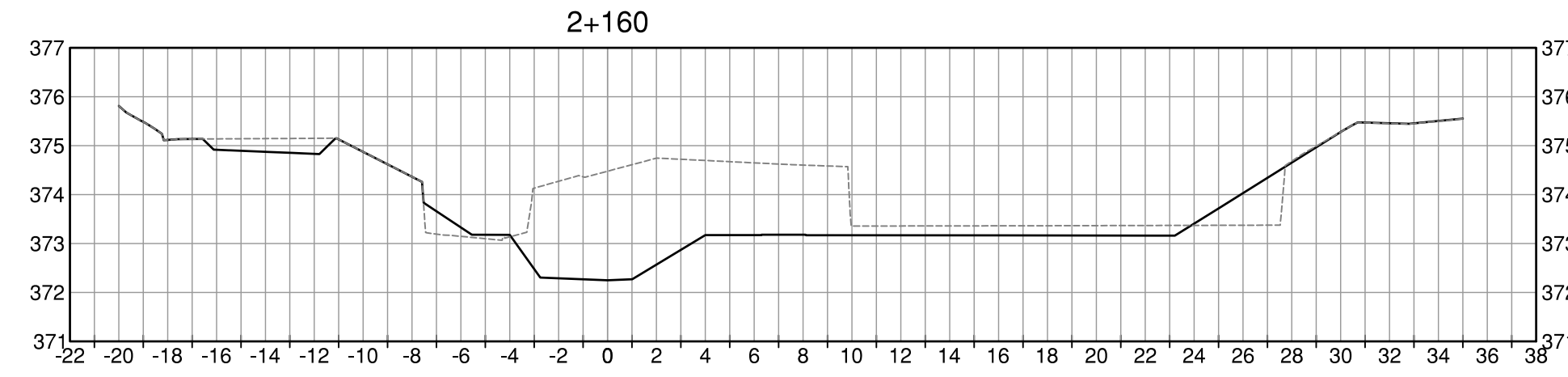
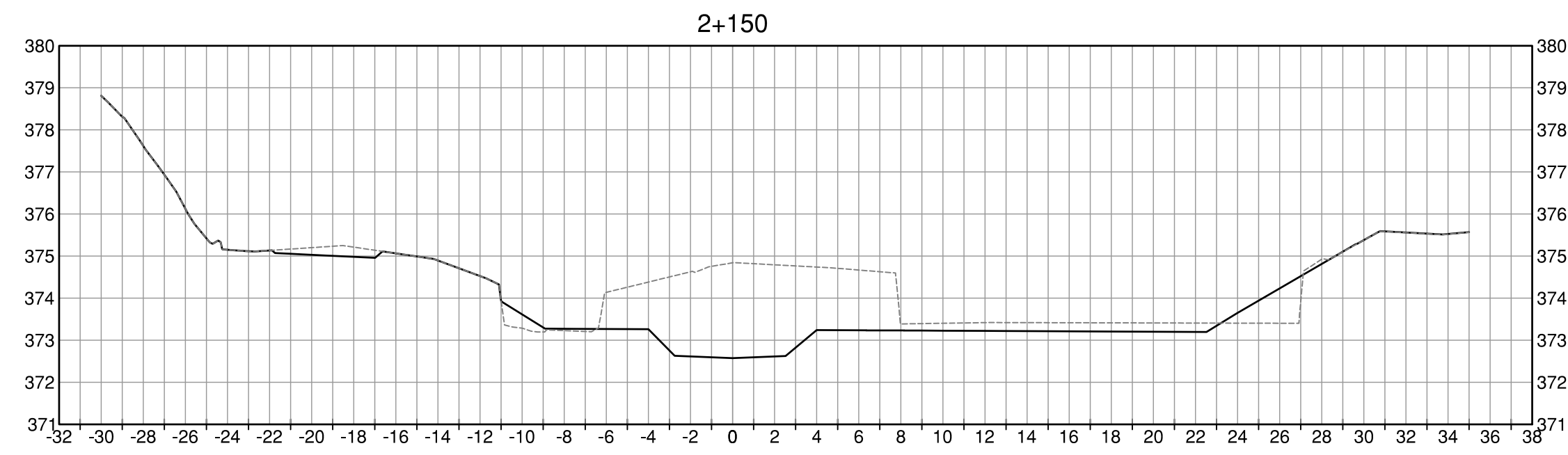
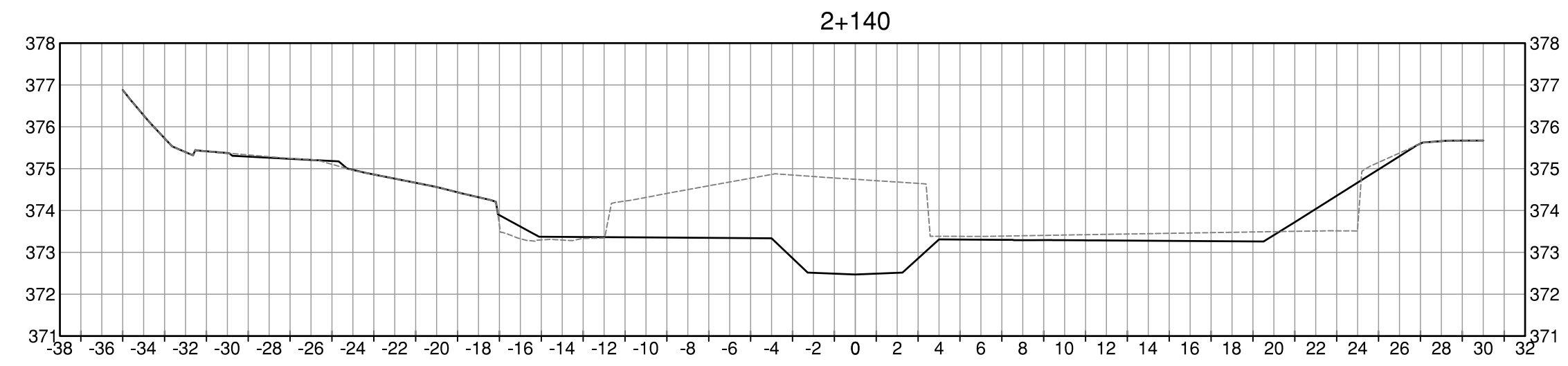
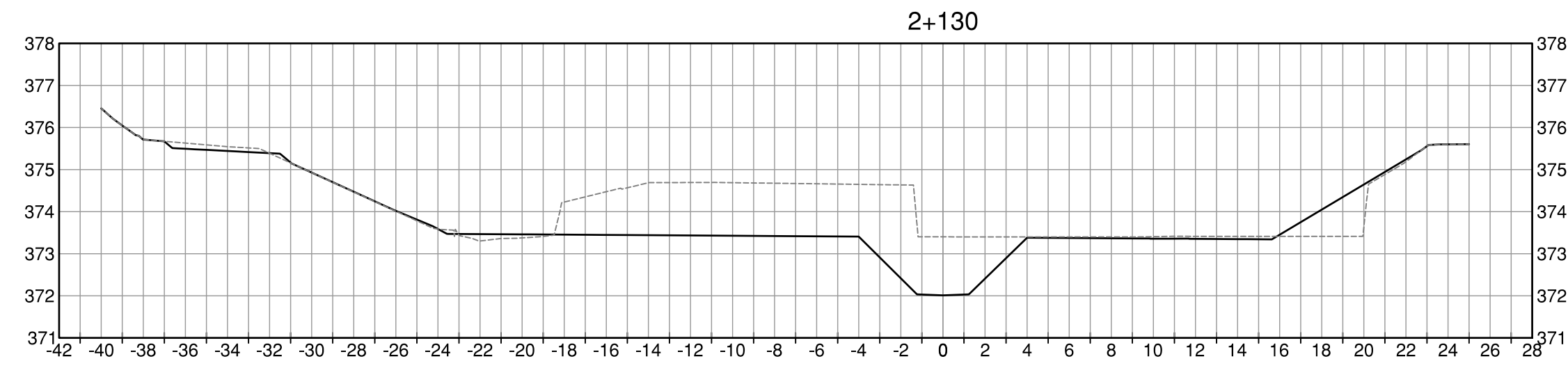
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SECTIONS

**POLSON PARK NATURALIZATION
PHASE 2**

DRAWING NUMBER
C312

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28.01.2024



LEGEND

ORIGINAL GROUND - - - - -
 FINISHED GROUND _____

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
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 V: 1:125

SHEET
 20 OF

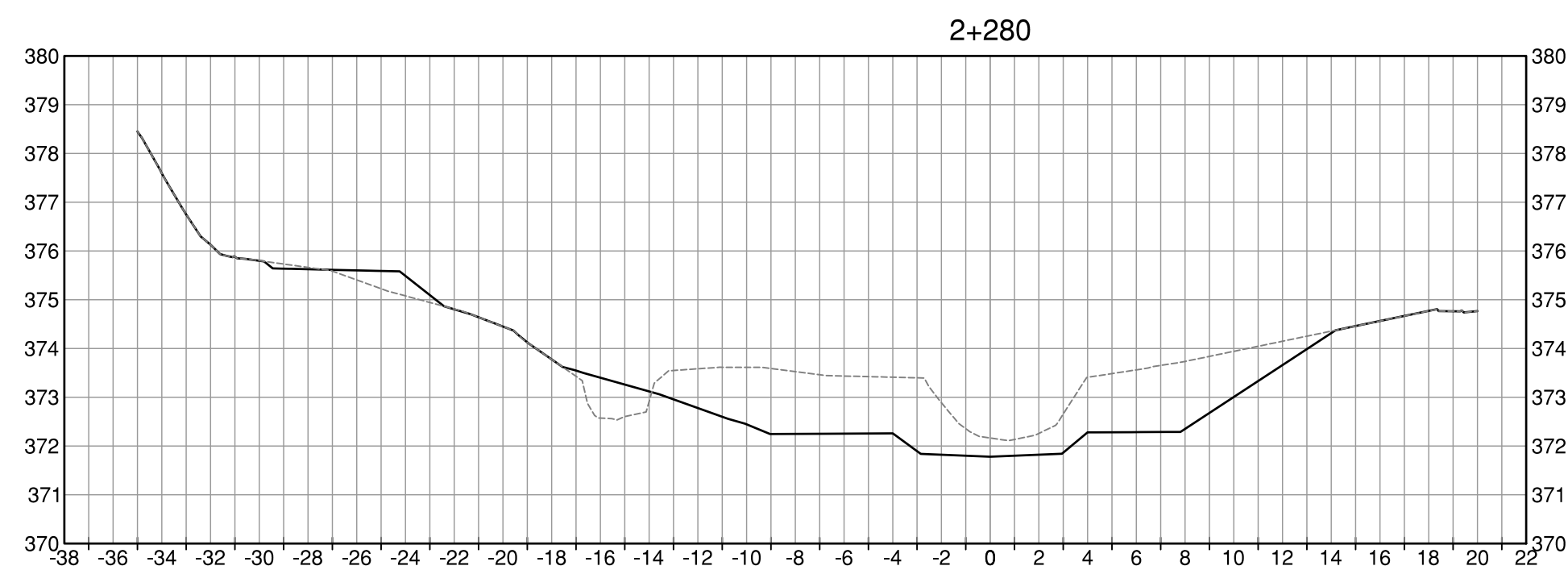
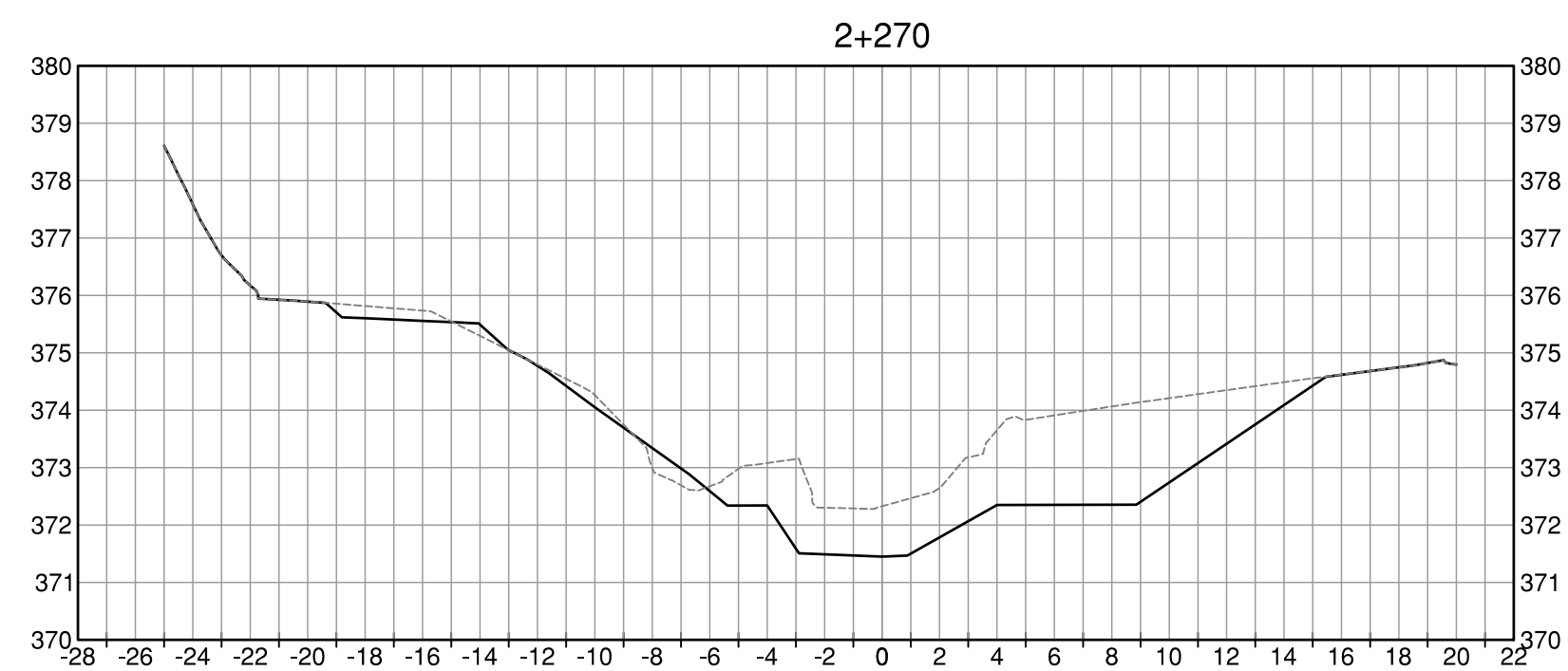
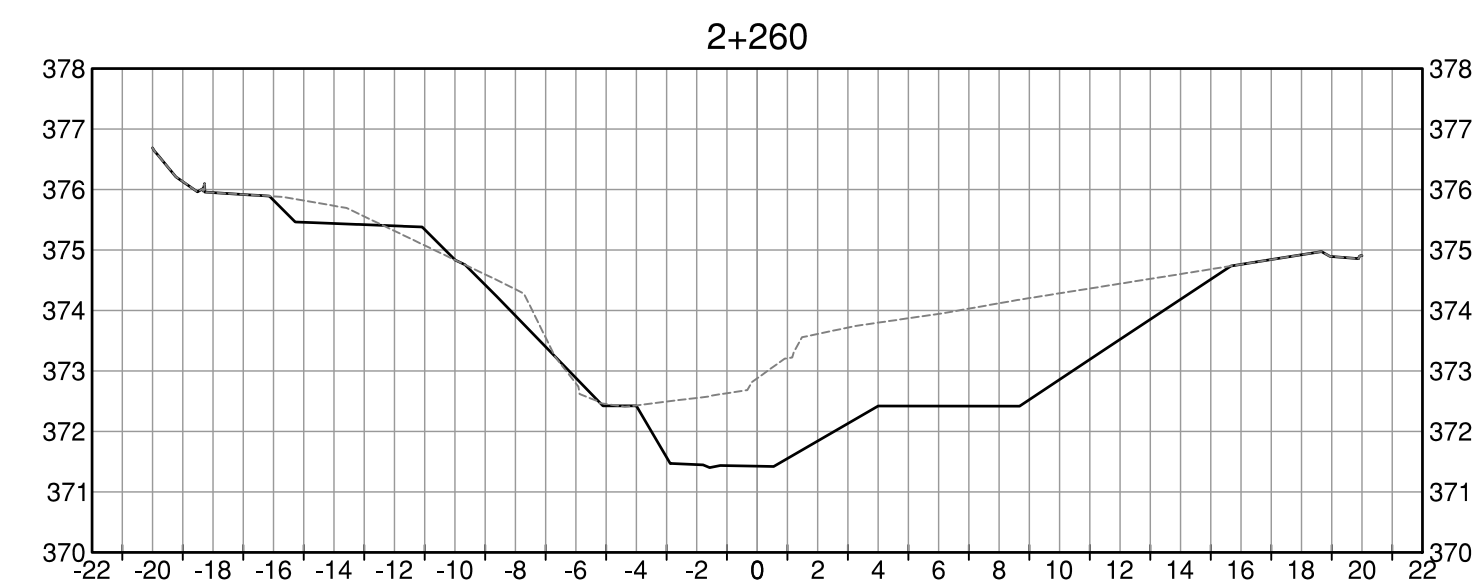
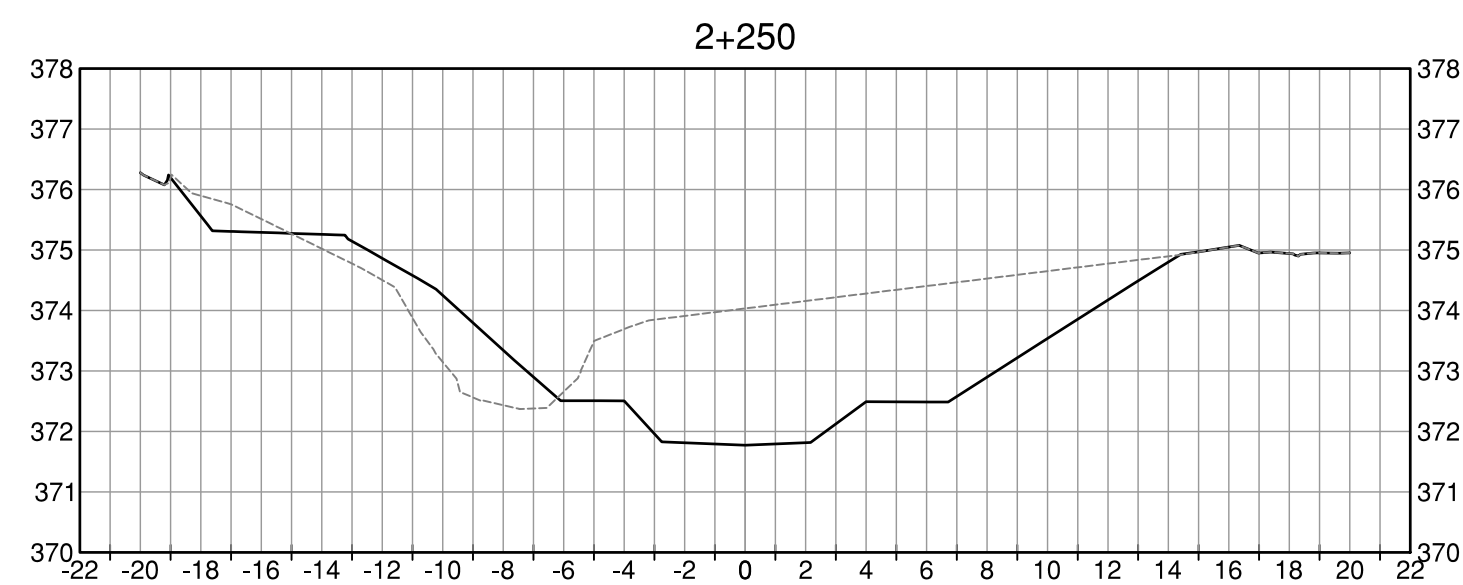
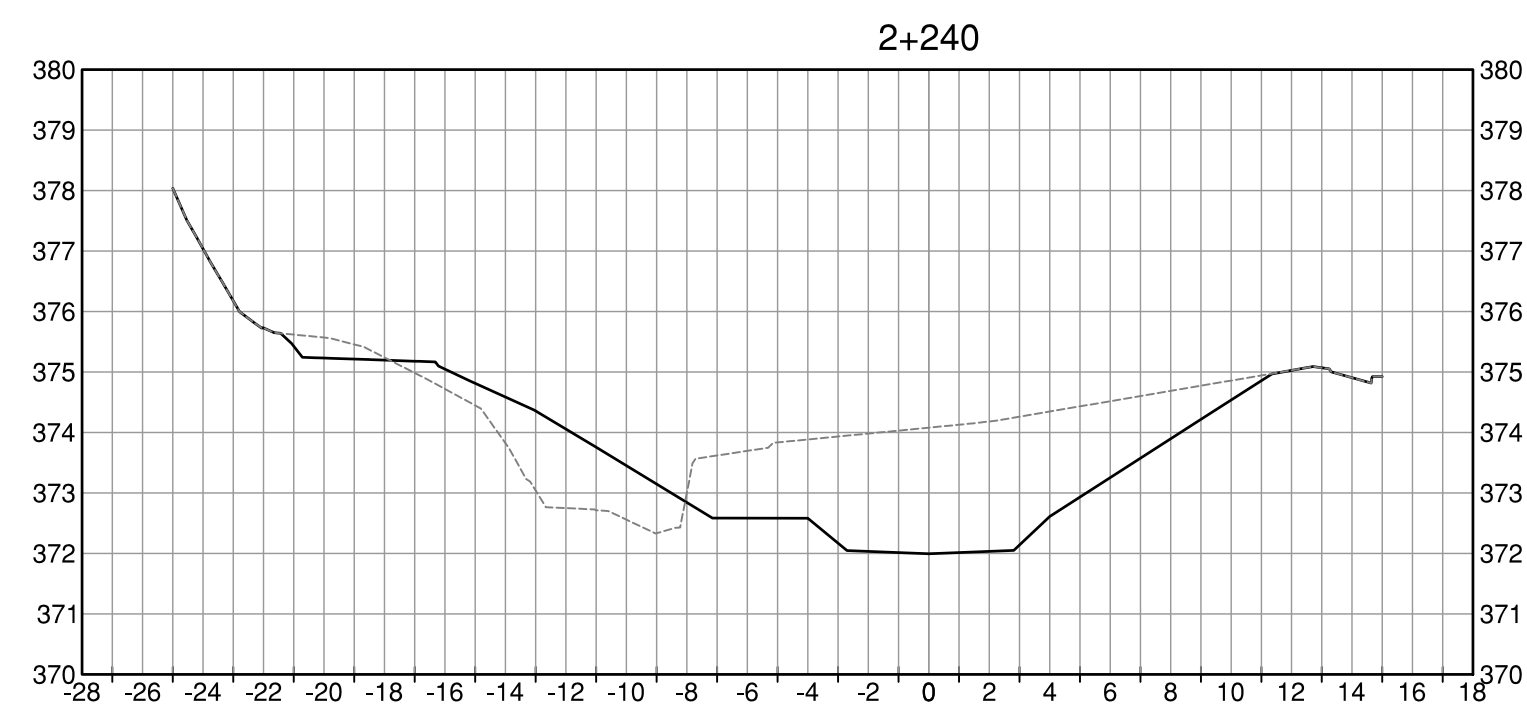
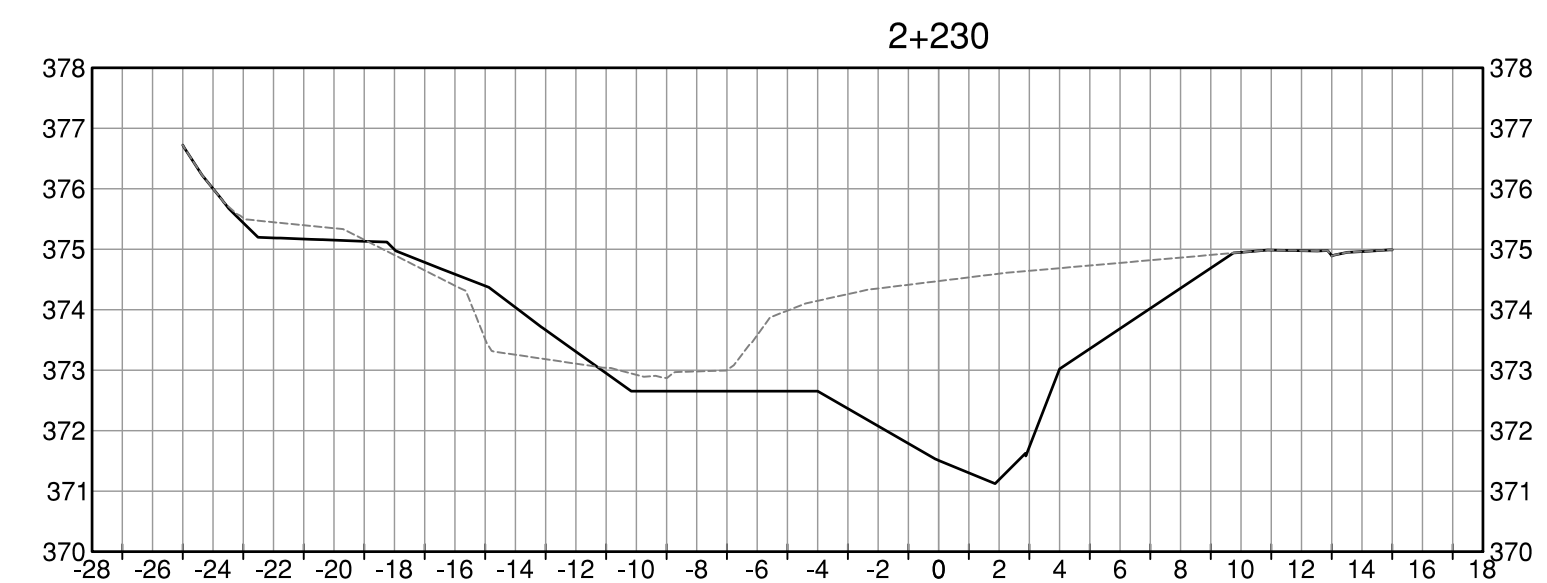
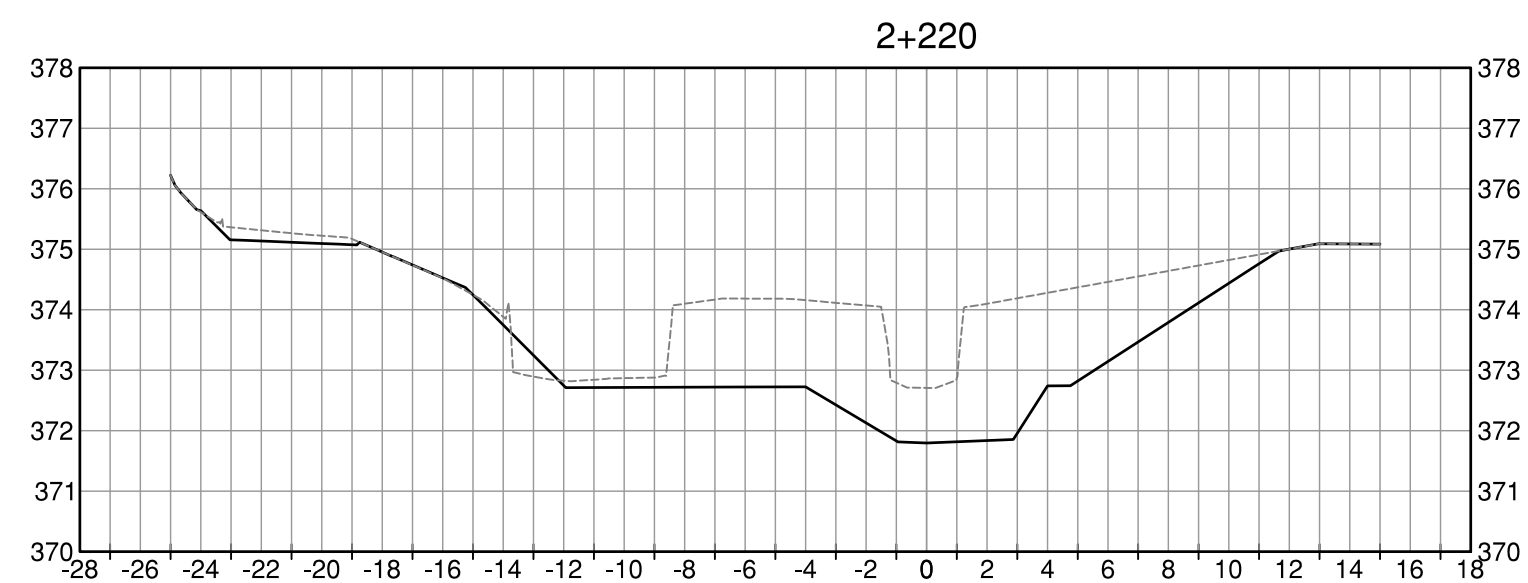
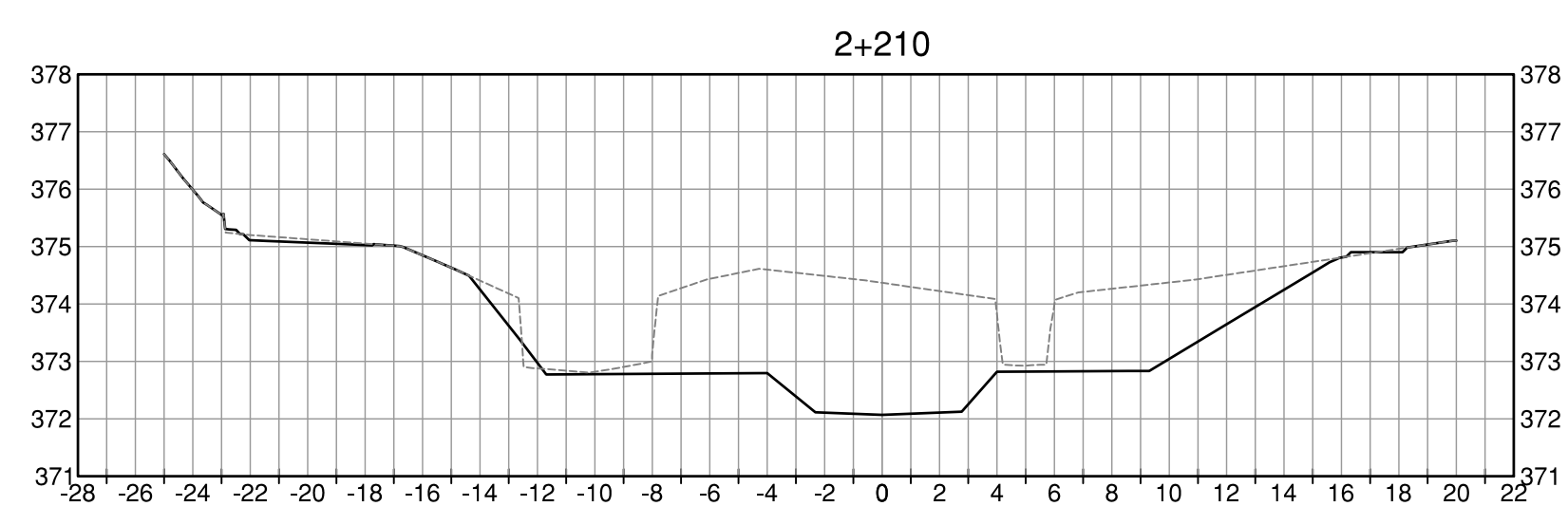
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SECTIONS

**POLSON PARK NATURALIZATION
 PHASE 2**

DRAWING NUMBER
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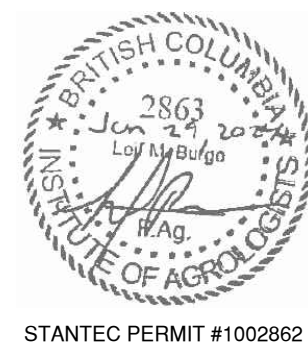
28.01.2024



LEGEND

- ORIGINAL GROUND -----
- FINISHED GROUND _____

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
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V: 1:125

SHEET
21 OF

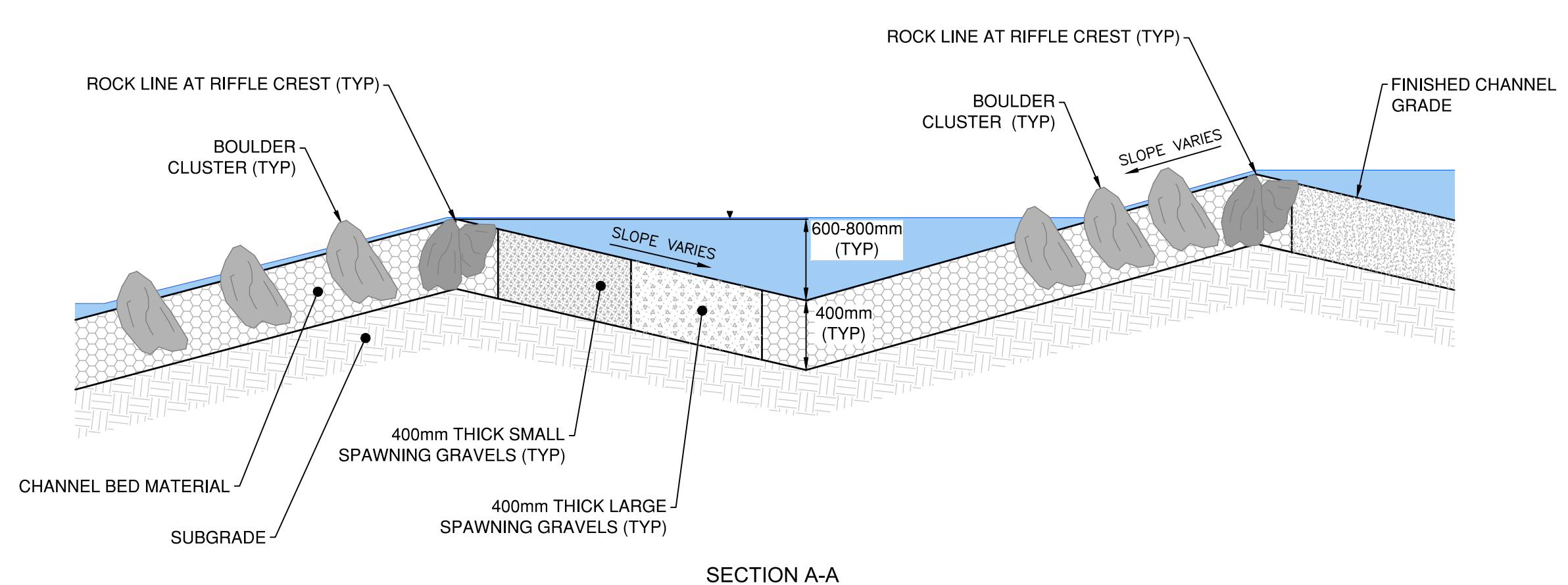
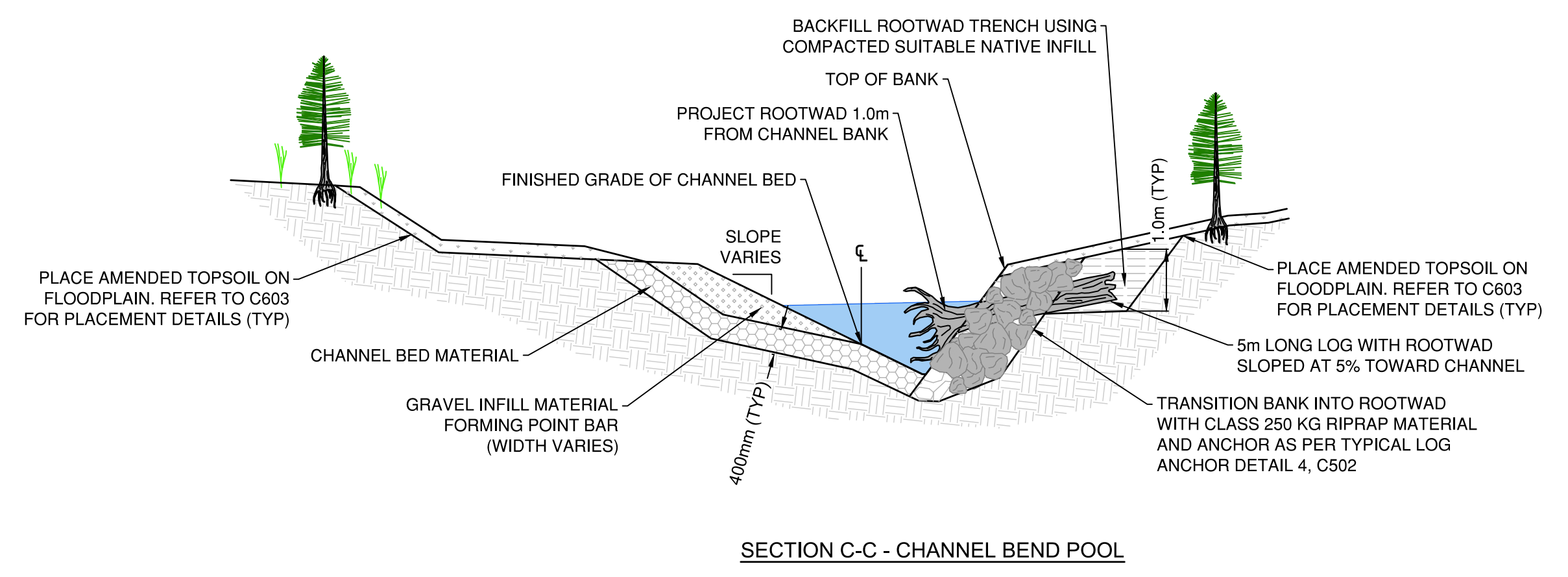
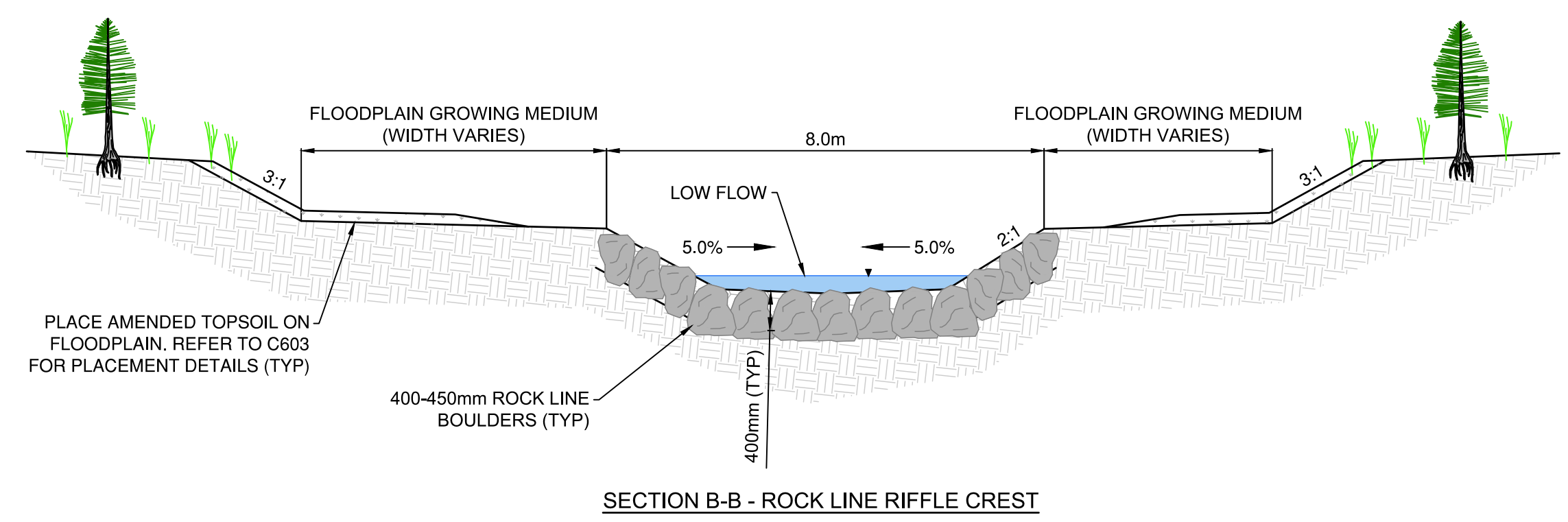
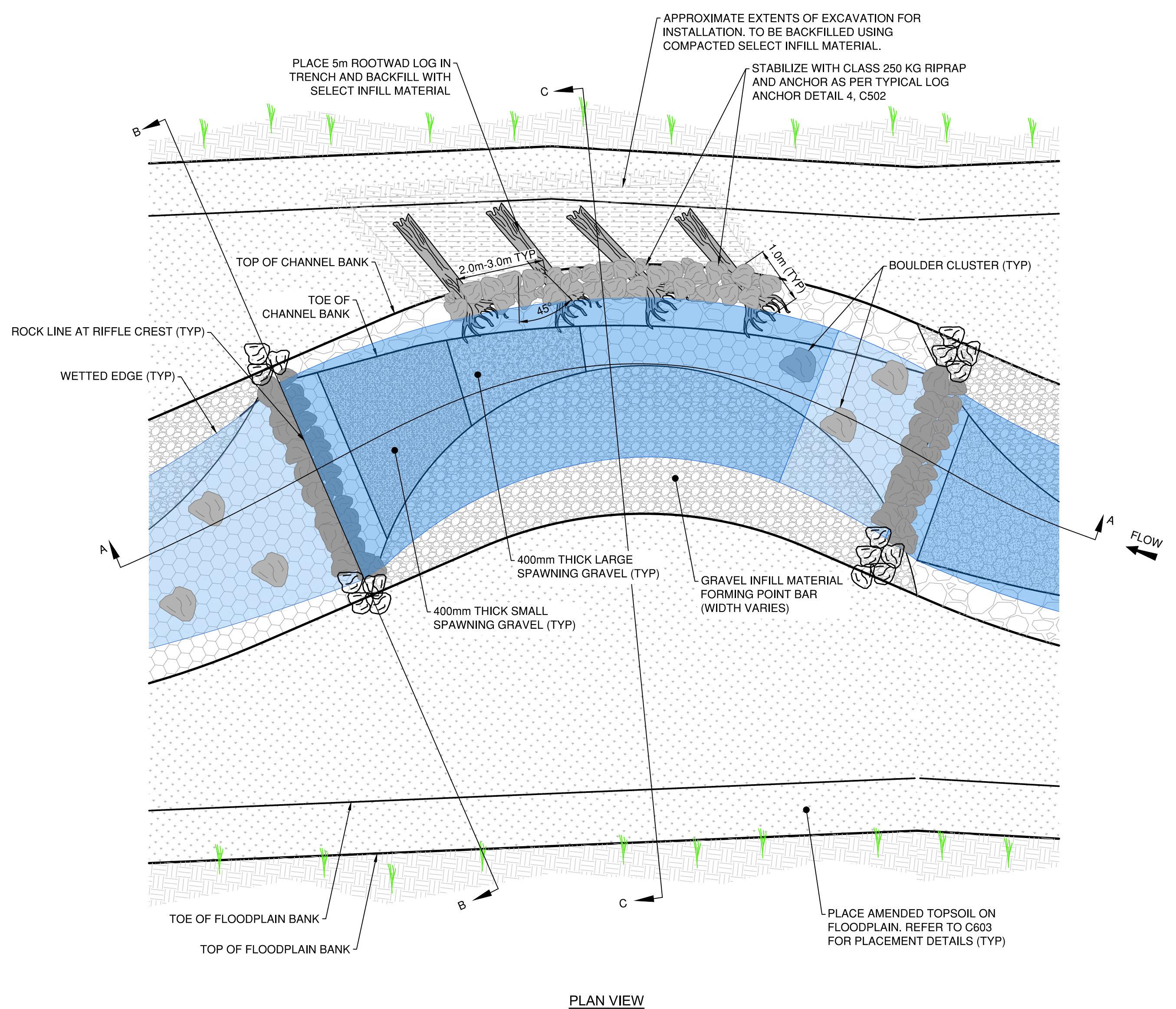
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**POLSON PARK NATURALIZATION
PHASE 2**

DRAWING NUMBER
C314

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28.01.2024



1 RIFFLE POOL DETAIL
C501 NTS

- NOTES:**
- EXCAVATE TO SUBGRADE SURFACE
 - INSTALL ROOTWADS IN TRENCH AT 5% SLOPE TOWARDS THE CHANNEL WITH THE ROOTWAD 1m INTO THE CHANNEL FROM THE BANK
 - ANCHOR ROOTWADS AS PER TYPICAL LOG ANCHOR DETAIL
 - PLACE CLASS 250 KG RIPRAP BALLAST OVER LOGS
 - FORM BANKS FROM CLASS 250 KG RIPRAP
 - BACKFILL TRENCH WITH SUITABLE NATIVE INFILL MATERIAL APPROVED BY QUALIFIED PROFESSIONAL
 - PLACE ROCK LINE AT RIFFLE CREST
 - PLACE CHANNEL BED MATERIAL AND WASH IN GRAVEL INFILL MATERIAL
 - PLACE SMALL AND LARGE SPAWNING GRAVELS AS PER TYPICAL DETAIL
 - PLACE GRAVEL INFILL MATERIAL TO FORM BAR OPPOSITE TO ROOTWADS
 - DO NOT INFILL THE POOL ON THE OUTSIDE BEND. MAINTAIN DESIGN POOL DEPTH

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



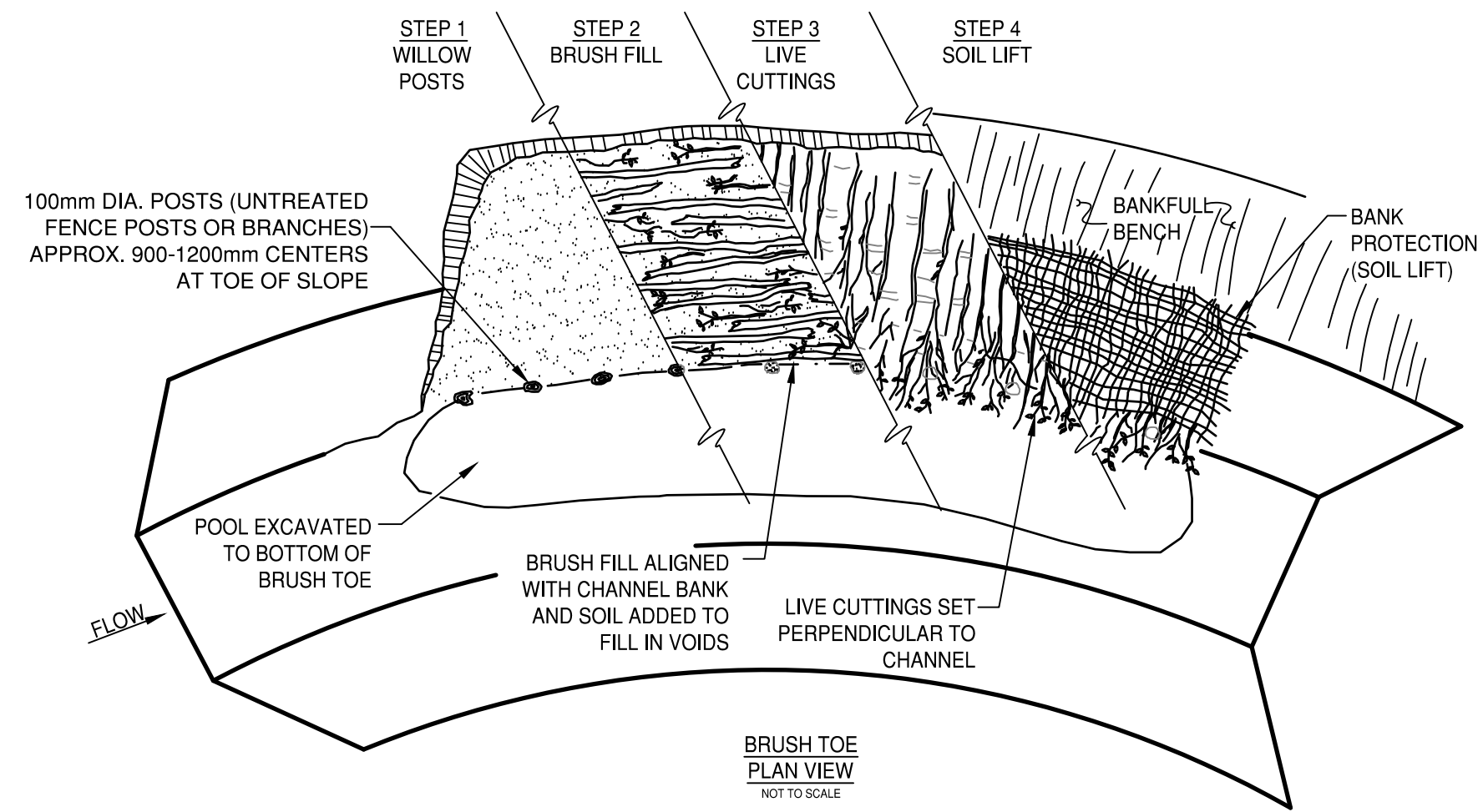
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19 OF

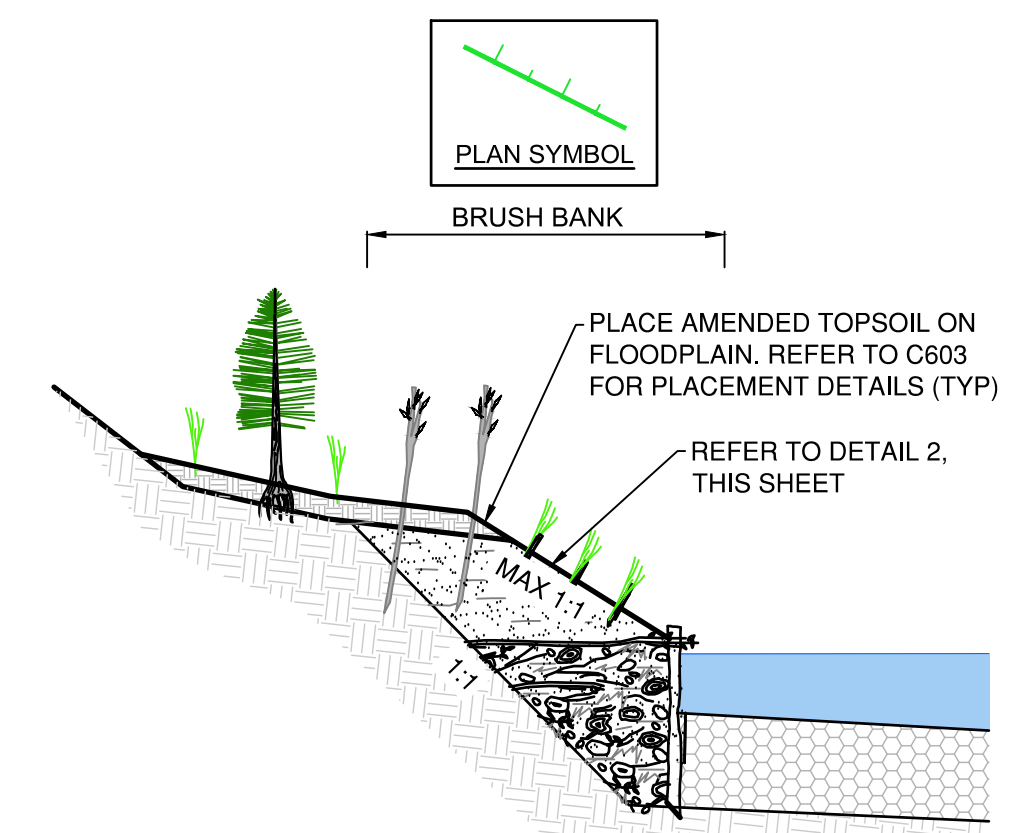
TITLE
TYPICAL CHANNEL DETAILS

PHASE 2

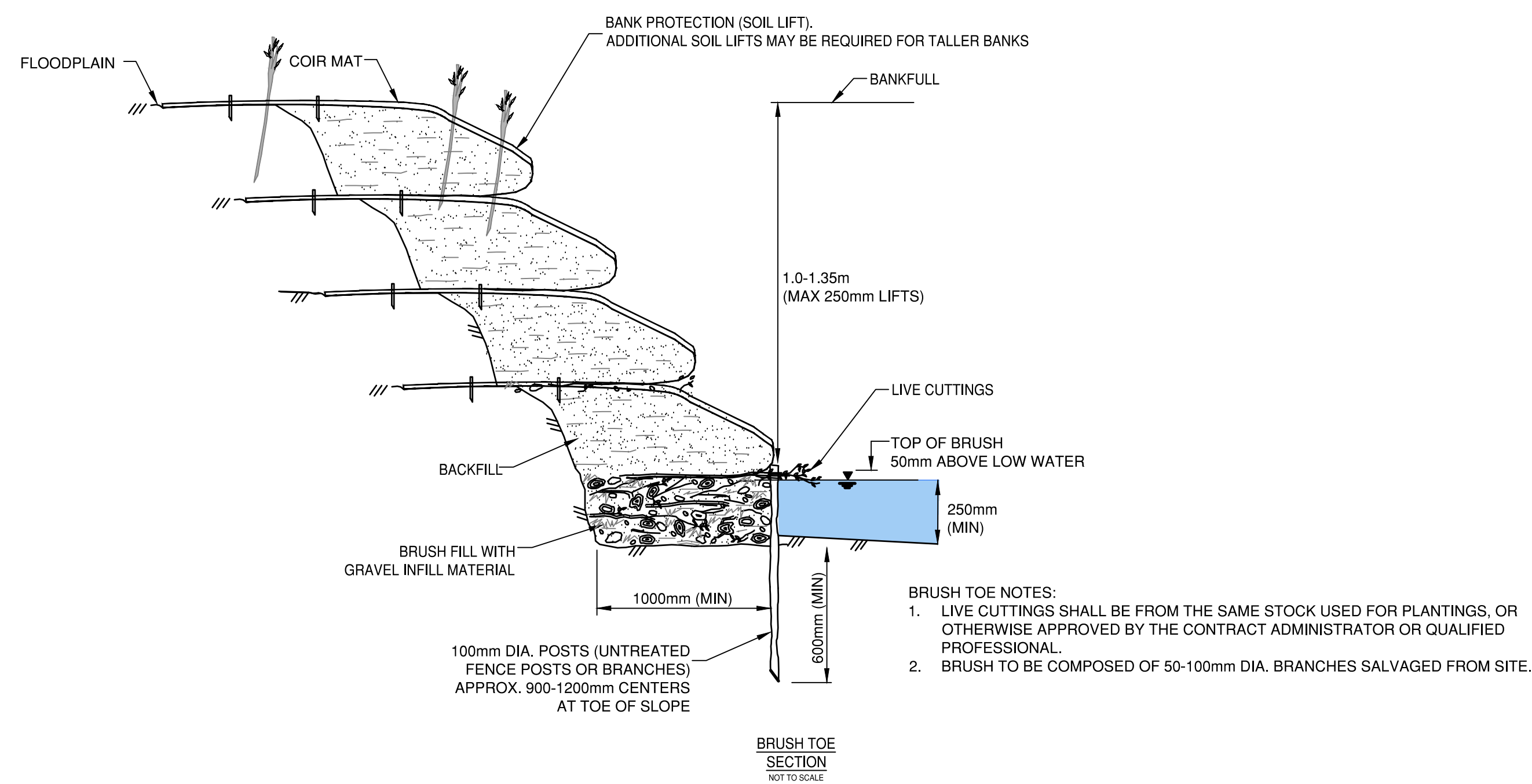
DRAWING NUMBER
C501



BRUSH TOE
PLAN VIEW
NOT TO SCALE

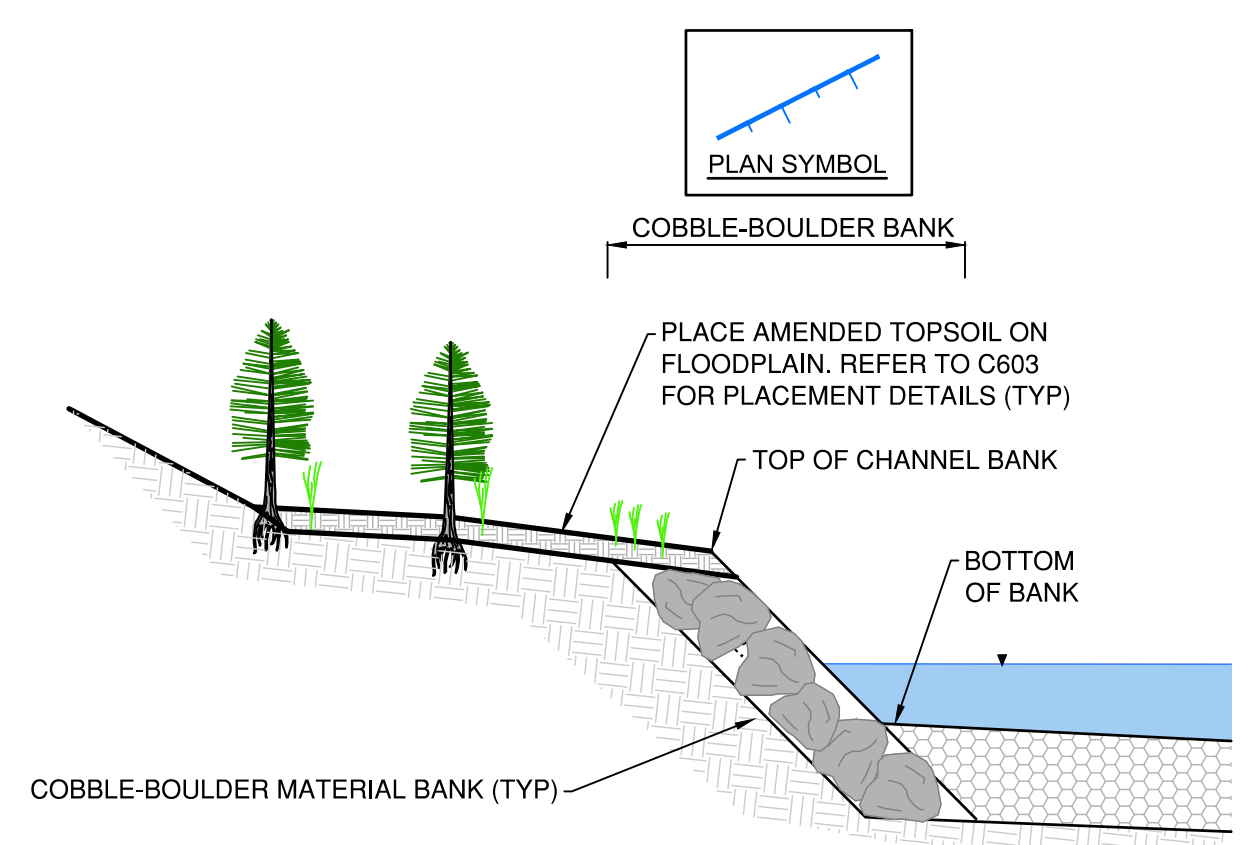


SECTION - RIFFLE POOL w/ RIPRAP AND BRUSH BANK

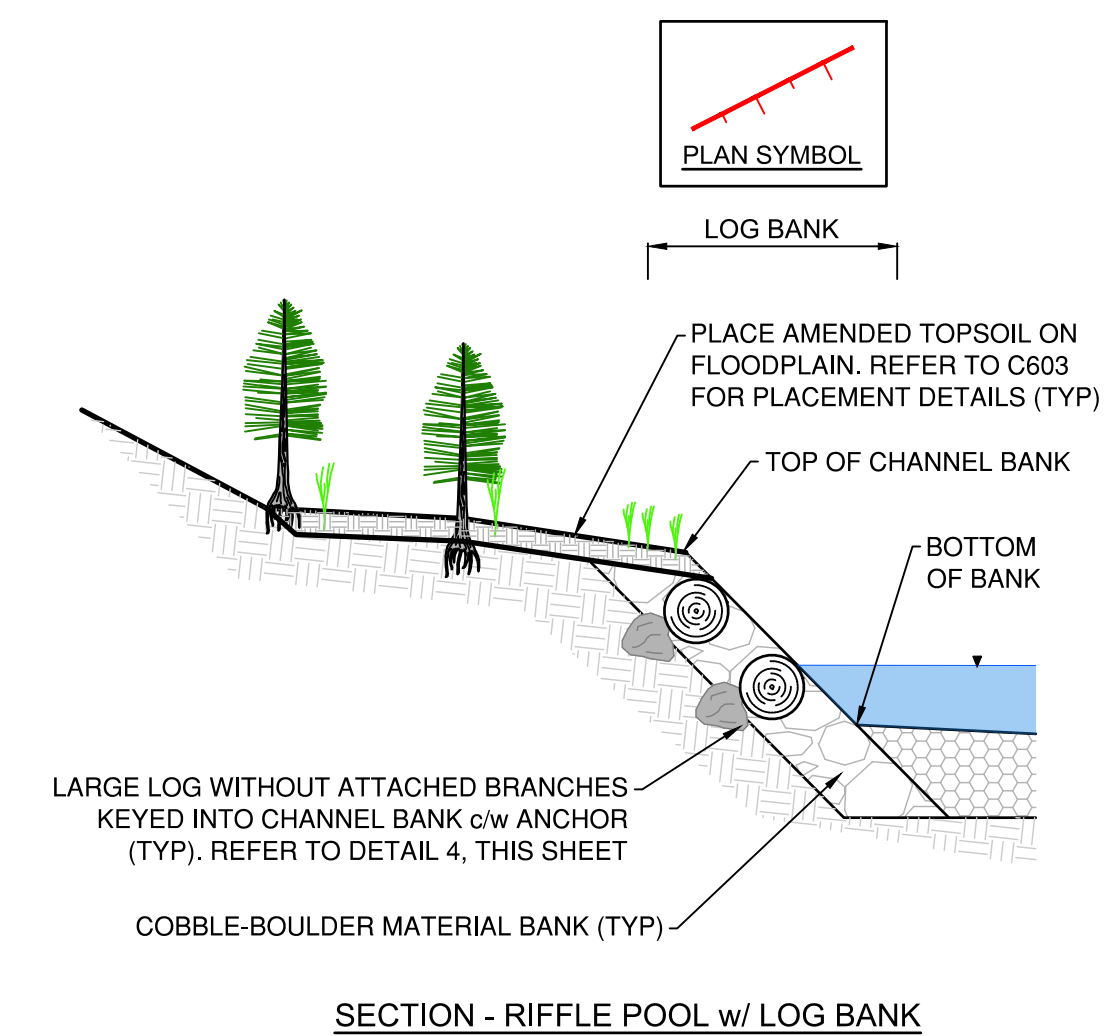


BRUSH TOE
SECTION
NOT TO SCALE

2 TYPICAL BRUSH TOE DETAILS
C502 NTS

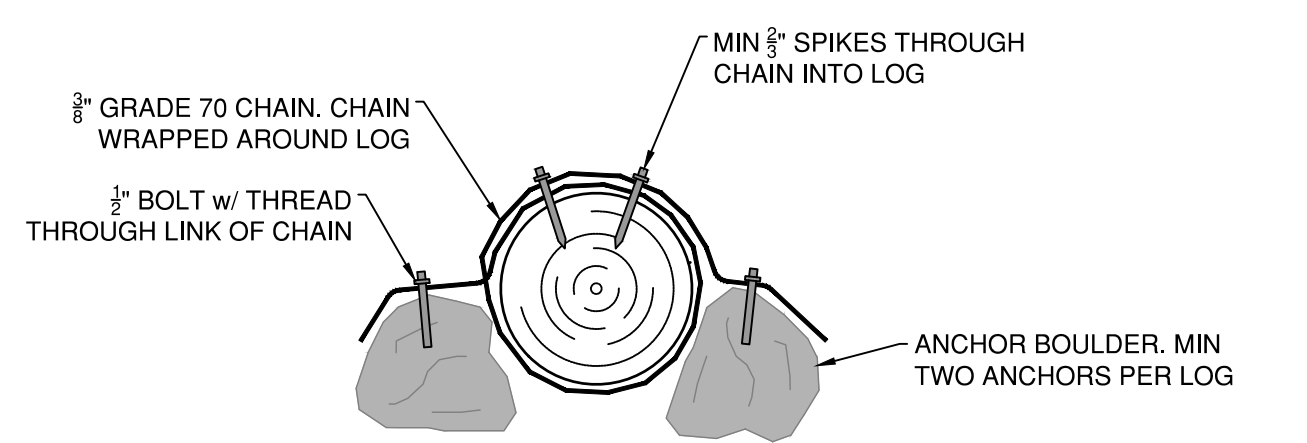


SECTION - RIFFLE POOL w/ RIPRAP AND COBBLE BOULDER BANK



SECTION - RIFFLE POOL w/ LOG BANK

3 TYPICAL BANK TREATMENT DETAILS
C502 NTS



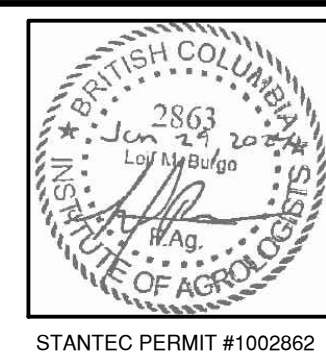
4 TYPICAL LOG ANCHOR DETAIL
C502 NTS

- NOTES:**
- SUPPLY AND INSTALL 12mmØ 150mm HILTI-KNIT BOLT (MINIMUM 100mm EMBEDMENT) c/w HILTI HIT-RE 500 V3 SYSTEM INTO ANCHOR BOULDERS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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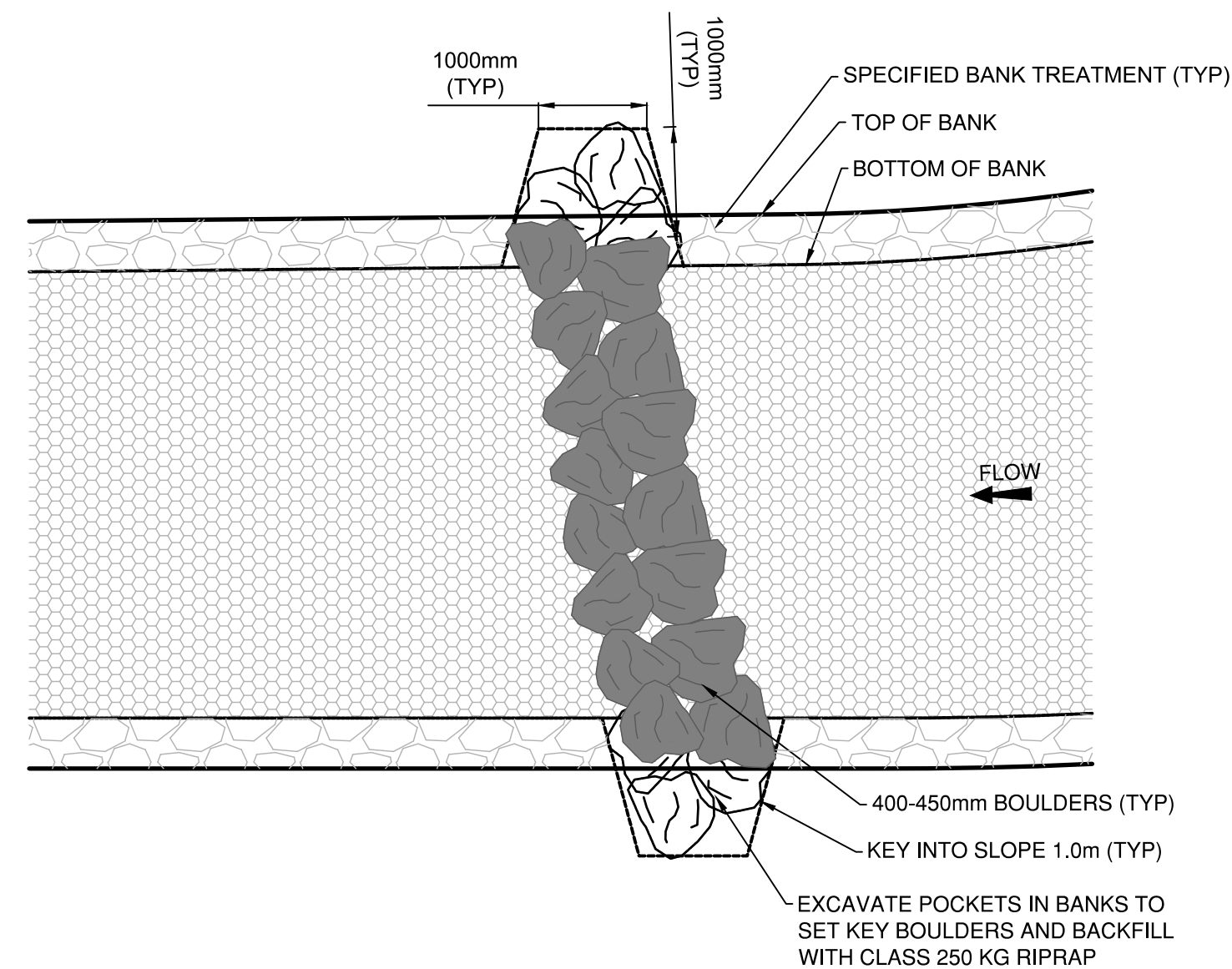
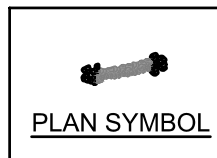
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SHEET
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TITLE
TYPICAL CHANNEL DETAILS

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C502

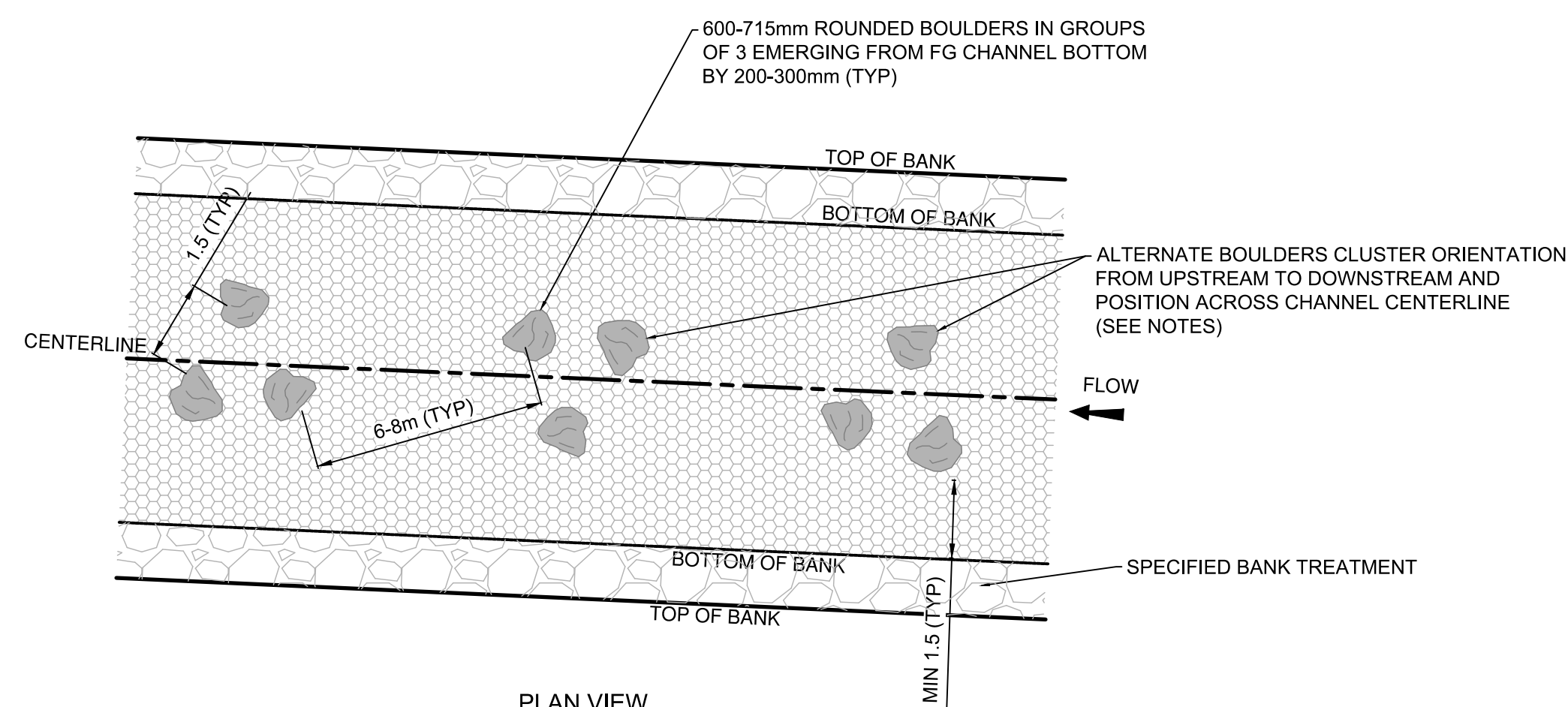
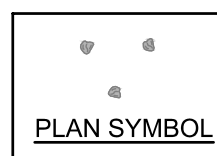


PLAN VIEW

5 ROCK LINE DETAIL
C503 NTS

NOTES:

- BOULDERS FOR THE ROCK LINE MUST HAVE A HAVE A DIAMETER OF 400-450mm.
- HEADER BOULDERS SHALL BE UNDERLAIN BY FOOTER BOULDERS UNLESS OTHERWISE DIRECTED BY THE QUALIFIED PROFESSIONAL. FOOTER BOULDERS SHALL BE INSTALLED FIRST AND POSITIONED TO SUPPORT HEADER BOULDERS ABOVE. HEADER BOULDERS SHALL BE OFFSET SLIGHTLY UPSTREAM OF THE FOOTER BOULDERS.
- SET INVERTS AT ELEVATION SHOWN ON THE PLAN AND PROFILE SHEETS WITH NO DROP IN ELEVATION ACROSS EACH LINE.
- THE ROCK LINE SHALL BE PLACED PERPENDICULAR TO THE CHANNEL BANKS. LOCATION OF ALL ROCK LINES SHOWN ON THE PLAN AND PROFILE SHEETS (C201 TO C203).
- THE VERTICAL SLOPE OF EACH ROCK LINE SHALL NOT EXCEED 10% UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ALL GAPS/VOIDS LARGER THAN 50 mm BETWEEN THE HEADER AND FOOTER BOULDERS SHALL BE HAND CHINKED WITH COBBLE AND GRAVEL ON THE UPSTREAM SIDE WITH GRAVEL INFILL MATERIAL. ALL CHINKING SHALL BE APPROVED BY THE QUALIFIED PROFESSIONAL BEFORE THEY ARE BACKFILLED.
- BACKFILL BETWEEN LINES WITH COBBLE BOULDER MATERIAL (SEE G004).
- INFILL BED WITH GRAVEL INFILL MATERIAL. USE A PUMP AND HOSE TO WASH THE GRAVEL INFILL MATERIAL INTO VOIDS SUCH THAT WATER FLOWS OVER THE BED AND NOT THROUGH IT. INFILLING SHALL BE APPROVED BY THE QUALIFIED PROFESSIONAL.
- SELECT BACKFILL AND SOIL BACKFILL MATERIAL ON THE BANKS SHALL BE COMPACTED SUCH THAT FUTURE SETTLEMENT OF THE MATERIAL IS KEPT TO A MINIMUM.
- THE SURFACE OF THIS STRUCTURE SHALL BE FINISHED TO A ROUGH IRREGULAR SURFACE IN ACCORDANCE WITH THE LINES, GRADES, AND CROSS-SECTIONS OR ELEVATIONS SHOWN ON THE DRAWINGS. THE DEGREE OF FINISH FOR INVERT ELEVATIONS SHALL BE WITHIN 30 mm OF THE GRADES AND ELEVATIONS INDICATED, PROVIDED ANY HEIGHT DOES NOT EXCEED MAX. ALLOWABLE DROP OF 120mm FOR THIS STRUCTURE.



PLAN VIEW

6 BOULDER CLUSTER DETAIL
C503 NTS

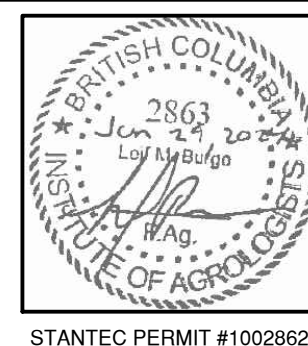
NOTES:

- BOULDERS FOR THE CLUSTERS SHALL HAVE A DIAMETER OF 600-715mm.
- BOULDER CLUSTERS SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF THE QUALIFIED PROFESSIONAL. BOULDER CLUSTERS ARE TO BE INSTALLED WITHIN THE CHANNEL DURING LOW FLOW (WITH FISH ISOLATION) TO ADJUST PLACEMENT AS REQUIRED FOR THE FLOW CONDITIONS.
- BOULDERS SHALL BE PLACED IN GROUPS OF THREE, WITHIN THE MIDDLE 3/4 OF THE CREEK, IN PATTERNS THAT DO NOT DIRECT FLOW TOWARDS THE BANKS.
- BOULDERS SHALL PROTRUDE 200-300mm ABOVE THE CHANNEL BED.
- SPACE THE BOULDERS AS SPECIFIED IN THE DETAIL ENSURING THAT NO MORE THAN 20% OF THE STREAM WIDTH IS OBSTRUCTED AT ANY GIVEN POINT.

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28.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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V: N/A

SHEET
21 OF

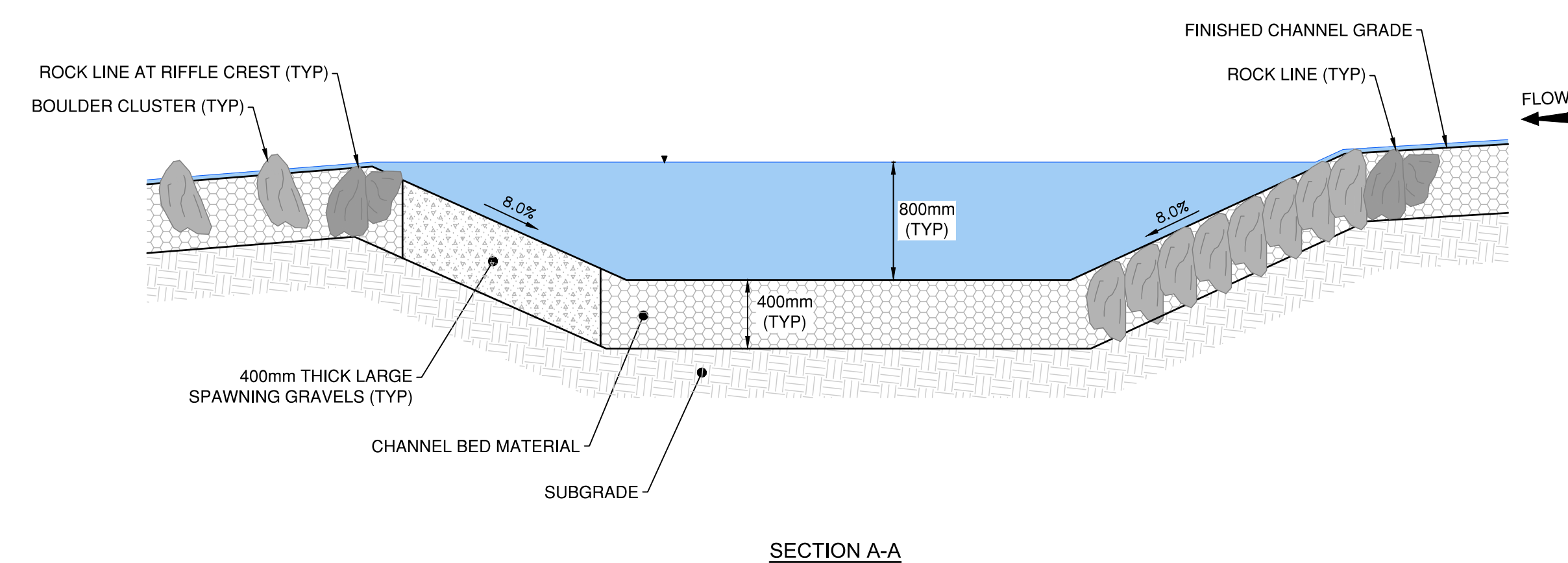
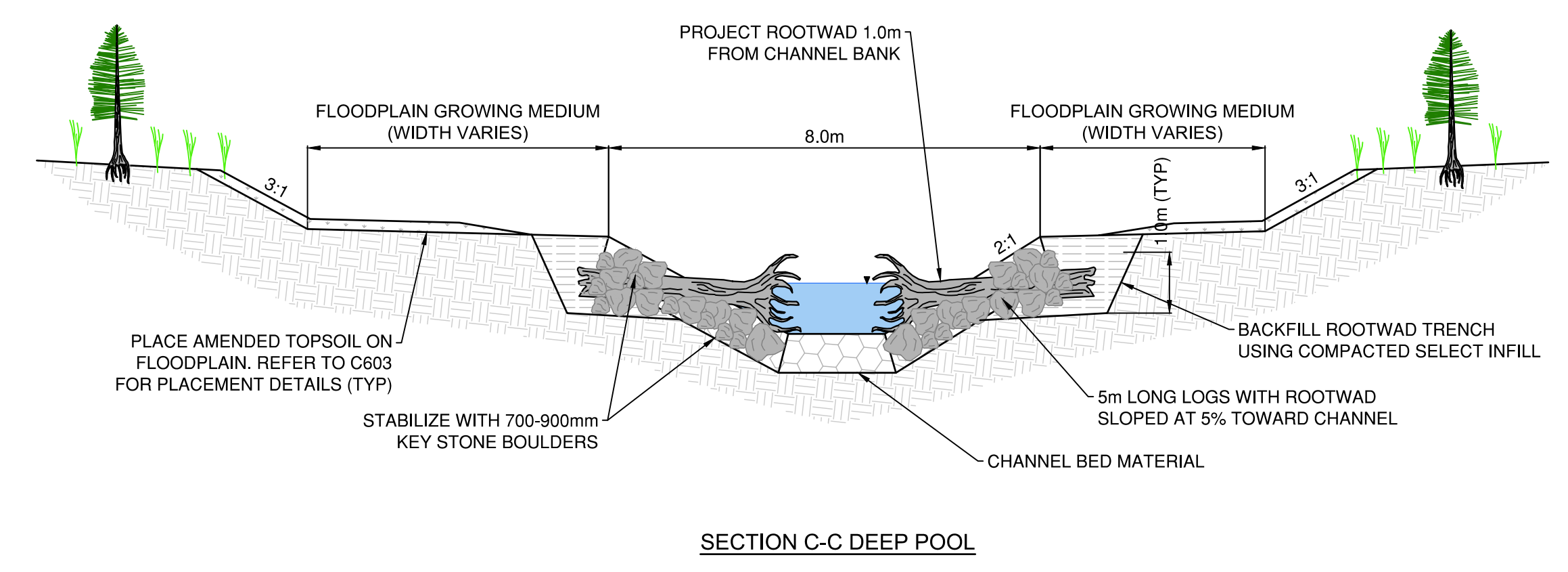
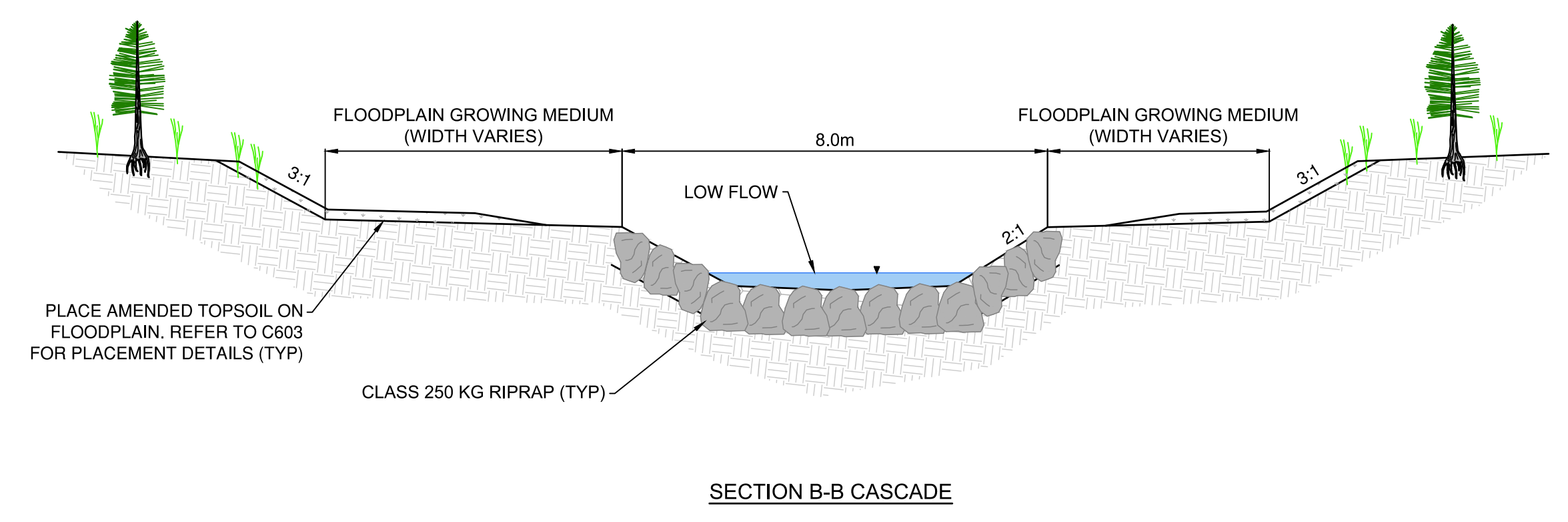
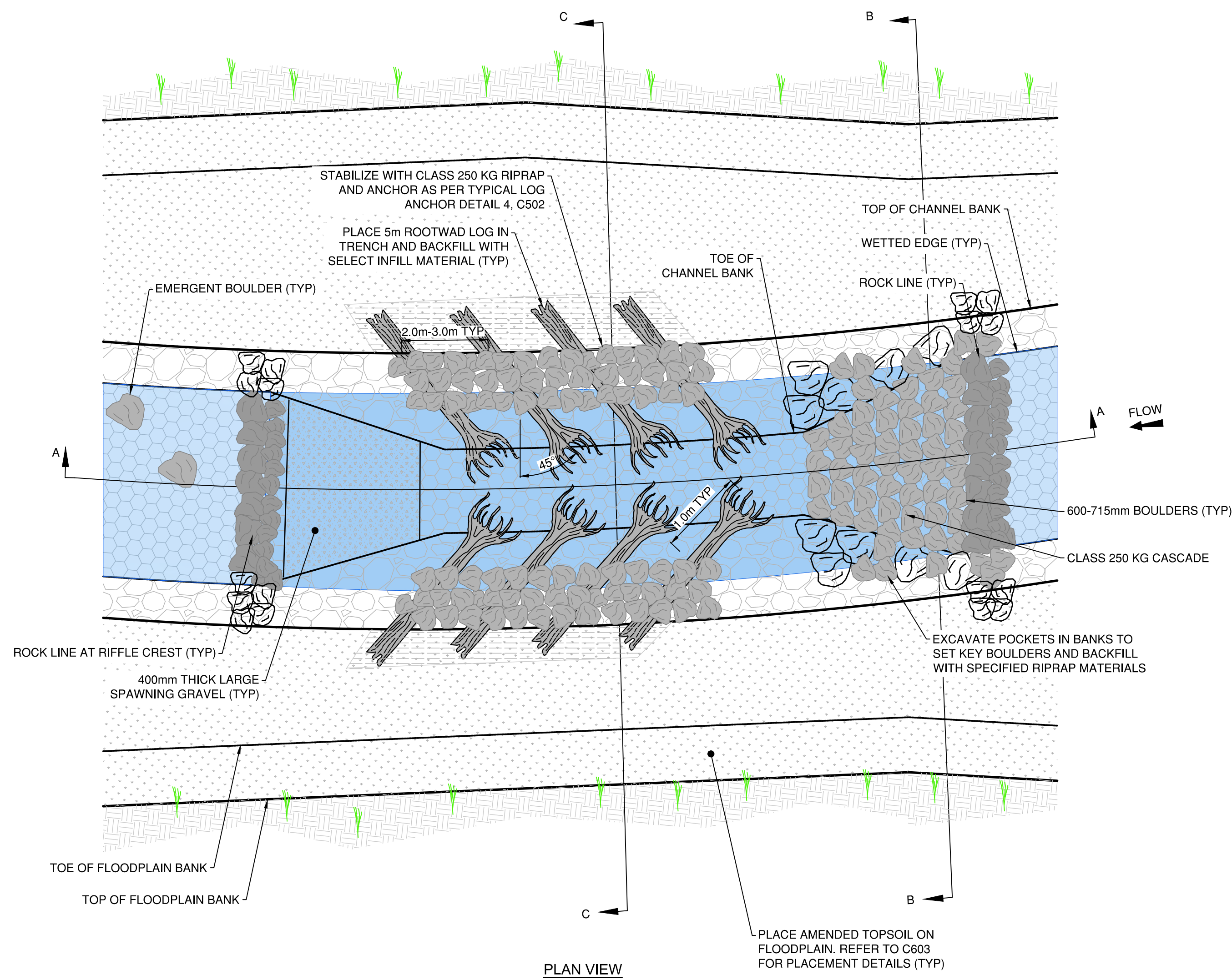
TITLE
TYPICAL CHANNEL DETAILS

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
C503

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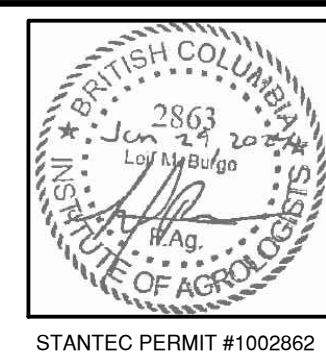
28.01.2024



- NOTES:**
- EXCAVATE TO SUBGRADE SURFACE
 - INSTALL ROOTWADS IN TRENCH AT 5% SLOPE TOWARDS THE CHANNEL WITH THE ROOTWAD 1m INTO THE CHANNEL FROM THE BANK
 - ANCHOR ROOTWADS AS PER TYPICAL LOG ANCHOR DETAIL
 - PLACE CLASS 250 KG RIPRAP BALLAST OVER LOGS
 - FORM BANKS FROM CLASS 250 KG RIPRAP
 - BACKFILL TRENCH WITH SELECT INFILL MATERIAL
 - INSTALL ROCK LINE, KEYSTONES AND CASCADE INTO THE DEEP POOL
 - PLACE CHANNEL BED MATERIAL AND WASH IN GRAVEL INFILL MATERIAL
 - PLACE LARGE SPAWNING GRAVELS AS PER TYPICAL DETAIL
 - ENSURE POOL IS NOT INFILLED BEYOND DESIGNED POOL DEPTH

7 DEEP POOL DETAIL
C504 NTS

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	IB	JL	LB	ISSUED FOR PROPOSAL



SCALE
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SHEET
22 OF

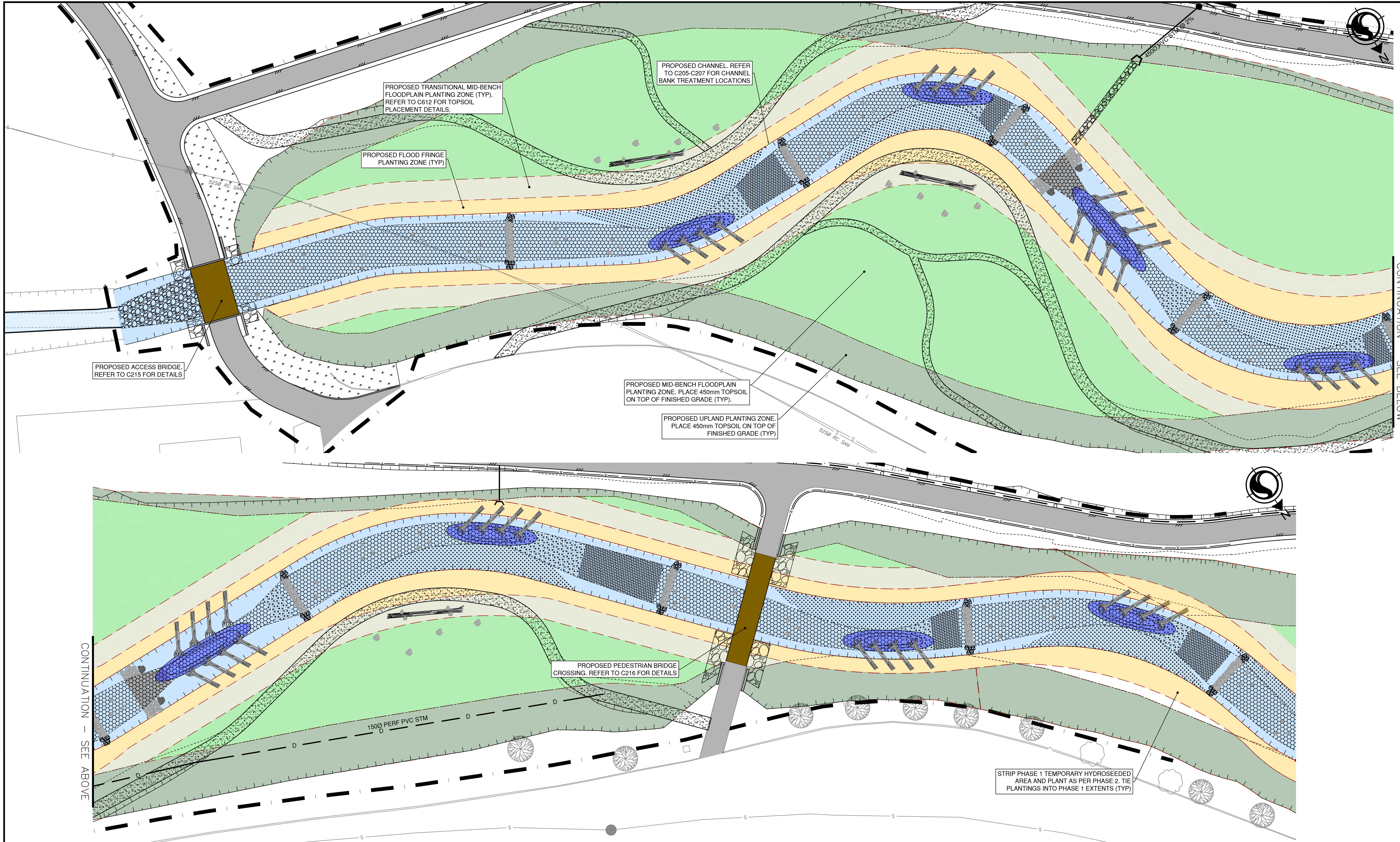
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TYPICAL CHANNEL DETAILS

PHASE 2

DRAWING NUMBER
C504

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28.01.2024



CONTINUATION - SEE ABOVE

CONTINUATION - SEE BELOW

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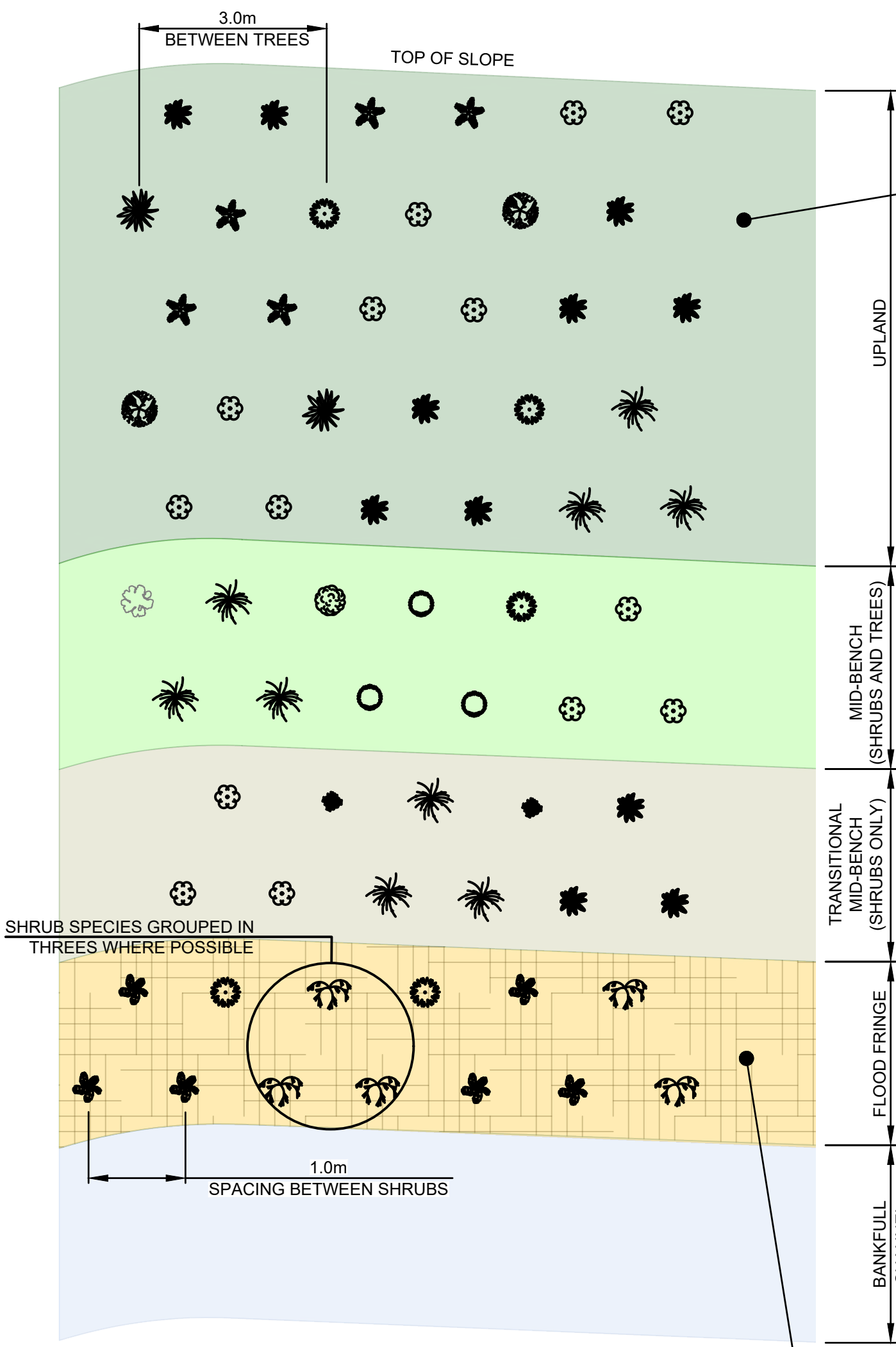
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SHEET
26 OF

TITLE
PLANTING PLAN

**POLSON PARK NATURALIZATION
PHASE 2**

DRAWING NUMBER
C610



NOTE: THIS TYPICAL ARRANGEMENT DOES NOT CONTAIN ACCURATE QUANTITIES OF EACH SPECIES. INSTEAD THE TYPICAL ARRANGEMENT ONLY APPROXIMATES THESE PROPORTIONS. REFER TO THE TABLE FOR QUANTITIES

SPECIES PLANTING LEGEND

- DRUMMOND'S WILLOW
- RED OSIER DOGWOOD
- NOOTKA ROSE
- SASKATOON BERRY
- TALL OREGON-GRAPE
- BLACK GOOSEBERRY
- CHOKECHERRY
- GENERIC SHRUB
- BLACK COTTONWOOD
- HYBRID WHITE x ENGLEMANN SPRUCE
- INTERIOR DOUGLAS FIR
- DOUGLAS FIR
- PONDEROSA PINE

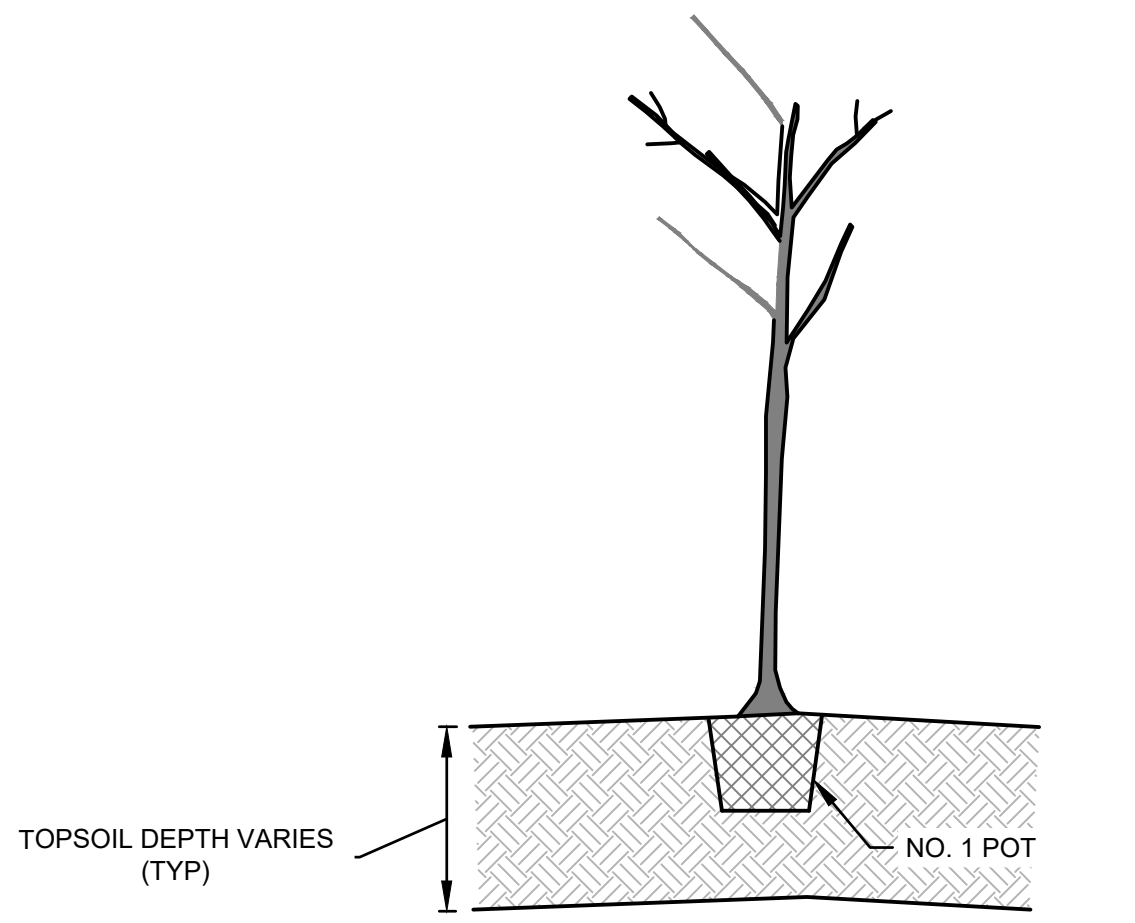
NOTES:

- PLACE TOPSOIL ON TOP OF FINISHED GRADE OF THE MID-BENCH FLOODPLAIN AND UPLAND PLANTING ZONES AS PER THE TYPICAL TOPSOIL PLACEMENT SECTION ON C612. TOPSOIL CAN BE SLIGHTLY COMPACTED BY WALKING A TRACKED EXCAVATOR OVER IT UP/DOWN SLOPE SO THAT THE TREADS ARE ON CONTOUR. REFER TO DETAIL ON C603 FOR FURTHER TOPSOIL PLACEMENT DETAILS.
- APPLY SEED TO BARE GROUND PORTIONS OF THE PLANTING AREA HYDRAULICALLY AT A RATE OF 50 kg/ha WITH 560 kg/ha OF WOOD FIBRE MULCH. THE PRESCRIBED SEED MIX FOR USE IS DEFINED IN THE SEED MIX TABLES ON THIS SHEET.
- PLANT SPECIES SPECIFIED ABOVE HAVE BEEN PRESCRIBED BASED ON LOCAL SITE CONDITIONS. SUBSTITUTIONS OF PLANT SPECIES, PROPORTIONS, OR LAYOUTS MUST BE APPROVED BY THE DESIGN ECOLOGIST PRIOR TO IMPLEMENTING CHANGES.
- PLANT STOCK SHOULD BE INSPECTED BY A DESIGN ECOLOGIST PRIOR TO COMMENCING PLANTING WORKS.

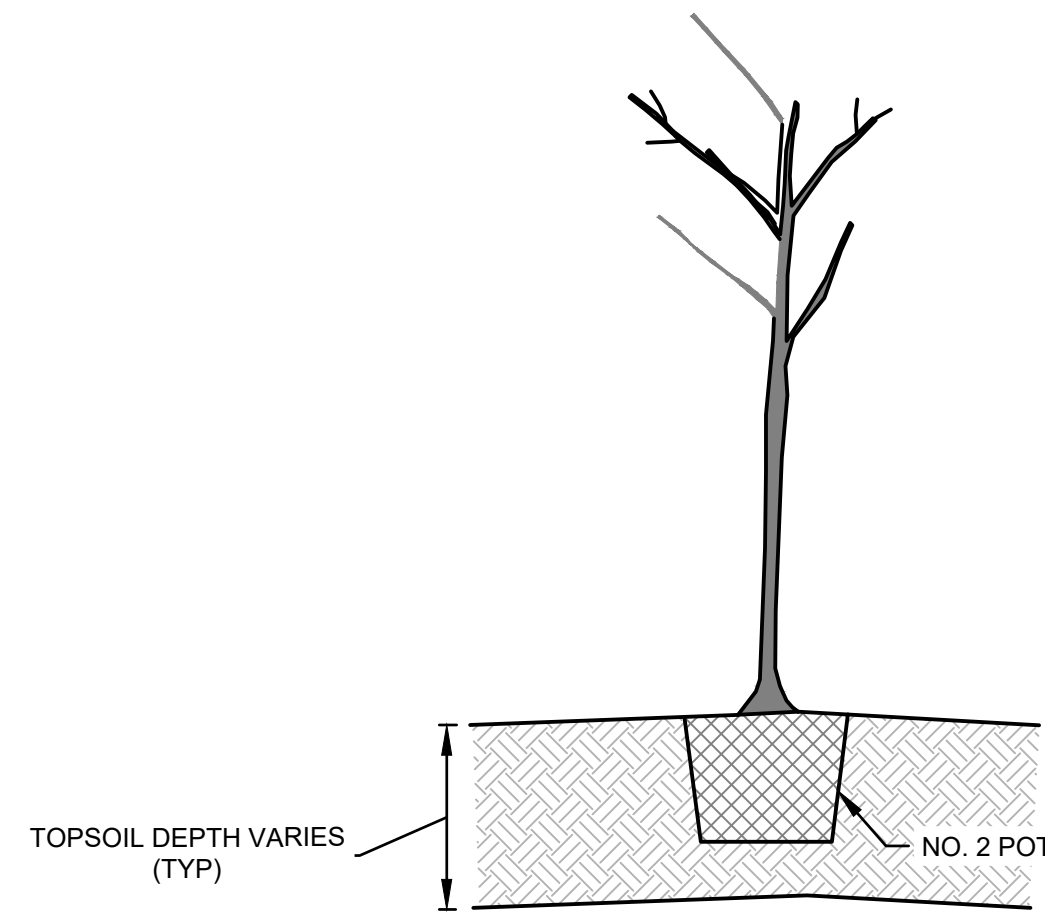
TYPICAL PLANTING ARRANGEMENT - PLAN

REFER TO C603 FOR TOPSOIL PLACEMENT DETAIL

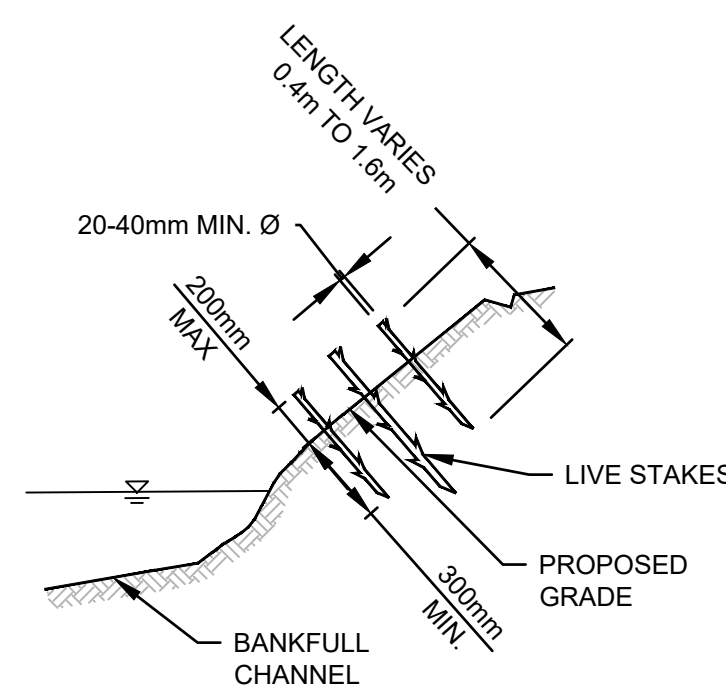
SEED AND PLANTINGS (PER DRAWING C601) COVERED BY ROLLMAX BIONET C700BN BIODEGRADABLE EROSION CONTROL MATTING (OR EQUIVALENT APPROVED BY ENGINEER) TRENCHED ON BOTH ENDS AND STAKED AS SHOWN.



TYPICAL NO. 1 POT PLANTING DETAIL
SCALE: NOT TO SCALE



TYPICAL NO. 2 POT PLANTING DETAIL
SCALE: NOT TO SCALE



TYPICAL LIVE STAKE PLANTING DETAIL
SCALE: NOT TO SCALE

PLANTING ZONE	FORM	SCIENTIFIC NAME	COMMON NAME	TYPICAL ON-CENTER SPACING (m)	SIZE	QUANTITY
Flood Fringe	Trees	<i>Populus trichocarpa</i>	black cottonwood	3	live-stake	63
	Shrubs	<i>Cornus sericea</i>	red-twig dogwood	1	live-stake	562
		<i>Salix drummondiana</i>	Drummond's willow	1	live-stake	422
Mid-bench / Upland	Trees	<i>Populus trichocarpa</i>	black cottonwood	3	1.5m height	86
		<i>Picea engelmannii x glauca</i>	hybrid white x Engelmann spruce	4	1.5m height	31
		<i>Pinus ponderosa</i>	Ponderosa pine	3	1.5m height	36
		<i>Pseudotsuga menziesii</i>	interior Douglas-fir	4	1.5m height	59
		<i>Populus tremuloides</i>	quaking aspen	3	1.5m height	23
		<i>Cornus sericea</i>	red-osier dogwood	2	#2 pot	198
	Shrubs	<i>Symphoricarpos albus</i>	common snowberry	2	#1 pot	133
		<i>Acer glabrum</i>	Douglas maple	2	#2 pot	151
		<i>Rosa nutkana</i>	Nootka rose	2	#1 pot	208
		<i>Amelanchier alnifolia</i>	Saskatoon berry	2	#2 pot	163
		<i>Ribes lacustre</i>	black gooseberry	2	#1 pot	197
		<i>Salix bebbiana</i>	Bebb's Willow	2	#1 pot	224
		<i>Mahonia aquifolium</i>	tall Oregon-grape	2	#1 pot	196
		<i>Philadelphus lewisii</i>	Lewis's mock orange	2	#1 pot	125
<i>Prunus virginiana</i>	Chokecherry	2	#1 pot	56		

* TYPICAL ON-CENTER SPACING - REFER TO LANDSCAPE DRAWINGS

FLOOD FRINGE / MID-BENCH RECLAMATION SEED MIX

COMMON NAME	SCIENTIFIC NAME	PERCENT BY WEIGHT
Spike bentgrass	<i>Agrostis exarata</i>	20
California oatgrass	<i>Danthonia californica</i>	5
Tufted harigrass	<i>Deschampsia cespitosa</i>	5
Blue wildrye	<i>Elymus glaucus</i>	15
Slender wheatgrass	<i>Elymus trachycaulus</i>	20
Western wheatgrass	<i>Pascopyrum smithii</i>	20
Fowl bluegrass	<i>Poa palustris</i>	15

UPLAND RECLAMATION SEED MIX

COMMON NAME	SCIENTIFIC NAME	PERCENT BY WEIGHT
Spike bentgrass	<i>Agrostis exarata</i>	10
Blue wildrye	<i>Elymus glaucus</i>	10
Slender wheatgrass	<i>Elymus trachycaulus</i>	10
Idaho fescue	<i>Festuca idahoensis</i>	20
Prairie junegrass	<i>Koeleria macrantha</i>	20
Western wheatgrass	<i>Pascopyrum smithii</i>	10
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	20

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28.01.2024

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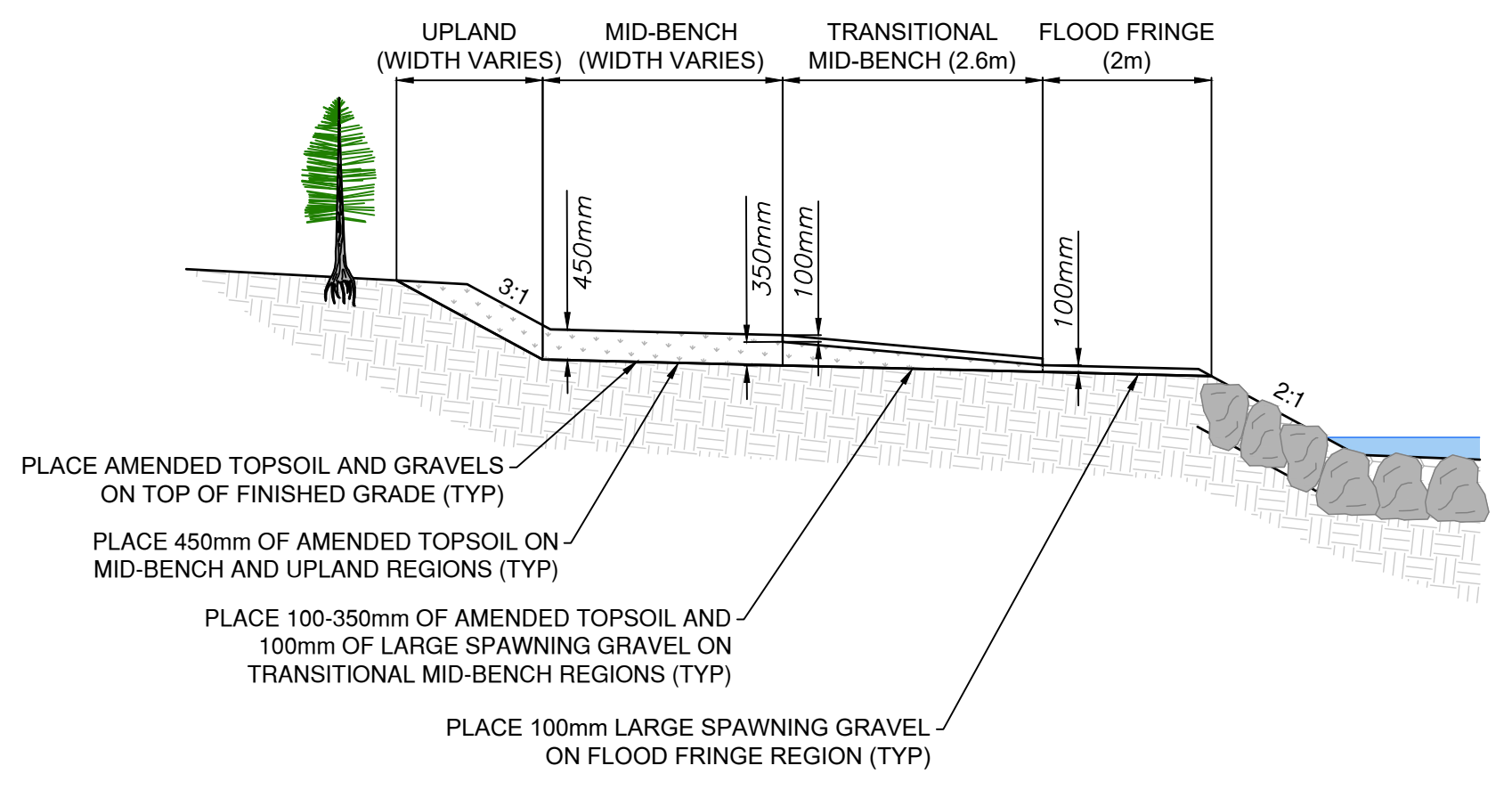
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SHEET
27 OF

TITLE
PLANTING DETAILS

**POLSON PARK NATURALIZATION
PHASE 2**

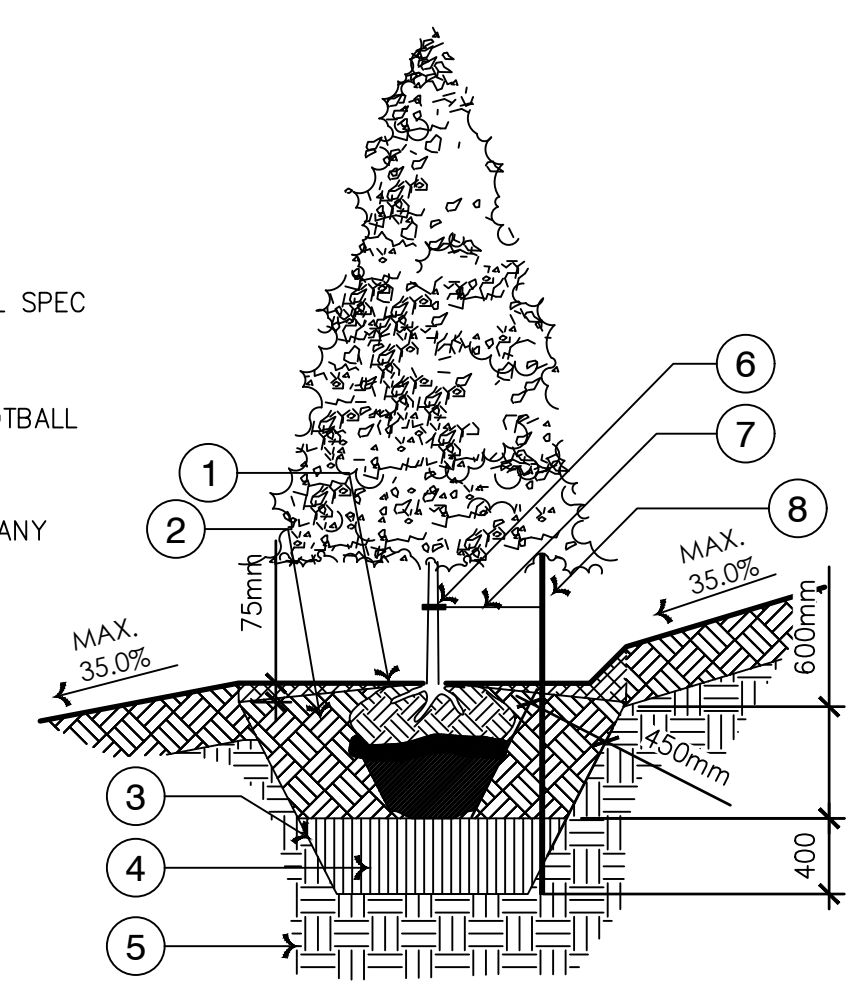
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C611



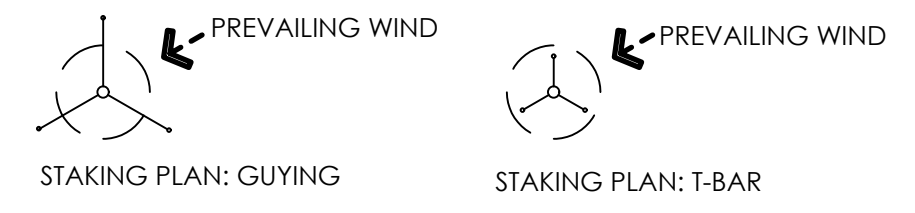
TYPICAL TOPSOIL SECTION

TYPICAL TOPSOIL PLACEMENT SECTION
SCALE: N.T.S.

- ① TRUNK FLARE AT GRADE
- ② TOP SOIL, REFER TO TOP SOIL SPEC
- ③ SCARIFY SIDES OF TREE PIT
- ④ COMPACTED CLAY BELOW ROOTBALL
- ⑤ SUB-SOIL
- ⑥ RUBBER STRAP TO PREVENT ANY CONTACT BETWEEN WIRE AND TREE
- ⑦ 11 GAUGE GUY WIRE OR APPROVED ALTERNATIVE
- ⑧ USE THREE 1800mm PAINTED T-BARS



TYPICAL PLANTING DETAIL FOR 1.5m HEIGHT TREE
SCALE: N.T.S.



NOTES:

- TREES TO BE OVERSEEDDED UNLESS OTHERWISE NOTED.
- PRUNE AWAY ANY GIRDLING ROOTS.
- PRUNE BROKEN AND FRAYED ROOT ENDS WITH SECATEURS.
- HOLD TRUNK VERTICAL. BACKFILL AROUND ROOTS WITH TOPSOIL, CONTINUOUSLY PACKING THE SOIL UNTIL FIRM. DO NOT ALLOW AIR POCKETS TO FORM.
- TREE SHOULD BE PLANTED 75mm - 100mm BELOW GROUND LEVEL.
- IF TREE IS IN A WIRE BASKET, CUT AND REMOVE STRAPPING AND THE HORIZONTAL/VERTICAL WIRES OF THE UPPER 1/3 AS A MINIMUM. PULL BACK BURLAP TO THE SAME MINIMUM.
- T-BARS SHOULD BE HAMMERED DOWN INTO SOLID FOOTING (MINIMUM 400mm INTO SUBSOIL).
- STAKING TO BE IN PLACE FOR A MAXIMUM OF ONE YEAR, WHEN REQUIRED.
- STAKE BEYOND EDGE OF ROOT BALL.
- USE RUBBER STRAPS (TO PROTECT THE TREE) AT POINT OF CONTACT WITH TRUNK.
- PRUNE DEAD / DYING / DISEASED BRANCHES TO MAINTAIN NATURAL FORM OF TREE
- ALL DIMENSIONS IN mm.

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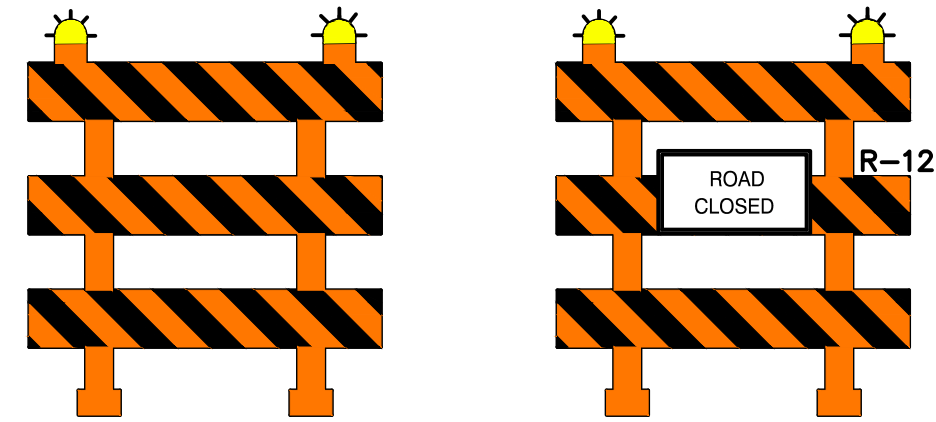
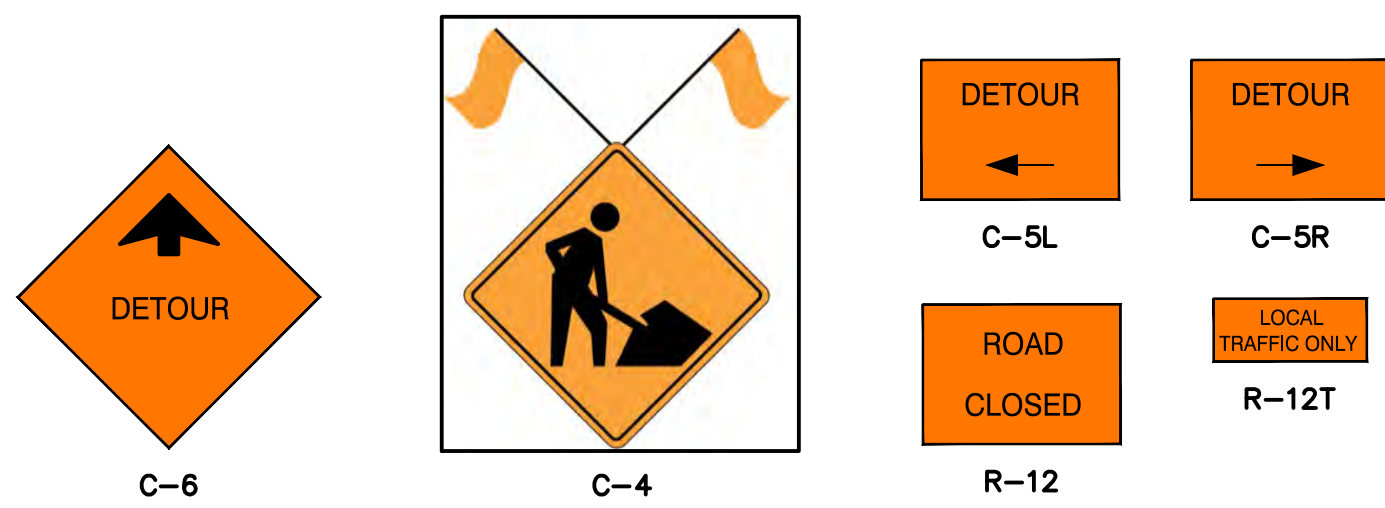
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SHEET
28 OF

TITLE
PLANTING DETAILS

**POLSON PARK NATURALIZATION
PHASE 2**

DRAWING NUMBER
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DETAIL A
CLASS 3 BARRICADE c/w TYPE A YELLOW FLASHERS (TYP.)

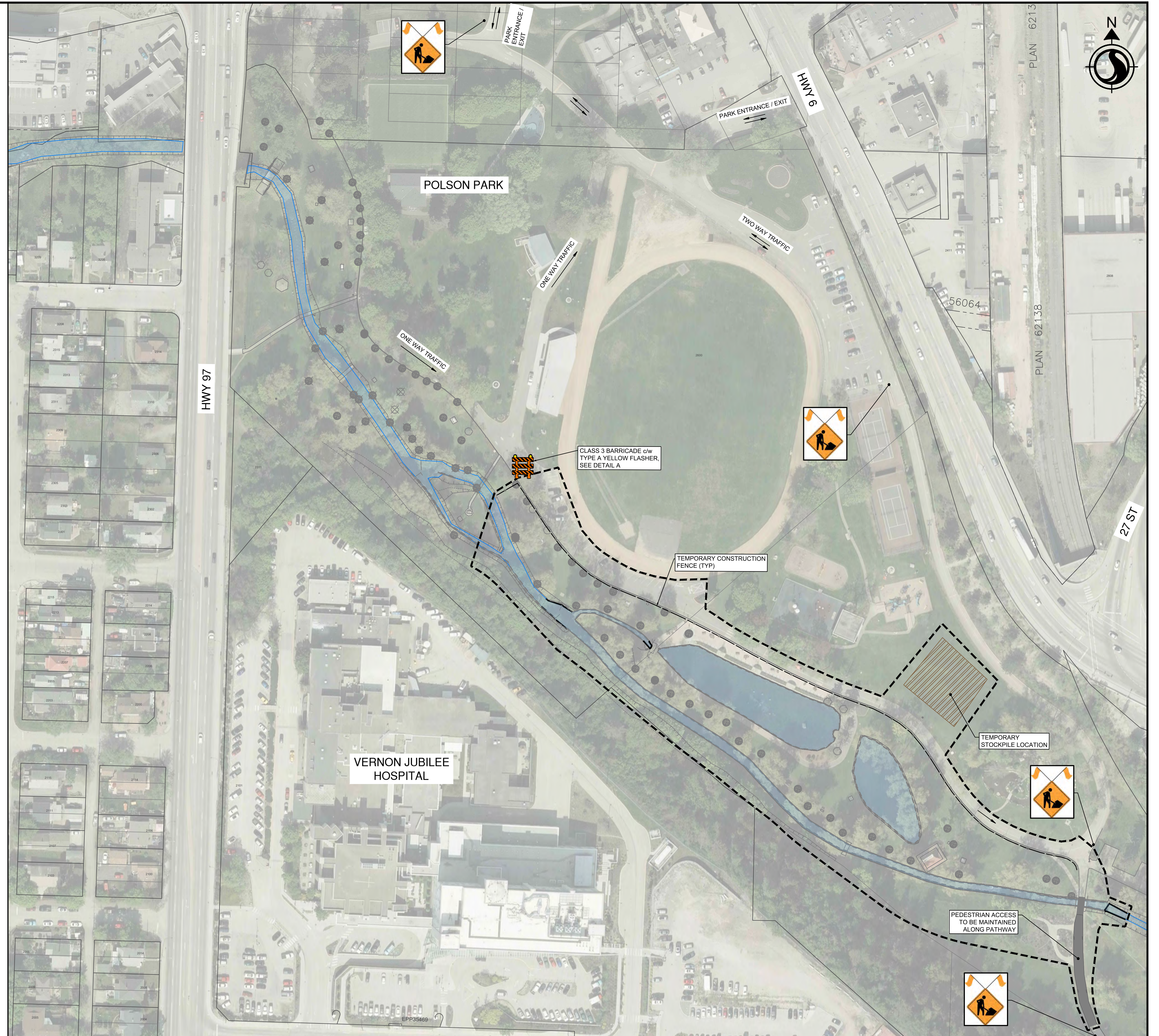


GENERAL NOTES - TRAFFIC CONTROL

- CONTRACTOR TO ISOLATE WORK AREA FROM PEDESTRIAN TRAFFIC.
- CONTRACTOR TO MAINTAIN VEHICLE ACCESS AT PARK ENTRANCES AND EXITS AT ALL TIMES.

TRAFFIC MANAGEMENT NOTES:

- TRAFFIC MANAGEMENT SIGNAGE PLAN SHOWN IS AN EXAMPLE. CONTRACTOR TO USE AS REFERENCE FOR THEIR TRAFFIC MANAGEMENT PLAN.
- ALL NOTICE OF CONSTRUCTION SIGNAGE SHALL BE IN PLACE FOR THE DURATION OF THE PROJECT.
- ALL CONSTRUCTION SIGNAGE SHALL MOVE WITH THE WORK AREAS AS REQUIRED.
- THE CONTRACTOR SHALL ERECT ALL SIGNAGE AND OBTAIN A PERMIT TO WORK WITHIN CITY RIGHT-OF-WAY PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CHECK FOR CONFLICTING INFORMATION ON EXISTING SIGNAGE AND ADVISE THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR SHALL COORDINATE WITH AFFECTED BUSINESSES TO MAINTAIN VEHICLE ACCESS AS REQUIRED. MINIMUM SINGLE LANE ACCESS TO ALL DRIVEWAYS SHALL BE MAINTAINED FOR LOCAL TRAFFIC.
- SIGNAGE AND SPACING SHALL BE IN CONFORMANCE WITH THE BC MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE'S TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS (LATEST EDITION).
- SIGNAGE SHOWN REPRESENTS MINIMAL REQUIREMENTS. THE CONTRACTOR SHALL TAKE OWNERSHIP OF THE TRAFFIC MANAGEMENT PLAN AND MAKE MODIFICATIONS AS THE CONTRACTOR DEEMS NECESSARY WITH THE APPROVAL OF THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR IS TO ENSURE ACCESS TO FIRE HYDRANTS AT ALL TIMES.
- THE CONTRACTOR SHALL COORDINATE WITH EMERGENCY SERVICES WEEKLY FOR ACCESS TO THE AREA.
- THE CONTRACTOR SHALL PROVIDE SAFE ACCESS FOR PEDESTRIANS OUTSIDE THE WORK AREA AT ALL TIMES.
- THE CONTRACTOR SHALL SUPPLY CONTRACT ADMINISTRATOR WITH UPDATED TRAFFIC MANAGEMENT PLANS AS REQUIRED.



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26 OF

TITLE
TRAFFIC MANAGEMENT PLAN

POLSON PARK NATURALIZATION
PHASE 2

1:1000

DRAWING NUMBER
C702

1. GENERAL

- 1.1 UNLESS NOTED OTHERWISE, ELEVATIONS AND STATIONS ARE SHOWN IN METRES AND ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
- 1.2 SPECIFIC STRUCTURAL DRAWING NOTES SUPERSEDE GENERAL NOTES WHERE THEY ARE IN CONFLICT.
- 1.3 CONSTRUCTION OF THE WORKS SHALL COMPLY WITH MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND PROJECT SPECIFIC SUPPLEMENTARY SPECIFICATIONS.
- 1.4 THE CONTRACTOR SHALL EXAMINE ALL CONTRACT DOCUMENTS, CHECK DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR FOR CLARIFICATION PRIOR TO COMMENCING CONSTRUCTION. DISCREPANCIES NOT REPORTED ARE THE RESPONSIBILITY OF THE CONTRACTOR. CHECK AND VERIFY ALL DIMENSIONS BEFORE COMMENCING ANY WORK. NOTIFY THE CONTRACT ADMINISTRATOR OF ANY ERRORS OR OMISSIONS.
- 1.5 DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION".
- 1.6 ALL COMPONENTS, STRUCTURAL OR OTHERWISE, NOT INCLUDED IN THESE DRAWINGS ARE THE RESPONSIBILITY OF THEIR RESPECTIVE DESIGNER.
- 1.7 READ THESE DRAWINGS IN CONJUNCTION WITH DRAWINGS COMPLETED BY OTHER DISCIPLINES AND CONTRACT SPECIFICATIONS. REPORT ANY DEFICIENCIES TO THE CONTRACT ADMINISTRATOR FOR ALL CONFLICTS BETWEEN PROJECT SPECIFICATIONS AND STRUCTURAL DRAWINGS, INCLUDING STRUCTURAL NOTES. THE STRUCTURAL ENGINEER OF RECORD WILL PROVIDE CLARIFICATION.
- 1.8 NOTIFY THE CONTRACT ADMINISTRATOR A MINIMUM OF 48 HOURS PRIOR TO ANY INSPECTIONS WHERE REQUIRED.

2. DESIGN DATA

- 2.1 DESIGN CODE/GUIDELINES:
 - CAN/CSA-S7:23 PEDESTRIAN, CYCLING, AND MULTIUSE BRIDGE DESIGN GUIDELINE
 - CAN/CSA-S6:19: CANADIAN HIGHWAY BRIDGE DESIGN CODE
- 2.2 DESIGN LIFE: 75 YEARS
- 2.3 SERVICE LIFE FOR NON-REPLACEMENT COMPONENTS: 75 YEARS
- 2.4 DESIGN IMPORTANCE CATEGORY: NORMAL/OTHER ($I_s = 1, I_w = 1, I_e = 1$)
- 2.5 WIND LOADS (50-YEAR RETURN PERIOD): 0.43 kPa (VERNON, BC)
- 2.6 TEMPERATURE LOADS (50-YEAR RETURN PERIOD):
 - MINIMUM MEAN DAILY TEMPERATURE: -35°C
 - MAXIMUM MEAN DAILY TEMPERATURE: 30°C
- 2.5 SNOW LOADS (50-YEAR RETURN PERIOD):
 - $S_s = 2.2$ kPa
 - $S_r = 0.1$ kPa
- 2.6 ICE ACCRETION LOADS: ICE THICKNESS OF 4MM
- 2.7 SEISMIC DESIGN (BASED NATIONAL BUILDING CODE OF CANADA 2020 SEISMIC HAZARDS):
 - SITE CLASSIFICATION: SITE CLASS D (BASED ON GEOTECHNICAL REPORT PREPARED BY FLETCHER PAINE ASSOCIATES LTD - DATED MARCH 3, 2023)
 - IMPORTANCE CATEGORY: OTHER
 - SEISMIC PERFORMANCE CATEGORY: 1 (DESIGN EXCEPTION)
 - DESIGN RESPONSE SPECTRAL ACCELERATION (SITE CLASS D, 2475-YEAR RETURN PERIOD):
PGA: 0.104g, Sa(0.2): 0.250g, Sa(0.5): 0.231g, Sa(1.0): 0.177g, Sa(2.0): 0.127g
- 2.8 DESIGN LIVE LOAD:
 - PEDESTRIAN LIVE LOAD AS PER CAN/CSA S7:23: 4.25 kPa FOR BOTH BRIDGES
 - 80kN MAINTENANCE VEHICLE DESIGN LOAD AS PER S7:23 FOR 16m PEDESTRIAN BRIDGE (IN VICINITY OF CHANNEL STATION 2+210)
 - CL-625 DESIGN LOAD WITH DYNAMIC LOAD ALLOWANCE, INCLUDING BRAKING LOADS, AS PER CAN/CSA S6:19 FOR 8m VEHICLE BRIDGE (IN VICINITY OF CHANNEL STATION 1+922)
- 2.9 FATIGUE DESIGN: LESS THAN 50 AVERAGE DAILY TRUCK TRAFFIC PER LANE FOR 8m VEHICLE BRIDGE (IN VICINITY OF CHANNEL STATION 1+922)

3. DELEGATED DESIGN

- 3.1 CONTRACTOR IS RESPONSIBLE FOR DESIGN, INSTALLATION AND REMOVAL OF TEMPORARY SHORING, BRACING, FALSEWORK, FORMWORK AND OTHER ERECTION SYSTEMS. DESIGN OF TEMPORARY SHORING, BRACING, FALSEWORK, FORMWORK AND OTHER ERECTION SYSTEMS SHALL BE PREPARED BY AN PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA. CONTRACTOR SHALL SUBMIT SEALED DRAWINGS AND CALCULATIONS OF ALL TEMPORARY WORKS REQUIRED TO COMPLETE CONSTRUCTION TO THE CONTRACT ADMINSTRATOR FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD.
- 3.2 CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALLATION OF BRIDGE SUPERSTRUCTURE AND BEARINGS/ANCHORAGE. DESIGN OF BRIDGE SUPERSTRUCTURE AND BEARINGS/ANCHORAGE SHALL BE THE RESPONSIBILITY OF THE BRIDGE MANUFACTURER'S ENGINEER WHO IS A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA AND FOR THESE COMPONENTS ACT AS THE SUPPORTING PROFESSIONAL OF RECORD. THE CONTRACTOR SHALL SUBMIT SEALED DRAWINGS TO THE CONTRACT ADMINISTRATOR FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD. SEALED DRAWINGS SHALL INCLUDE:
 - APPLICABLE DESIGN STANDARDS
 - DESIGN DATA
 - MATERIAL GRADES
 - QUALITY CONTROL
 - REACTIONS AT BEARINGS FOR THE GOVERNING ULTIMATE LIMIT STATE AS SPECIFIED BY S6:19 AND S7:23 AS WELL AS THE SPECIFIED REACTIONS FOR DEAD LOAD AND LIVE LOAD.
- 3.3 THE BRIDGE MANUFACTURER'S ENGINEER OF RECORD RESPONSIBLE FOR DESIGN OF BRIDGE SUPERSTRUCTURE AND BEARINGS/ANCHORAGE. AS THE SUPPORTING PROFESSIONAL OF RECORD FOR THESE COMPONENTS THEY ARE ALSO RESPONSIBLE FOR REVIEW OF THE FABRICATION AND FIELD REVIEWS FOR THE INSTALLATION OF COMPONENTS IN ACCORDANCE WITH ENGINEERS AND GEOSCIENTISTS BRITISH COLUMBIA PROFESSIONAL PRACTICE GUIDELINES. UPON COMPLETION OF THE WORK CERTIFYING IN WRITING TO THE CONTRACT ADMINISTRATOR THAT SUCH REVIEWS HAVE BEEN COMPLETED.
- 3.4 BRIDGE STRUCTURE DESIGN TO BE COMPLETED IN CONFORMANCE TO PROJECT SPECIAL PROVISIONS FOR PREFABRICATED BRIDGES(S).

3.5 BRIDGES SHALL CONFORM TO THE FOLLOWING CRITERIA:

- 8m VEHICLE BRIDGE (IN VICINITY OF CHANNEL STATION 1+922)
 - SLAB-ON-GIRDER TYPE BRIDGE
 - CONCRETE DECK WITH CONCRETE WEARING SURFACE
 - IF PANELS USED FOR DECK, MAXIMUM VERTICAL DIFFERENCE BETWEEN PANELS 3mm WITH MINIMUM LENGTH OF 2.5m.
 - DECK TO HAVE A MINIMUM 2% TRANSVERSE CROSSFALL.
 - BRIDGE SHALL BE CAMBERED TO HAVE POSITIVE RESIDUAL CAMBER AFTER DEAD LOAD APPLIED.
 - TRAFFIC BARRIERS TO MEET TL-1 AS PER S6:19.
 - DEFLECTION LIMITS AS PER S6:19 FOR "WITH SIDEWALKS - OCCASIONAL PEDESTRIAN USE"
 - 16m PEDESTRIAN BRIDGE (IN VICINITY OF CHANNEL STATION 2+210)
 - PARALLEL CHORD TRUSS TYPE BRIDGE
 - CONCRETE DECK, WITH WEARING SURFACE COATED WITH EPOXY RESIN AND POLYURETHANE AS PER S7:23 CLAUSE 5.9.4.2.
 - IF PANELS USED FOR DECK, MAXIMUM VERTICAL DIFFERENCE BETWEEN PANELS 3mm WITH MINIMUM LENGTH OF 2.5m.
 - DECK TO HAVE A TRANSVERSE CROSSFALL BETWEEN 1% AND 2%.
 - DECK LONGITUDINAL GRADE SHALL BE BETWEEN 1% AND 5% EXCEPT WHERE, FOR LIMITED LENGTHS, VERTICAL CURVE OR SUPER ELEVATION PRECLUDE THIS.
 - BRIDGE SHALL BE CAMBERED TO HAVE POSITIVE RESIDUAL CAMBER AFTER DEAD LOAD APPLIED.
 - BARRIERS SHALL BE DESIGNED IN ACCORDANCE WITH S7:23 SECTION 5.5 FOR BICYCLES AND PEDESTRIAN TRAFFIC.
 - LEVEL OF ACCEPTABLE VIBRATION PER S7:23 PEDESTRIAN INDUCED VIBRATION DESIGN WITH FOLLOWING COMFORT CLASS:

PEDESTRIAN CLASS (S7:23 TABLE 7.1)	ASSOCIATED MAXIMUM COMFORT CLASS (S7:23 TABLE 7.2)
TC1, TC2, TC3	CL2 (MEAN COMFORT)
TC0, TC4, TC5	CL3 (MINIMUM COMFORT)
- 3.6 QUALITY CONTROL FOR PREFABRICATED COMPONENTS SHALL BE PROVIDED TO THE CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION. THE DOCUMENTS SHALL INCLUDE BUT ARE NOT LIMITED TO:
- PROOF OF PLANT CSA CERTIFICATION (WELDING OR PRECAST);
 - STEEL MILL TEST CERTIFICATE (OR EQUIVALENT) FOR EACH COMPONENT;
 - PLANT REBAR INSPECTIONS PRIOR TO POUR FOR EACH PREFABRICATED CONCRETE COMPONENT; AND
 - CONCRETE TEST RESULTS FOR EACH PREFABRICATED COMPONENT.

4. FOUNDATION, EXCAVATION, AND BACKFILL

- 4.1 FOUNDATION DESIGN, EXCAVATION, BACKFILL AND COMPACTION ARE BASED ON THE GEOTECHNICAL REPORT "GEOTECHNICAL INVESTIGATION AND REPORT FOR POLSON PARK NATURALIZATION PEDESTRIAN BRIDGES 2600 HIGHWAY 6, VERNON, B.C." PREPARED BY FLETCHER PAINE ASSOCIATES LTD. DATED MAY 08, 2023 AND "ADDENDUM #1 TO MAY 8, 2023 REPORT RE: POLSON PARK NATURALIZATION PEDESTRIAN BRIDGES 2600 HIGHWAY 6, VERNON, B.C." PREPARED BY FLETCHER PAINE ASSOCIATES LTD. DATED JANUARY 29, 2024. ENSURE THAT THE REQUIREMENTS OUTLINED IN THIS DOCUMENT ARE READ AND UNDERSTOOD PRIOR TO COMMENCING FOUNDATION WORK. THIS INFORMATION IS GIVEN SOLELY AS A GUIDE. NO RESPONSIBILITY IS ACCEPTED BY THE OWNER OR CONTRACT ADMINISTRATOR FOR ITS CORRECTNESS NOR SHALL ITS ACCURACY OR ANY OMISSIONS AFFECT THE PROVISION OF THE CONTRACT. FOR FOUNDATION DESIGN BASED ON:
 - ULTIMATE LIMIT STATE BEARING CAPACITY 225 kPa
 - SERVICIBILITY LIMIT STATE BEARING CAPACITY 150 kPa
- 4.2 THE CONTRACTOR SHALL ALLOW THE CONTRACT ADMINISTRATOR AND/OR THE OWNER'S GEOTECHNICAL ENGINEER TO INSPECT SOILS DURING EXCAVATION AND SHALL NOT PROCEED WITH THE CONSTRUCTION OF FOUNDATION FORMWORK BEFORE APPROVAL FROM THE CONTRACT ADMINISTRATOR.
- 4.3 THE BEARING SURFACE MUST BE INSPECTED BY THE CONTRACT ADMINISTRATOR PRIOR TO PLACEMENT OF ANY FILL MATERIAL, FOUNDATION FORMWORK, ETC. ANY SOFT OR LOOSE SOILS DETECTED WITHIN THE EXPOSED SUBGRADE, INCLUDING THOSE DISTURBED BY CONSTRUCTION OR OTHER SITE ACTIVITIES, IS TO BE EXCAVATED AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR.
- 4.4 REMOVE ALL EXPOSED ORGANIC MATTER FROM THE EXCAVATION AREA AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR.
- 4.5 ALL FOUNDATIONS ARE TO BE FOUNDED AT ELEVATIONS AND LOCATIONS SHOWN ON THE DRAWINGS.
- 4.6 PRIOR TO BACKFILL, EXCAVATIONS SHALL BE FREE OF STANDING WATER AND CLEAN OF SHORING MATERIALS, FORMING MATERIALS, TRASH AND DEBRIS. NO SUCH MATERIALS SHALL BE INCLUDED IN THE BACKFILL MATERIAL, ANY LOOSE SOIL SHALL EITHER BE COMPACTED OR REMOVED.
- 4.7 THE LINE OF SLOPE FOR EXCAVATIONS IS NOT TO EXCEED THE VALUES PROVIDED BY THE CONTRACT ADMINISTRATOR AND/OR THE OWNER'S GEOTECHNICAL ENGINEER.
- 4.8 NO BACKFILL SHALL BE PLACED AGAINST THE ABUMENTS UNTIL CONCRETE HAS ACHIEVED ITS 28-DAY DESIGN COMPRESSIVE STRENGTH.
- 4.9 NO PORTION OF BACKFILL IS TO BE PLACED MORE THAN 600mm ABOVE ANY OTHER PORTION OF THE FILL.
- 4.10 ONLY HAND-OPERATED COMPACTION EQUIPMENT SHALL BE USED WITHIN 1.0m OF ABUTMENT AND RETURN WALLS.
- 4.11 BRIDGE ENDFILL EXTENTS SHALL BE AS SHOWN ON THE DRAWINGS AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY, AT OPTIMUM MOISTURE CONTENT. MATERIAL COMPACTION TESTING MAY BE REQUIRED BY THE CONTRACT ADMINISTRATOR'S SITE REPRESENTATIVE.
- 4.12 BRIDGE ENDFILL MATERIAL IS TO BE FREE DRAINING GRANUAL MATERIAL, SUCH AS MMCD GRANULAR PIPE BEDDING AND SURROUND MATERIAL, THAT IS APPROVED BY CONTRACT ADMINISTRATOR'S SITE REPRESENTATIVE PRIOR TO ALL BACKFILLING OPERATIONS.

5. CONCRETE

- 5.1 CONCRETE DESIGNED, TESTED, AND HANDLED TO CAN/CSA A23.1 AND CAN/CSA A23.2.
- 5.2 CAST-IN-PLACE CONCRETE MIX DESIGN SHALL BE DESIGNED FOR CLASS F-1 EXPOSURE, WITH MINIMUM 28-DAY COMPRESSIVE STRENGTH OF $f_c' = 30MPa$
- 5.3 SUBMIT CONCRETE MIX DESIGNS AS SHOP DRAWINGS FOR REVIEW. EACH CONCRETE MIX DESIGN SUBMITAL SHALL INCLUDE:
 - NAME OF THE PROPOSED SUPPLIER
 - PROJECT SPECIFICS
 - DISTANCE AND EXPECTED TRAVEL TIME FROM BATCH PLANT TO PROJECT SITE
 - EXPECTED METHOD OF BATCHING, TRANSPORTATION AND PLACEMENT OF CONCRETE
 - SPECIFIED MIX PARAMETERS REQUIREMENTS
 - NAME AND CONTACT INFORMATION OF INDEPENDENT, CERTIFIED QUALITY CONTROL TESTING FORM AND/OR CERTIFIED TESTING PERSONNEL
- 5.4 MINIMUM 14 DAYS PRIOR TO STARTING CONCRETE WORK SUBMIT TO CONTRACT ADMINISTRATOR MANUFACTURER'S TEST DATA AND CERTIFICATION BY QUALIFIED INDEPENDENT INSPECTION AND TESTING LABORATORY THAT MATERIALS WILL MEET SPECIFIED REQUIREMENTS AS PER CONTRACT SPECIFICATIONS. PROVIDE TO CONTRACT ADMINISTRATOR CERTIFICATION THAT PLANT, EQUIPMENT, AND MATERIALS TO BE USED IN CONCRETE COMPLY WITH REQUIREMENTS OF CAN/CSA A23.1. PROVIDE TO CONTRACT ADMINISTRATOR CERTIFICATION THAT SUBMITTED MIX DESIGN WILL PRODUCE QUALITY, DURABILITY, AND STRENGTH WILL COMPLY WITH CAN/CSA-A23.1.
- 5.5 ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 20 MM UNLESS OTHERWISE NOTED.
- 5.6 FORMWORK SHALL BE DESIGNED, SUPPLIED, AND INSTALLED IN COMPLIANCE WITH CAN/CSA-S269.1
- 5.7 WHERE NEW CONCRETE IS TO BE PLACED AGAINST EXISTING CONCRETE, EXISTING CONCRETE IS TO BE ROUGHED TO AN AMPLITUDE OF 6mm AND CLEANED TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR. CLEAN SURFACES OF ALL CONSTRUCTION JOINTS THOROUGHLY AND REMOVE LAITANCE.
- 5.8 BEFORE PLACING CONCRETE, ENSURE THE REINFORCING STEEL AND FORMS ARE CLEAN OF ALL LOOSE SCALE, DIRT, CORROSION, OR OTHER FOREIGN MATEIRAL WHICH COULD REDUCE BOND BETWEEN REINFORCEMENT AND CONCRETE.
- 5.9 PRIOR TO ANY CONCRETE POURS THE CONTRACTOR SHALL ARRANGE FOR AN INSPECTION BY THE CONTRACT ADMINISTRATOR OR THEIR REPRESENTATIVE TO VERIFY CONFORMANCE OF FORMWORK AND REINFORCEMENT TO CONTRACT REQUIREMENTS.

6. REINFORCEMENT

- 6.1 REINFORCING STEEL SHALL CONFORM TO CAN/CSA-G30.18 GRADE 4002, UNLESS NOTED OTHERWISE.
- 6.2 SPACING OF BARS SHOWN ON THE DRAWINGS IS FROM CENTER-TO-CENTER IN THE DRAWINGS.
- 6.3 WELDING OF REINFORCING STEEL IS NOT PERMITTED.
- 6.4 GALVANIZED COMPONENTS EMBEDDED IN CONCRETE SHALL NOT BE IN DIRECT CONTACT WITH REINFORCING BARS.
- 6.5 MINIMUM LENGTH OF LAP SPLICES FOR ALL REINFORCING BARS SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

SPLICE LAP TABLE		
BAR SIZE	TYPICAL BARS	TOP BARS *
15M	550	670
20M	680	890
25M	1070	1390

SPLICE LENGTH ASSUME CLASS B TENSION SPLICES. BAR IS CONSIDERED A "TOP BAR" IF MORE THAN 300 mm OF FRESH CONCRETE IS CAST BELOW THE BAR.

- 6.6 MINIMUM DEVELOPMENT LENGTH FOR ALL REINFORCING BARS SHALL BE AS FOLLOWS (mm):

DEVELOPMENT LENGTH TABLE		
BAR SIZE	TYPICAL BARS	TOP BARS *
15M	420	510
20M	530	680
25M	820	1070

- 6.7 MECHANICAL SPLICES ARE NOT PERMITTED.
- 6.8 MINIMUM CONCRETE COVER TO REINFORCEMENT AND ASSOCIATED TOLERANCES SHALL BE AS FOLLOWS (mm):
 - SURFACES CAST AGAINST EARTH 100 ± 25
 - ALL OTHER SUFACES 70 ± 20
- 6.9 ATTACHMENTS AND ANCHORAGES SHALL NOT BE IN CONTACT WITH REINFORCEMENT.
- 6.10 REINFORCEMENT LOCATION ABBREVIATIONS:

• I.F.	INSIDE FACE
• O.F.	OUTSIDE FACE
• E.F.	EACH FACE

7. RIPRAP

- 7.1 REFER TO DRAWING NUMBER G004 FOR RIPRAP NOTES.

8. ENVIRONMENTAL

- 8.1 REFER TO DRAWING NUMBER G004 FOR ENVIRONMENTAL NOTES.

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ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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EGBC PERMIT TO PRACTICE NUMBER 1002862

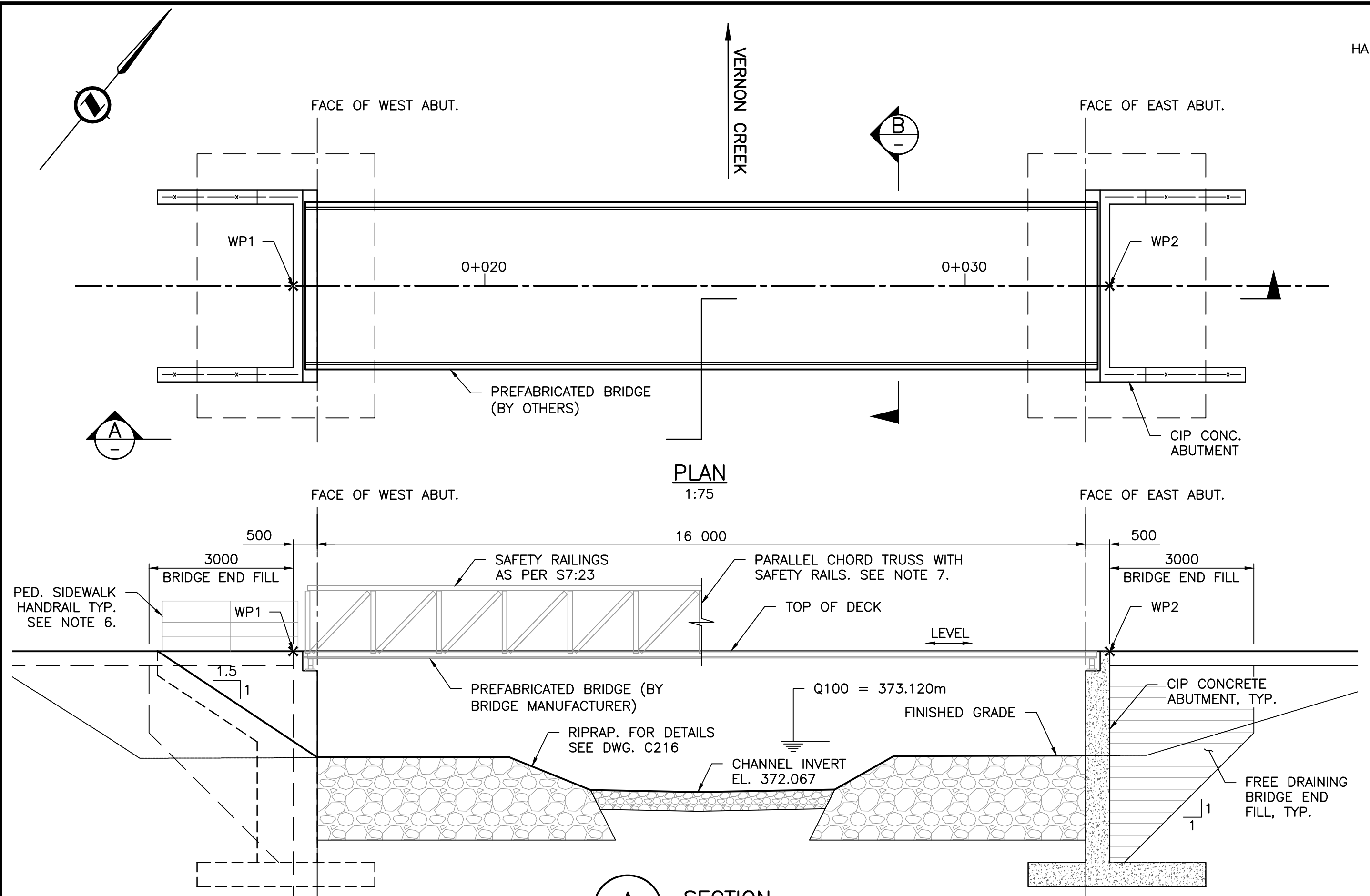


ENGINEERING AND GIS SERVICES

SCALE	TITLE	DRAWING NUMBER
AS NOTED	BRIDGE GENERAL NOTES - PHASE 2	S101
SHEET	POLSON PARK NATURALIZATION REACH 1	
1 OF 3		

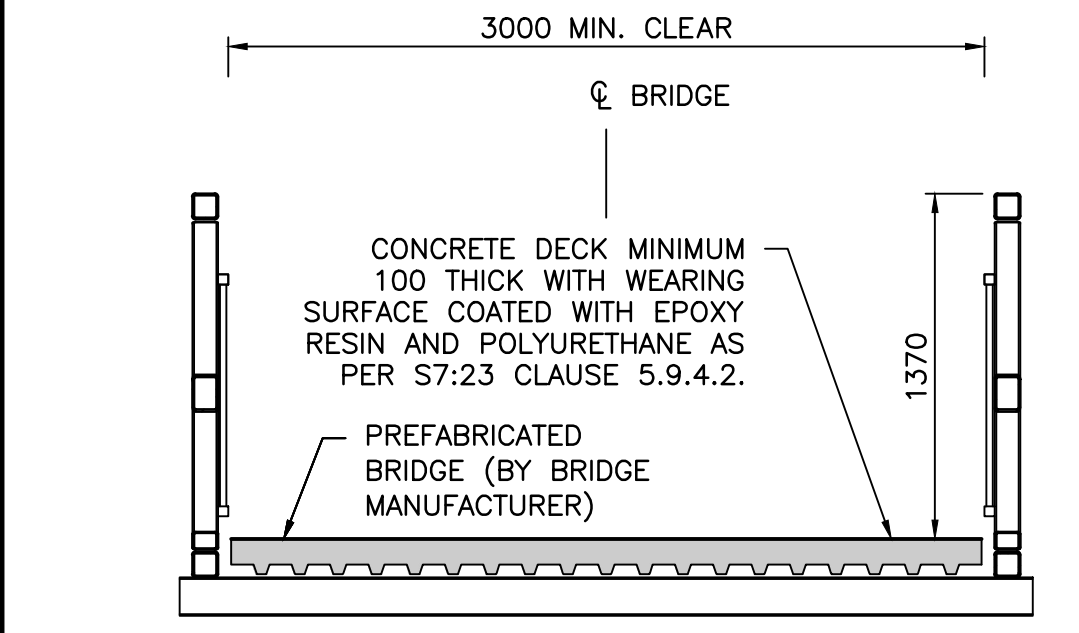
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31.01.2024



PLAN
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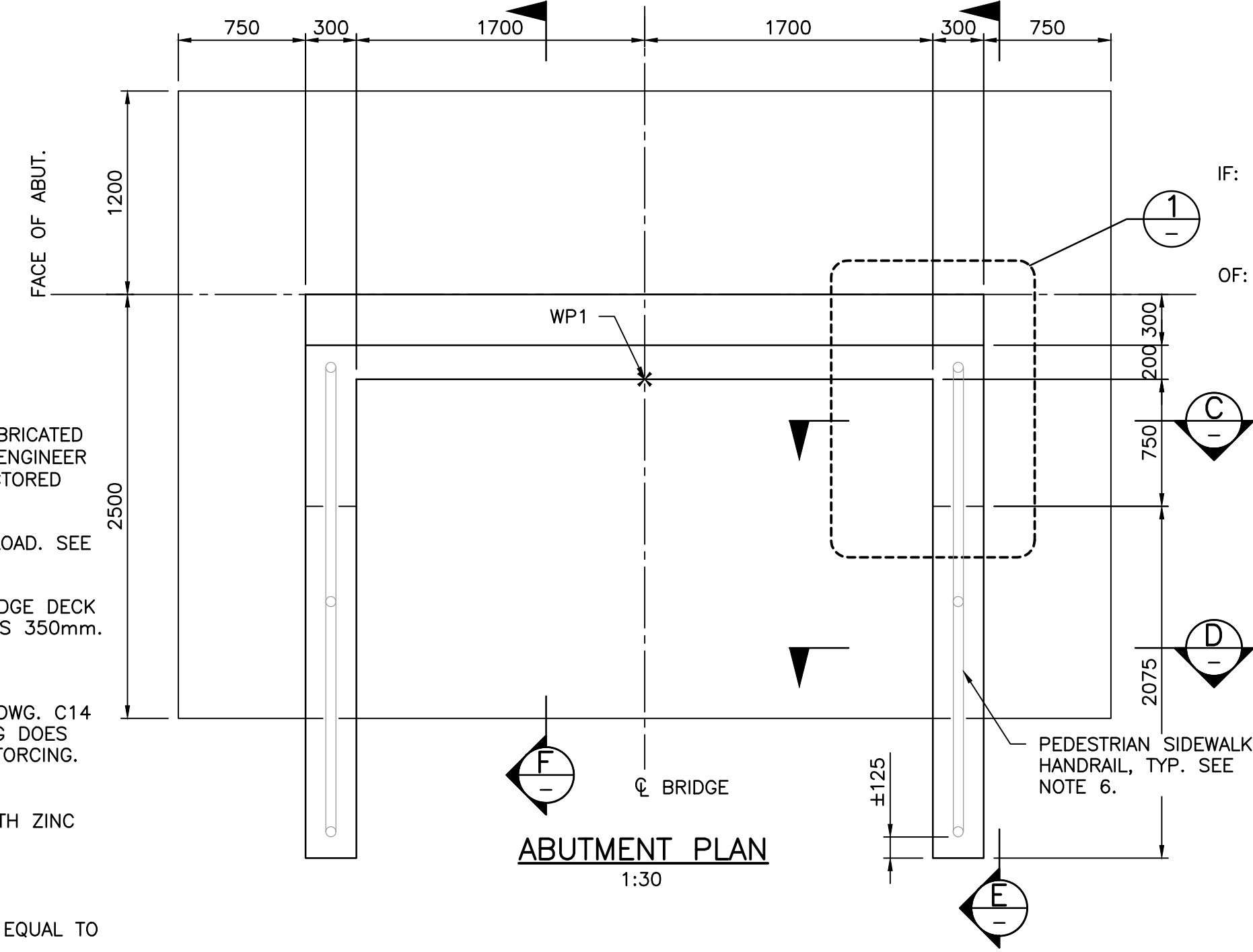
A SECTION
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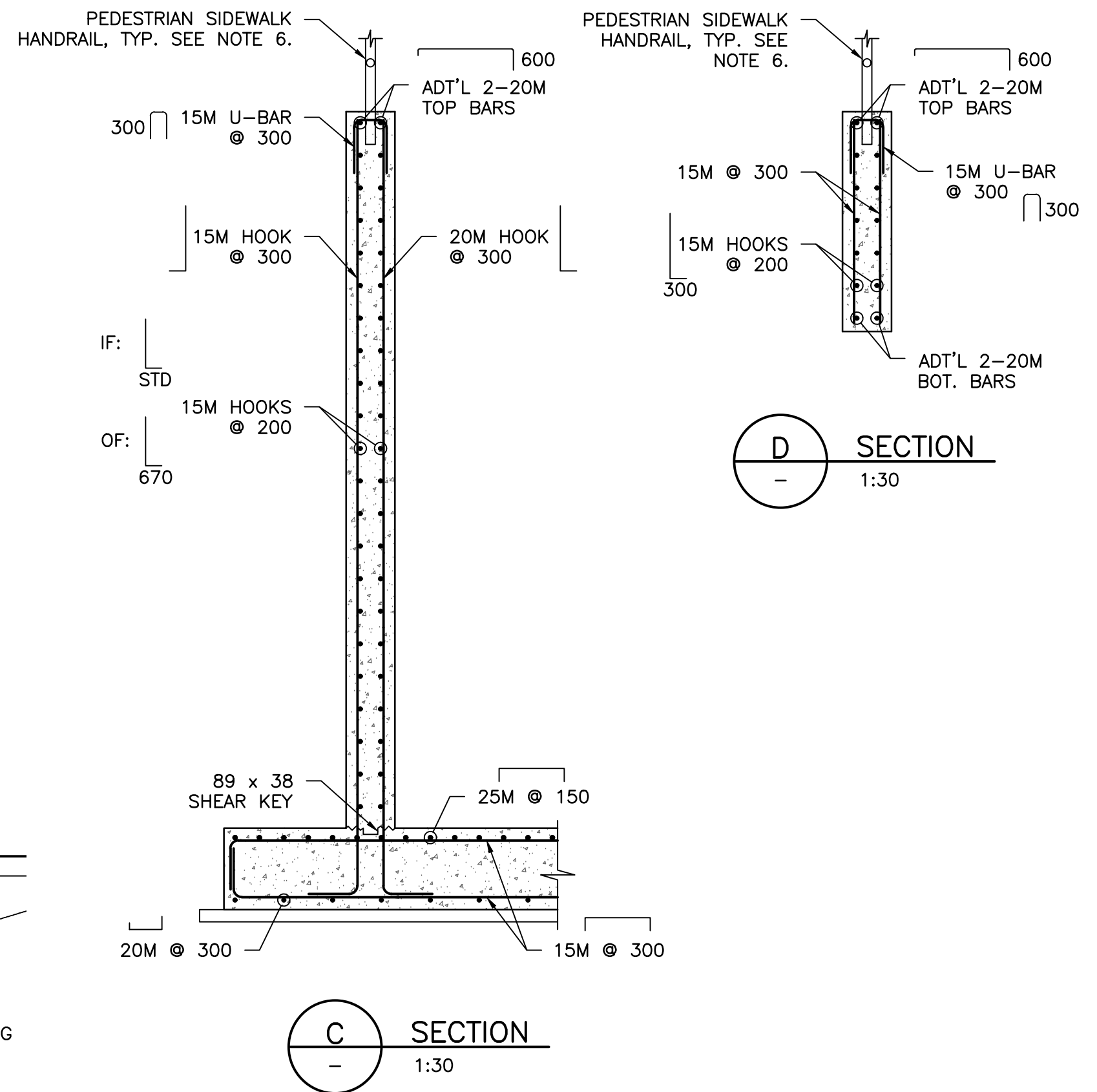
B SECTION
1:30

NOTES:

- SEE DWG. S101 FOR GENERAL NOTES.
- ABUTMENT DESIGNED FOR MAXIMUM UNFACTORED DEAD LOAD REACTION OF PREFABRICATED BRIDGE (BY OTHERS) AT EACH ABUTMENT BEING 80kN. BRIDGE MANUFACTURER'S ENGINEER TO CONFIRM REACTION LOADS TO CONTRACT ADMINISTRATOR. BRIDGES WITH UNFACTORED DEAD LOADS GREATER THAN THIS WILL NOT BE ACCEPTED.
- BRIDGE LIVE LOAD: 80kN MAINTENANCE VEHICLE LOAD AND 4.25kPa PEDESTRIAN LOAD. SEE GENERAL NOTES FOR FULL BREAKDOWN OF DESIGN DATA.
- HEIGHT OF BALLAST WALL TO ALLOW A SMOOTH TRANSITION BETWEEN TOP OF BRIDGE DECK AND APPROACH TOP OF GRADE. NOTIFY STRUCTURAL ENGINEER IF HEIGHT EXCEEDS 350mm.
- BEARING SEAT ELEVATION IS TO BE CONFIRMED BY BRIDGE FABRICATOR.
- SEE MMCD STANDARD DETAIL DRAWING HANDRAIL ON CONCRETE RETAINING WALL, DWG. C14 FOR DETAILS. ENSURE GAP BETWEEN BRIDGE RAILING AND ABUTMENT WALL RAILING DOES NOT EXCEED 150mm. ENSURE 20mm MIN. CLEAR BETWEEN RAIL POST AND REINFORCING.
- PARALLEL CHORD TRUSS WITH SAFETY RAILS. ACCEPTABLE MATERIALS ARE:
- STEEL CSA G40.21 GRADE 350AT OR 350WT (GALVANIZED AS PER ASTM A123, WITH ZINC METALLIZING IN COMPLIANCE WITH ASTM B833, POWDER COATED BLACK)
- HOT DIP GALVANIZED STEEL POWDER COATED BLACK, COLOR TO BE APPROVED BY CONTRACT ADMINISTRATOR PRIOR TO POWDER COATING COMPONENTS.
- ANY FIELD WELDS TO BE PAINTED WITH 2 COATS OF BLACK PAINT OR APPROVED EQUAL TO MATCH POWDER COATED COMPONENTS.



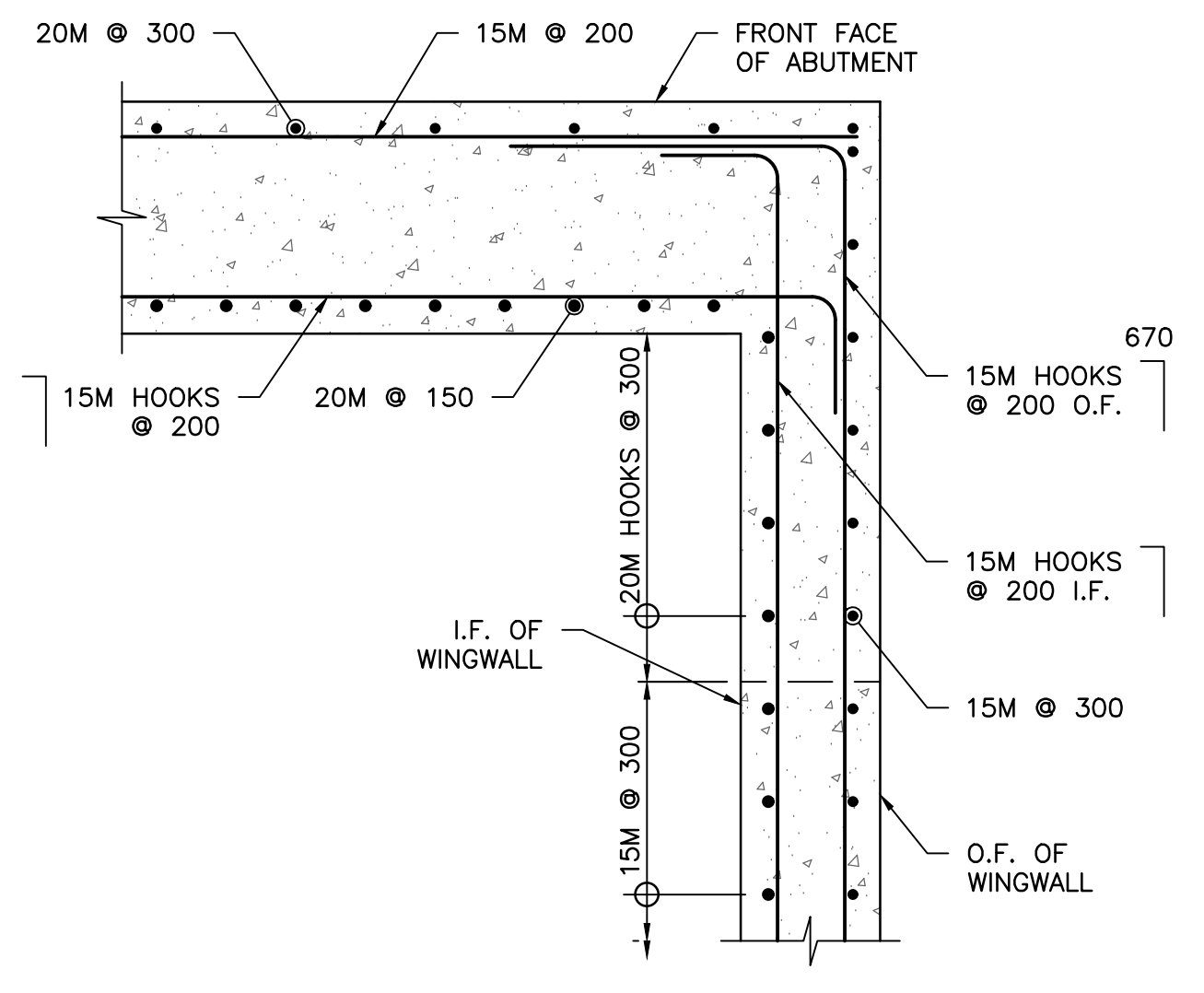
ABUTMENT PLAN
1:30



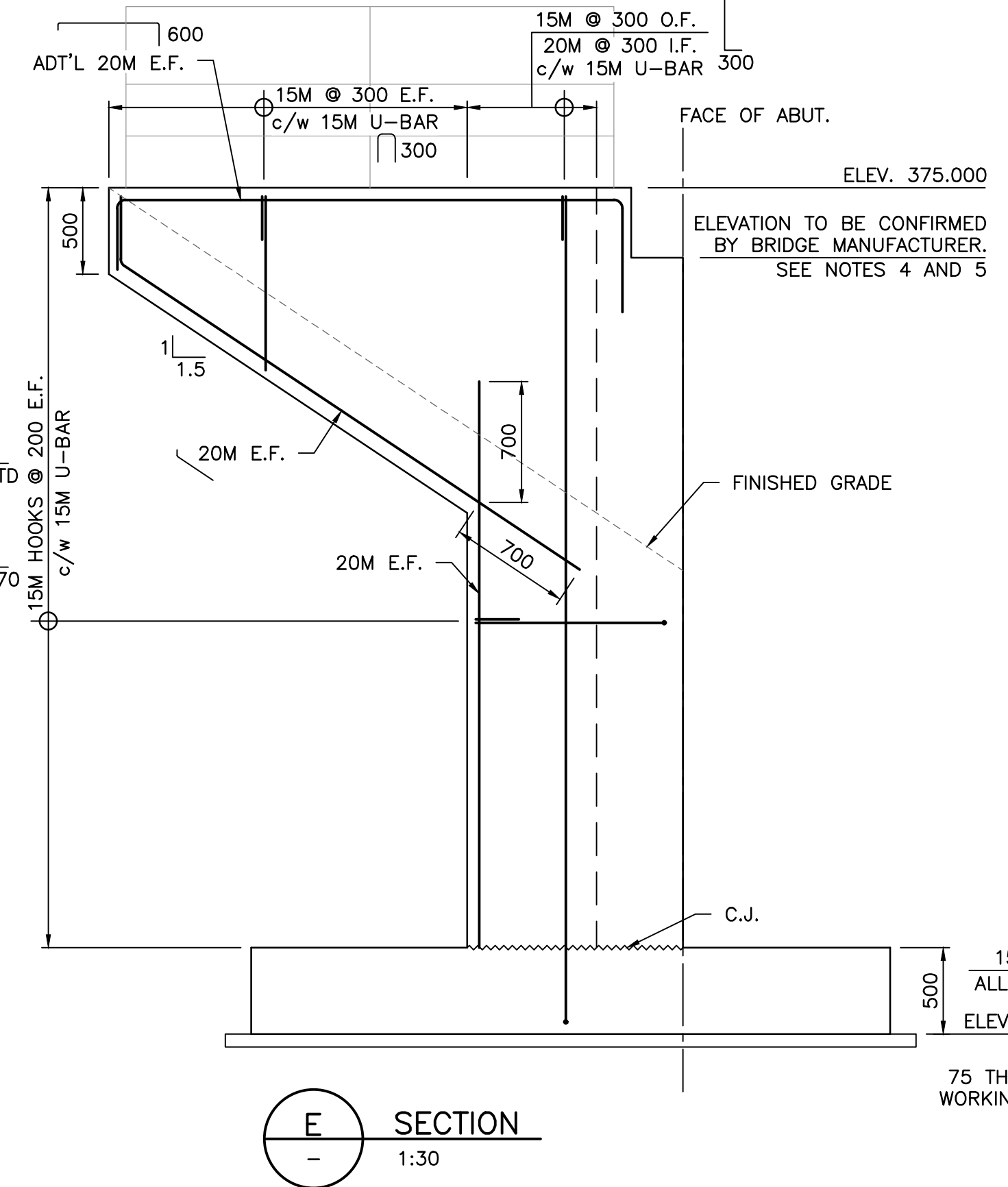
C SECTION
1:30

D SECTION
1:30

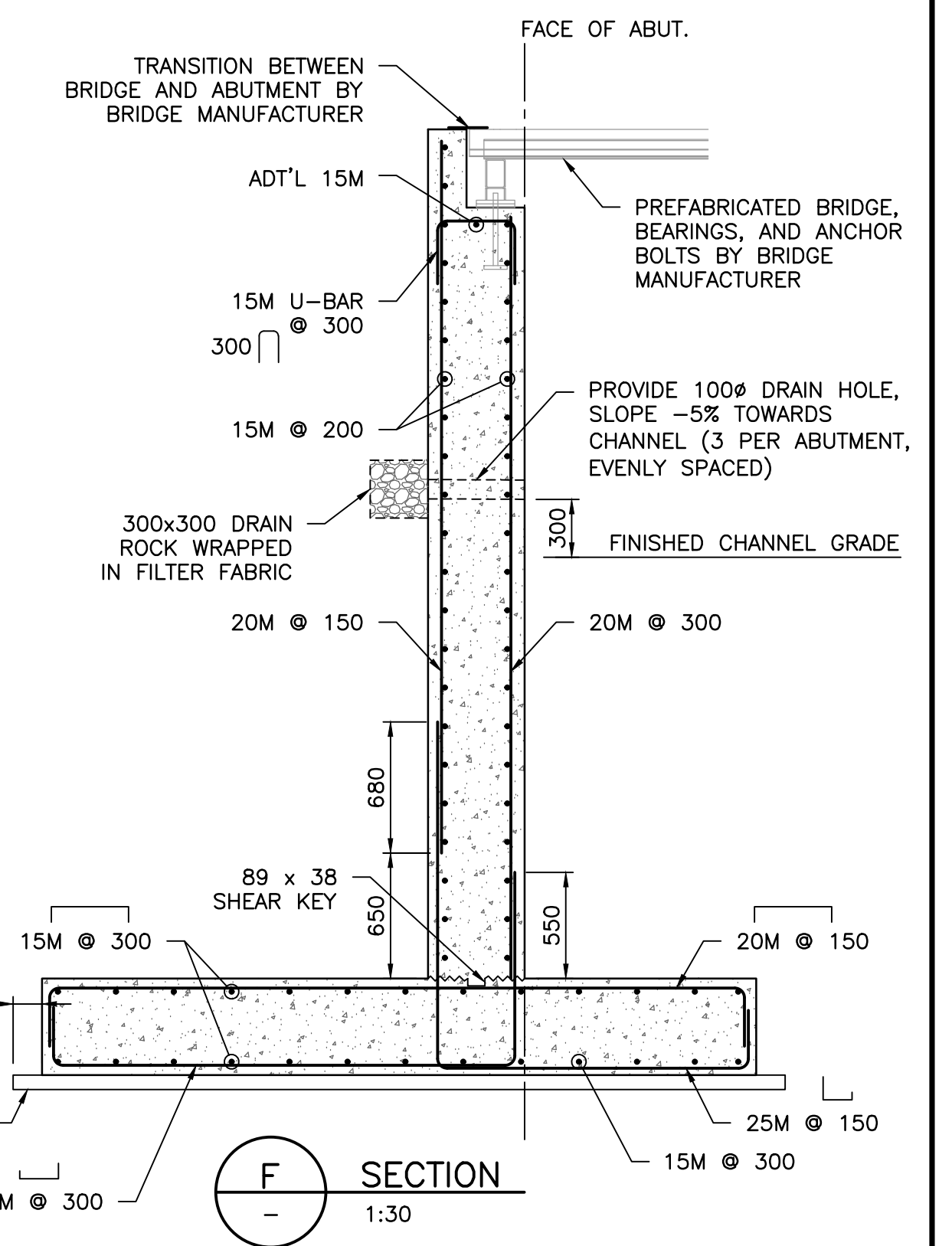
WORK POINTS (WP) COORDINATES				
	NORTHING	EASTING	STATION	ELEVATION
WP1	338114.484	569791.033	0+016.010	375.000m
WP2	338127.656	569801.780	0+033.010	375.000m



1 DETAIL
1:15



E SECTION
1:30



F SECTION
1:30

(WEST ABUTMENT SHOWN, EAST ABUTMENT SIMILAR, NOT ALL REINF. SHOWN FOR CLARITY)

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
1	31/01/24	AM	CM	BG	ISSUED FOR REVIEW



EGBC PERMIT TO PRACTICE NUMBER 1002862



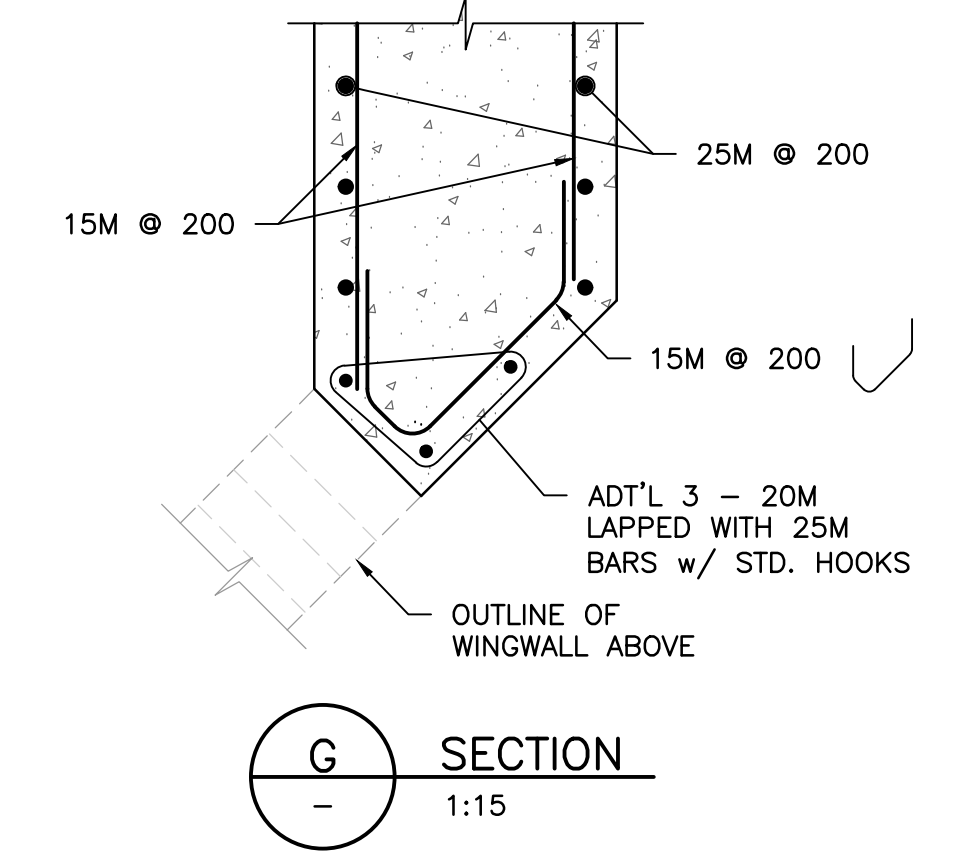
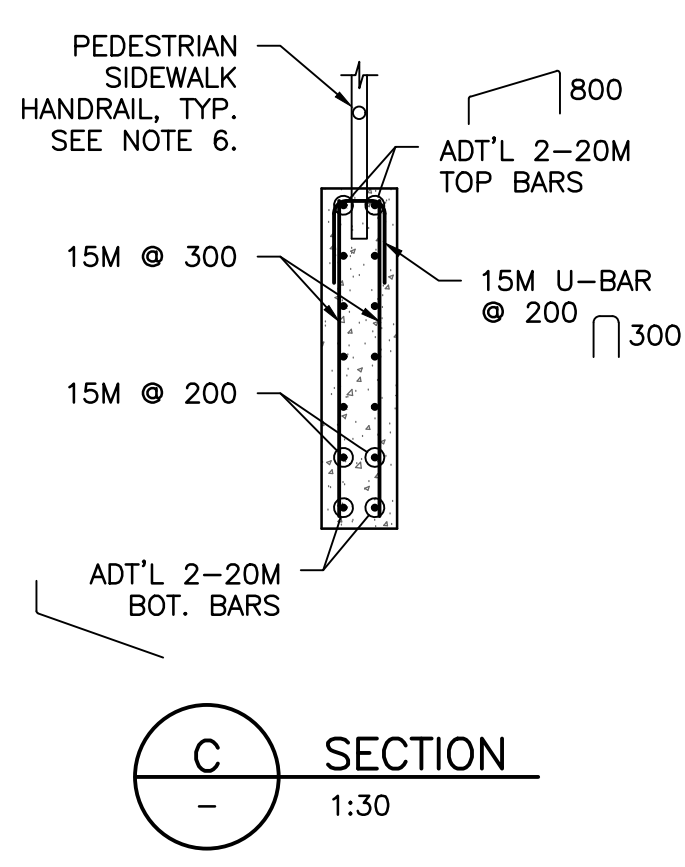
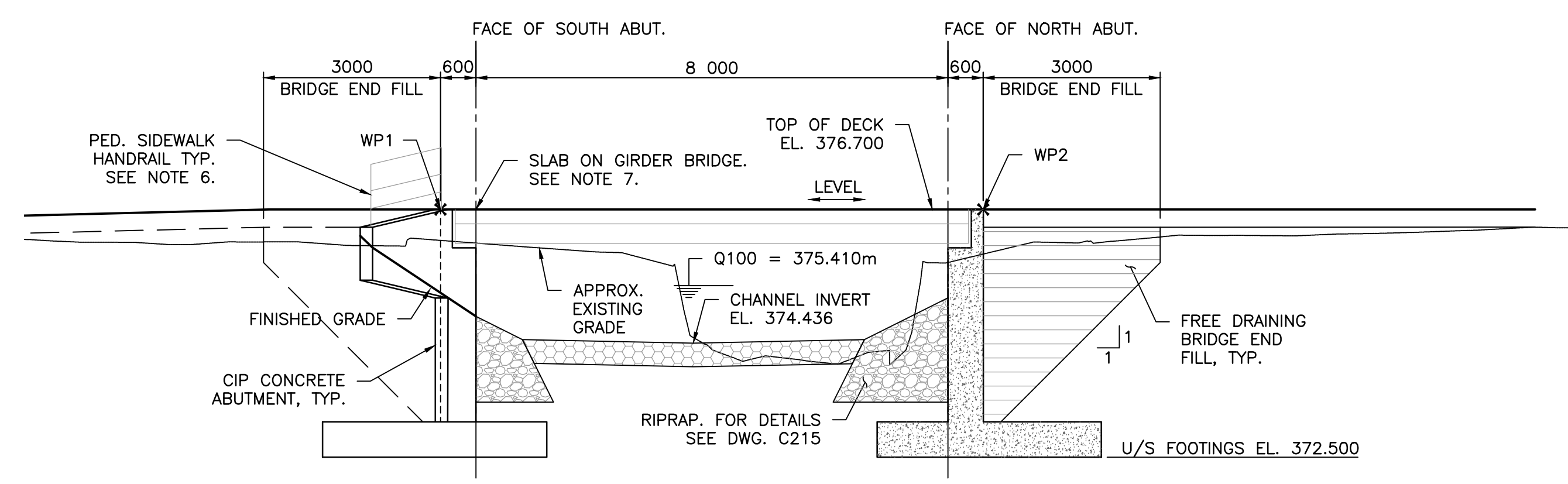
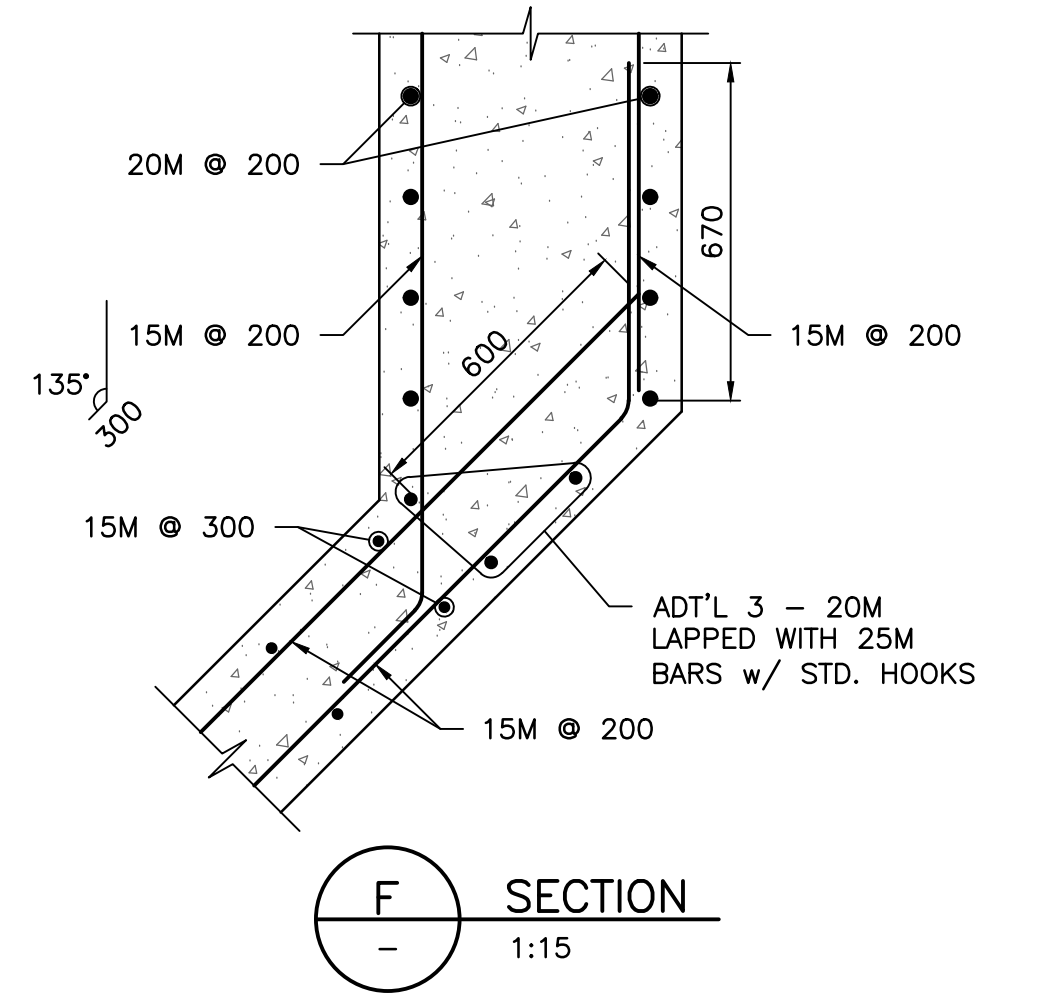
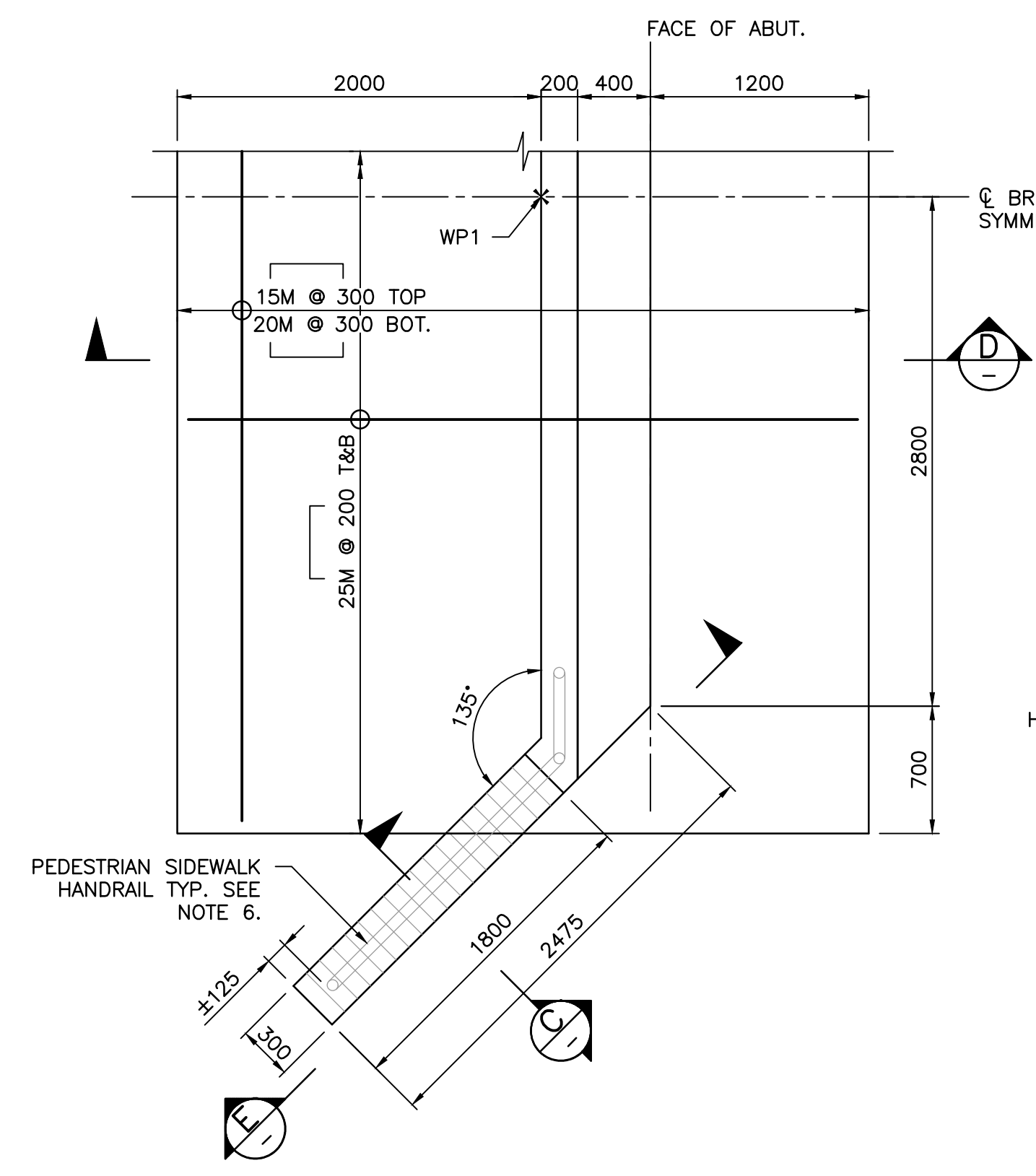
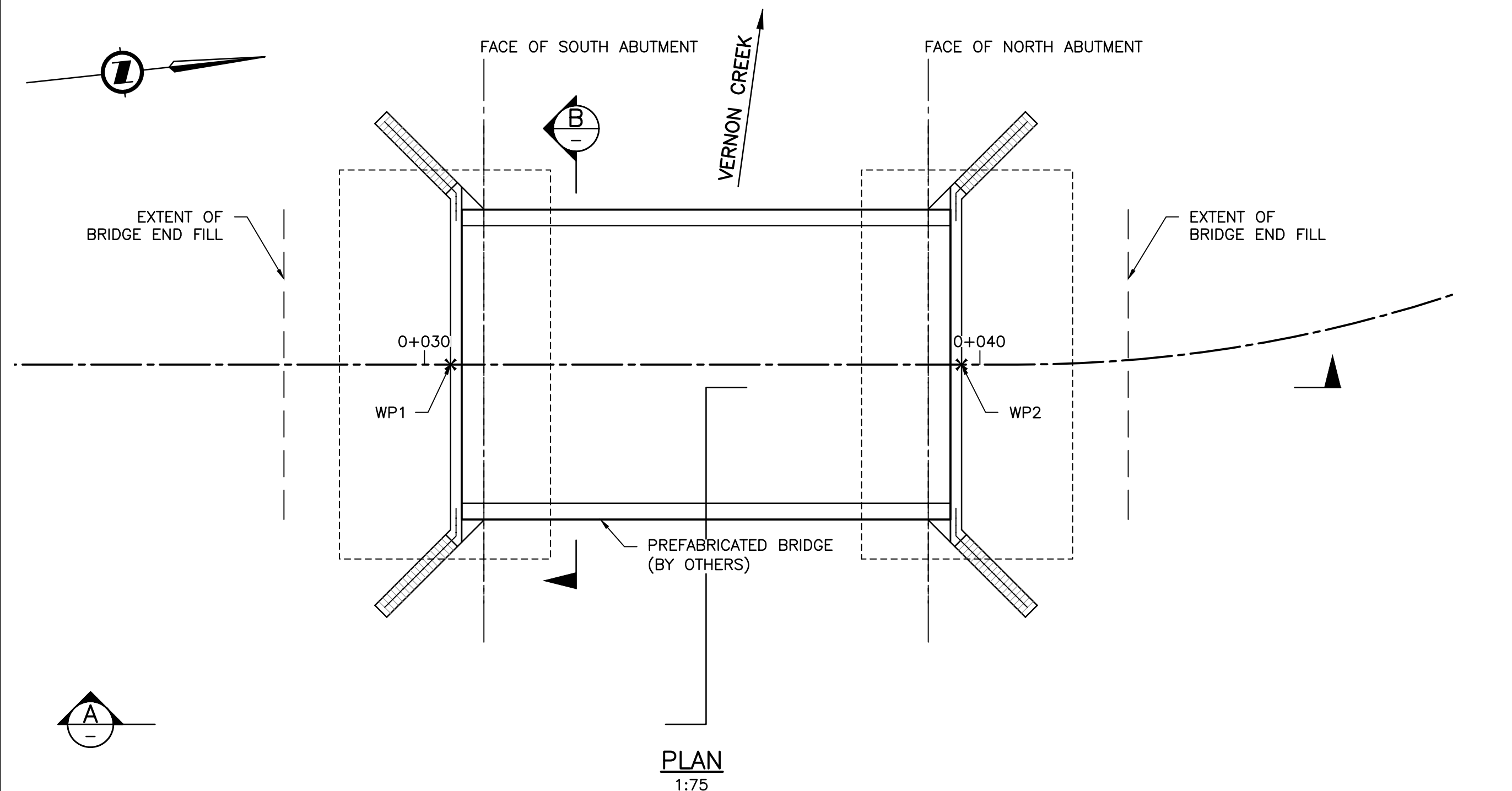
SCALE
AS NOTED

SHEET
2 OF 3

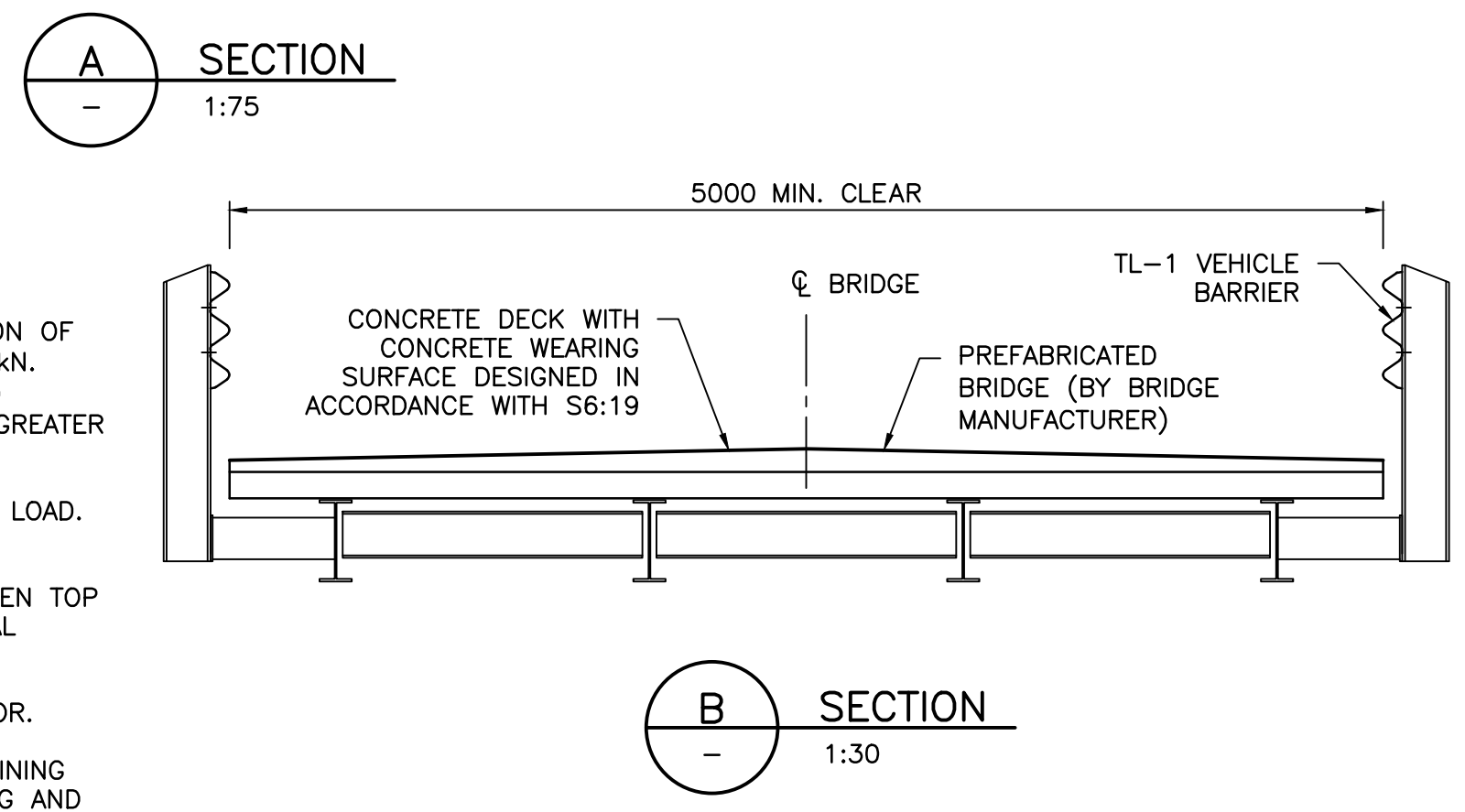
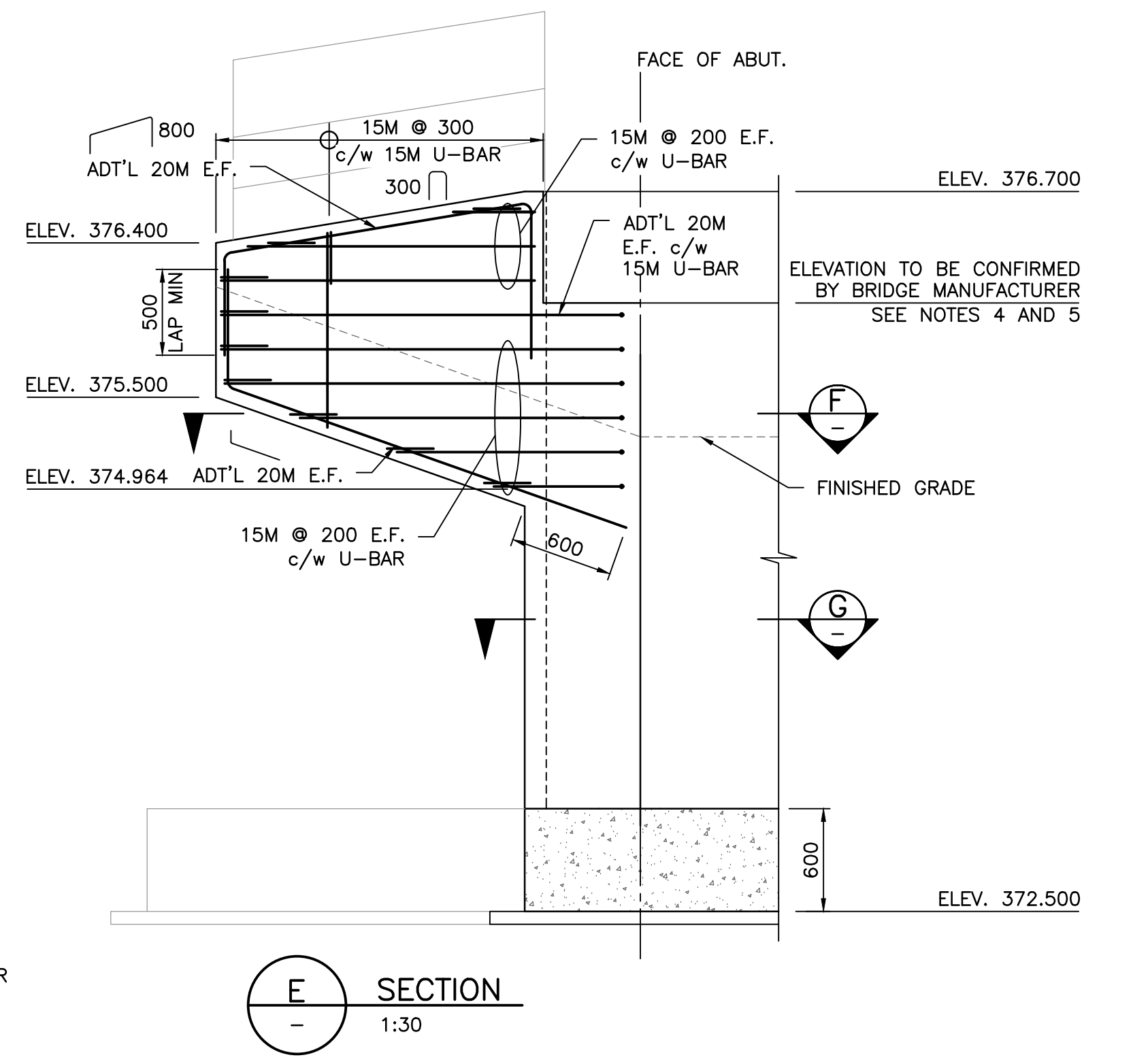
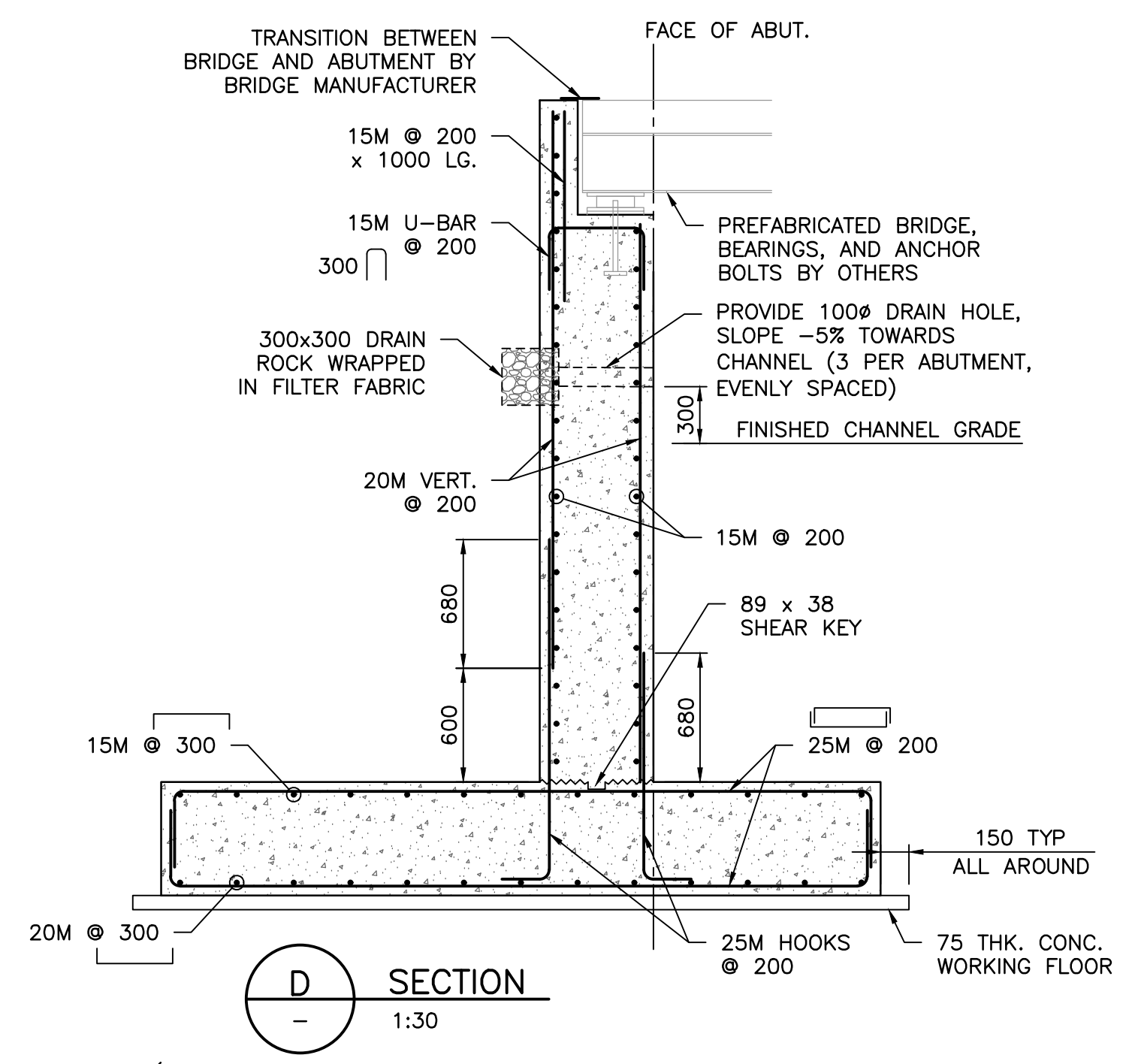
TITLE
16 METRE PEDESTRIAN BRIDGE – PHASE 2

POLSON PARK NATURALIZATION
REACH 1

DRAWING NUMBER
S102



ABUTMENT PLAN
1:30
(SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR, NOT ALL REINF. SHOWN FOR CLARITY)



WORK POINTS (WP) COORDINATES				
	NORTHING	EASTING	STATION	ELEVATION
WP1	338346.020	569661.898	0+030.470	376.700m
WP2	338347.020	569671.043	0+039.670	376.700m

- NOTES:**
- SEE DWG. S001 FOR GENERAL NOTES.
 - ABUTMENT DESIGNED FOR MAXIMUM UNFACTORED DEAD LOAD REACTION OF PREFABRICATED BRIDGE (BY OTHERS) AT EACH ABUTMENT BEING 144kN. BRIDGE MANUFACTURER'S ENGINEER TO CONFIRM REACTION LOADS TO CONTRACT ADMINISTRATOR. BRIDGES WITH UNFACTORED DEAD LOADS GREATER THAN THIS WILL NOT BE ACCEPTED.
 - BRIDGE LIVE LOAD: CL-625 VEHICLE LOAD AND 4.25kPa PEDESTRIAN LOAD. SEE GENERAL NOTES FOR FULL BREAKDOWN OF DESIGN DATA.
 - HEIGHT OF BALLAST WALL TO ALLOW FOR SMOOTH TRANSITION BETWEEN TOP OF BRIDGE DECK AND APPROACH TOP OF GRADE. NOTIFY STRUCTURAL ENGINEER IF HEIGHT EXCEEDS 650mm.
 - BEARING SEAT ELEVATION IS TO BE CONFIRMED BY BRIDGE FABRICATOR.
 - SEE MMCD STANDARD DETAIL DRAWING HANDRAIL ON CONCRETE RETAINING WALL, DWG. C14 FOR DETAILS. ENSURE GAP BETWEEN BRIDGE RAILING AND ABUTMENT WALL RAILING DOES NOT EXCEED 150mm. ENSURE 20mm MIN. CLEAR BETWEEN RAIL POST AND REINFORCING.
 - SLAB ON GIRDER BRIDGE ACCEPTABLE MATERIALS ARE:
- STEEL: CSA G40.21 GRADE 350AT OR 350WT (GALVANIZED AS PER ASTM A123, WITH ZINC METALLIZING IN COMPLIANCE WITH ASTM B833, POWDER COATED BLACK)
- CONCRETE: IN COMPLIANCE WITH CAN/CSA A23.1/A23.2, MINIMUM 28-DAY COMPRESSIVE STRENGTH, $f_c = 30 \text{ MPa}$
 - ANY FIELD WELDS TO BE PAINTED WITH 2 COATS OF BLACK PAINT OR APPROVED EQUAL TO MATCH POWDER COATED COMPONENTS.

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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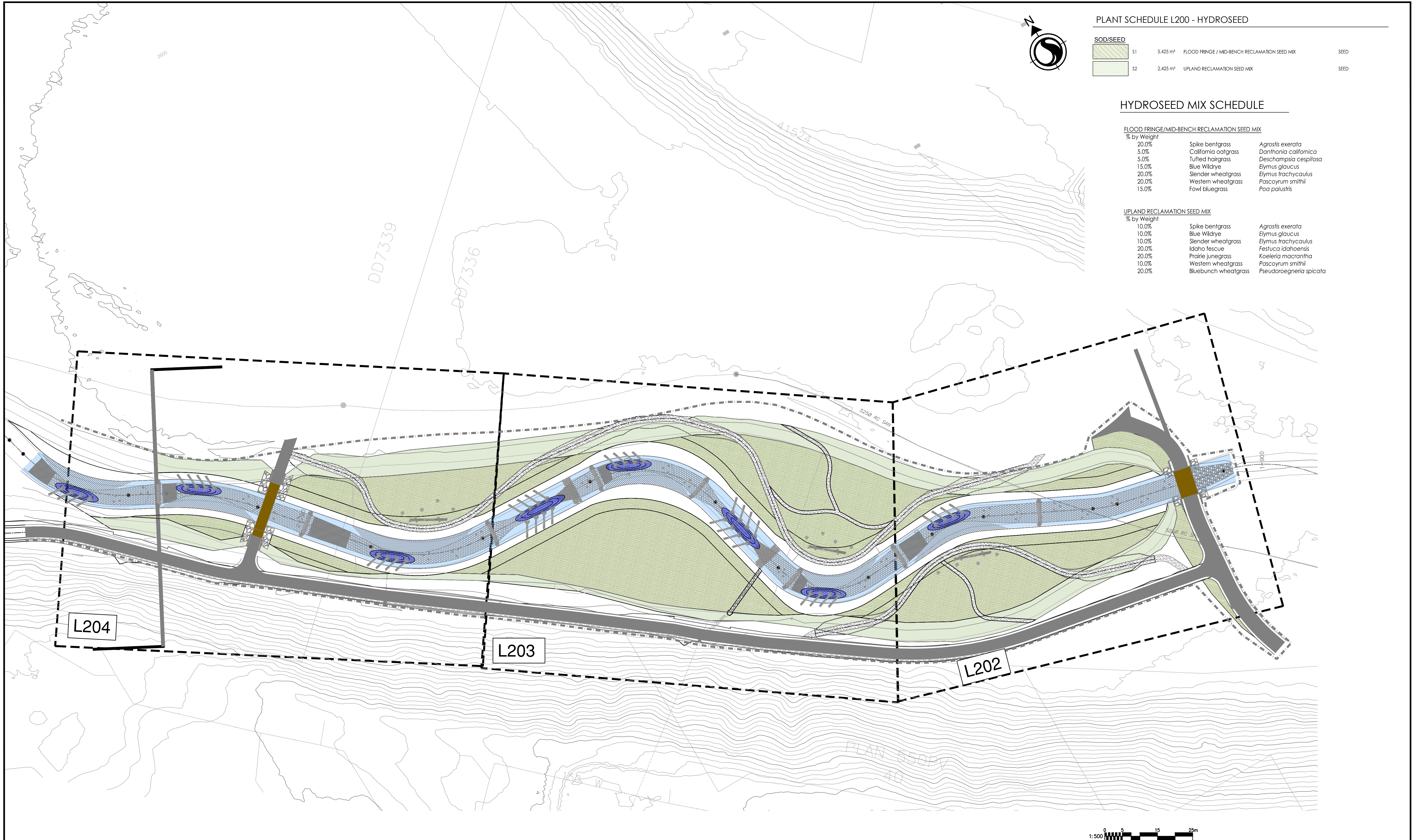


SCALE AS NOTED	TITLE 8 METRE MIXED USE BRIDGE - PHASE 2	DRAWING NUMBER S103
SHEET 3 OF 3	POLSON PARK NATURALIZATION REACH 1	

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28.01.2024



PLANT SCHEDULE L200 - HYDROSEED

SOD/SEED	SEED
S1 5,425 m ² FLOOD FRINGE / MID-BENCH RECLAMATION SEED MIX	SEED
S2 2,425 m ² UPLAND RECLAMATION SEED MIX	SEED

HYDROSEED MIX SCHEDULE

FLOOD FRINGE/MID-BENCH RECLAMATION SEED MIX		
% by Weight		
20.0%	Spike bentgrass	Agrostis exarata
5.0%	California oatgrass	Danthonia californica
5.0%	Tufted hairgrass	Deschampsia cespitosa
15.0%	Blue Wildrye	Elymus glaucus
20.0%	Slender wheatgrass	Elymus trachycaulus
20.0%	Western wheatgrass	Pascopyrum smithii
15.0%	Fowl bluegrass	Poa palustris

UPLAND RECLAMATION SEED MIX		
% by Weight		
10.0%	Spike bentgrass	Agrostis exarata
10.0%	Blue Wildrye	Elymus glaucus
10.0%	Slender wheatgrass	Elymus trachycaulus
20.0%	Idaho fescue	Festuca idahoensis
20.0%	Prairie junegrass	Koeleria macrantha
10.0%	Western wheatgrass	Pascopyrum smithii
20.0%	Bluebunch wheatgrass	Pseudoroegneria spicata

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	LM	LM	MG	ISSUED FOR PROPOSAL



SCALE
H: 1:500
V: N/A

SHEET
1 OF 5

TITLE
LANDSCAPE HYDROSEEDING KEY PLAN

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
L200

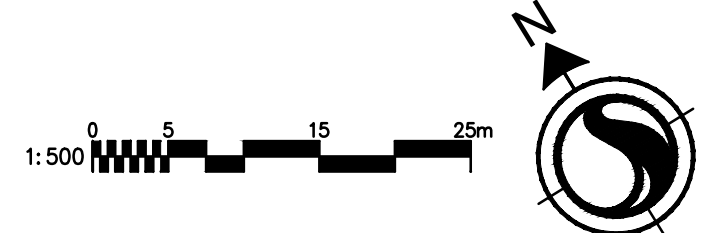
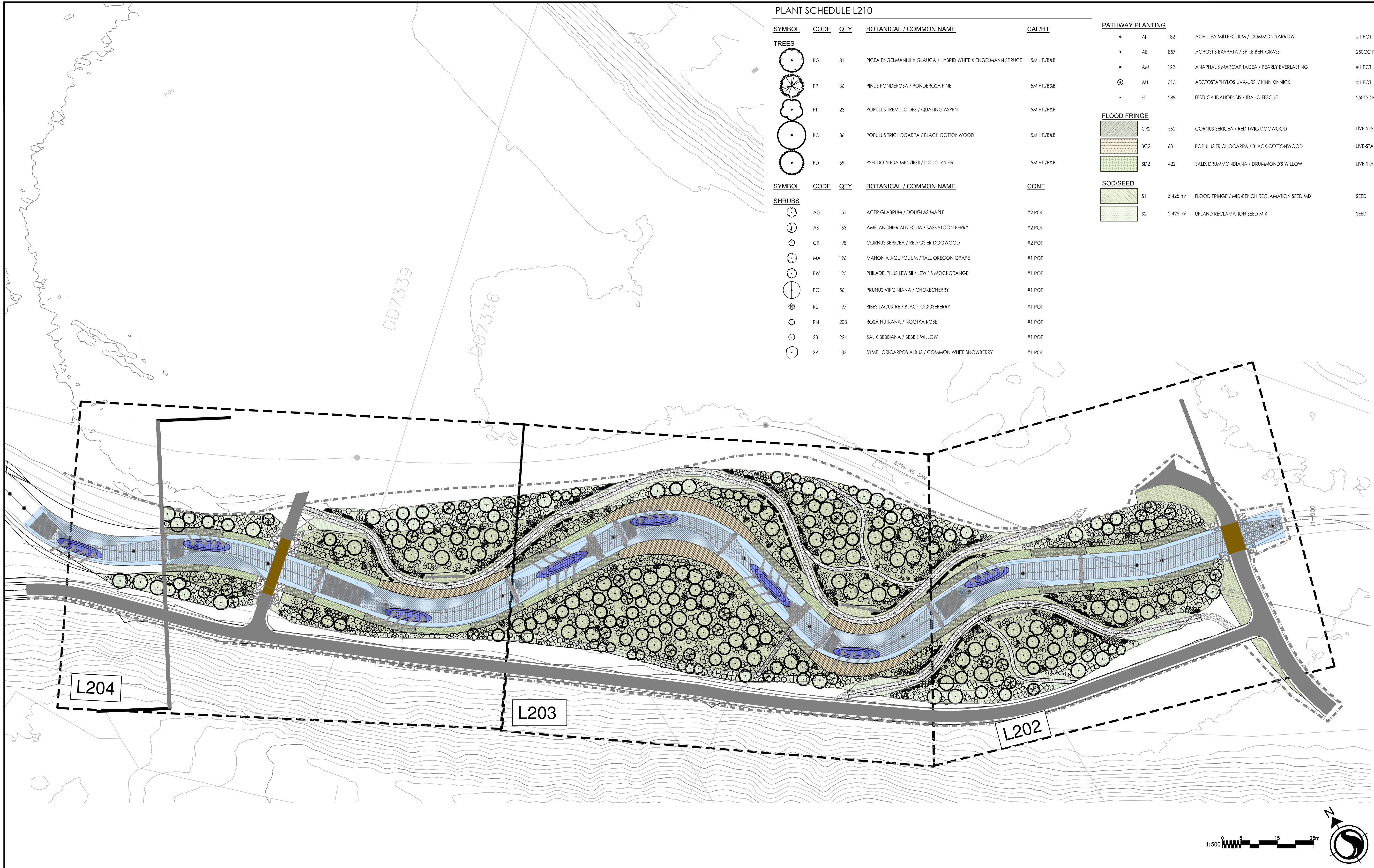
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28.01.2024

PLANT SCHEDULE L210

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CAL/HT
TREES				
	PG	31	PICEA ENGELMANNII X GLAUCA / HYBRID WHITE X ENGELMANN SPRUCE	1.5M HT./B&B
	PP	36	PINUS PONDEROSA / PONDEROSA PINE	1.5M HT./B&B
	PT	23	POPULUS TREMULOIDES / QUAKING ASPEN	1.5M HT./B&B
	BC	86	POPULUS TRICHOCARPA / BLACK COTTONWOOD	1.5M HT./B&B
	PD	59	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	1.5M HT./B&B
SHRUBS				
	AG	151	ACER GLABRUM / DOUGLAS MAPLE	#2 POT
	AS	163	AMELANCHIER ALNFOLIA / SASKATOON BERRY	#2 POT
	CR	198	CORNUS SERICEA / RED-OSIER DOGWOOD	#2 POT
	MA	196	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	#1 POT
	PW	125	PHILADELPHUS LEWISII / LEWIS'S MOCKORANGE	#1 POT
	PC	56	PRUNUS VIRGINIANA / CHOKECHERRY	#1 POT
	RL	197	RIBES LACUSTRE / BLACK GOOSEBERRY	#1 POT
	RN	208	ROSA NUTKANA / NOOTKA ROSE	#1 POT
	SB	224	SALIX BEBBIANA / BEBB'S WILLOW	#1 POT
	SA	133	SYMPHORICARPOS ALBUS / COMMON WHITE SNOWBERRY	#1 POT

PATHWAY PLANTING				
	AI	182	ACHILLEA MILLEFOLIUM / COMMON YARROW	#1 POT.
	AE	857	AGROSTIS EXARATA / SPIKE BENTGRASS	250CC PLUG
	AM	122	ANAPHALIS MARGARITACEA / PEARLY EVERLASTING	#1 POT
	AU	315	ARCTOSTAPHYLOS UVA-URSI / KINKINNICK	#1 POT
	FI	289	FESTUCA IDAHOENSIS / IDAHO FESCUE	250CC PLUG
FLOOD FRINGE				
	CR2	562	CORNUS SERICEA / RED TWIG DOGWOOD	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
	BC2	63	POPULUS TRICHOCARPA / BLACK COTTONWOOD	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
	SD2	422	SALIX DRUMMONDIANA / DRUMMOND'S WILLOW	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
SOD/SEED				
	S1	5,425 m²	FLOOD FRINGE / MID-BENCH RECLAMATION SEED MIX	SEED
	S2	2,425 m²	UPLAND RECLAMATION SEED MIX	SEED



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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SCALE
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V: N/A

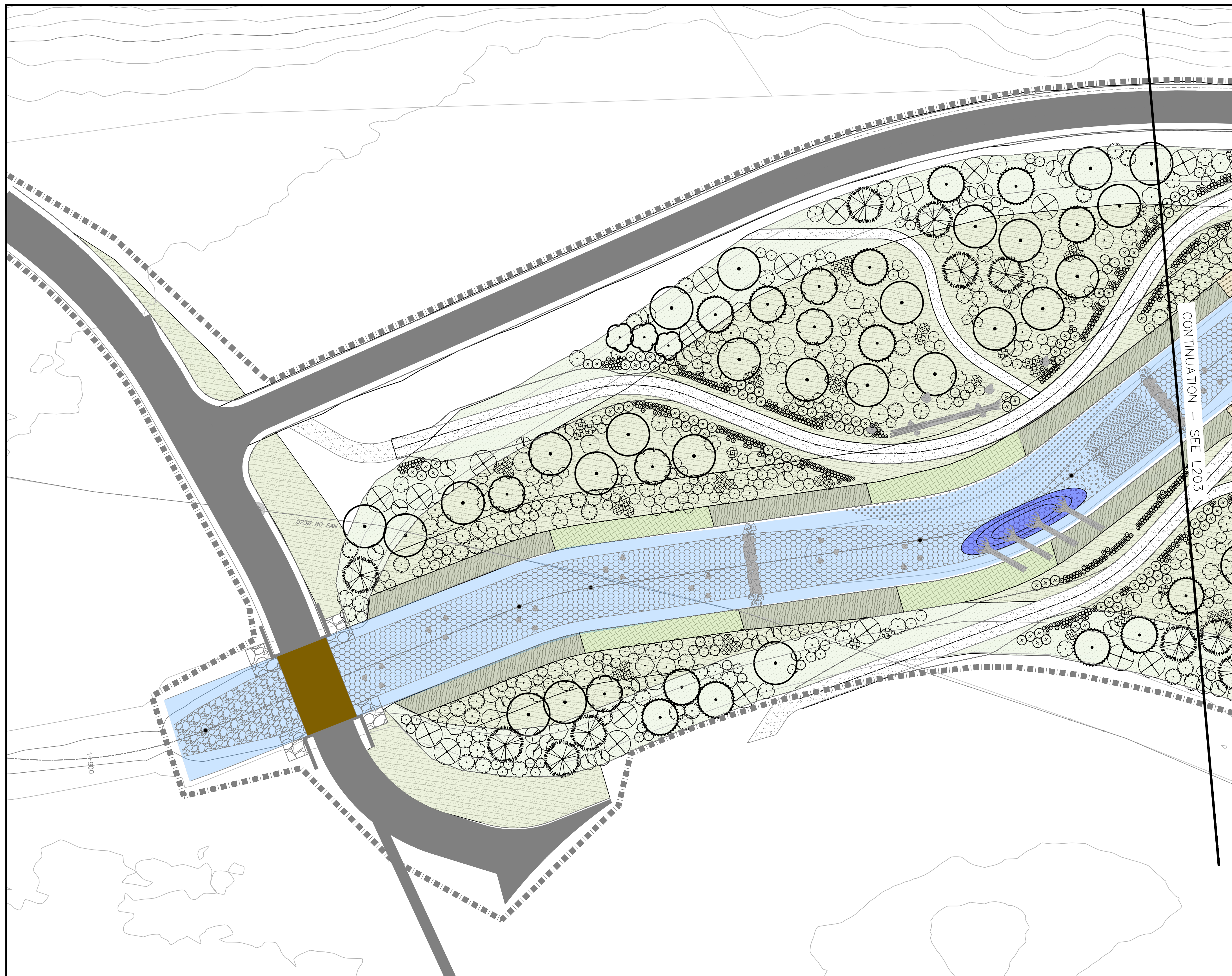
SHEET
2 OF 5

TITLE
LANDSCAPE PLANTING KEY PLAN

POLSON PARK NATURALIZATION
PHASE 2

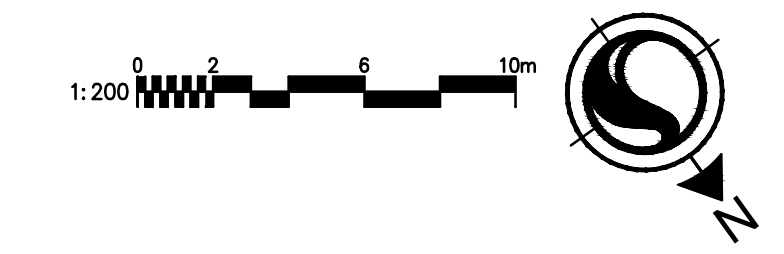
DRAWING NUMBER
L201

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PLANT SCHEDULE L203-

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CALLHT	DETAIL
TREES					
	PG	7	PICEA ENGELMANNII X GLAUCA / HYBRID WHITE X ENGELMANN SPRUCE	1.5M HT./B&B	
	PP	11	PINUS PONDEROSA / PONDEROSA PINE	1.5M HT./B&B	
	BC	16	POPULUS TRICHOCARPA / BLACK COTTONWOOD	1.5M HT./B&B	
	PD	15	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	1.5M HT./B&B	
SHRUBS					
	AG	30	ACER GLABRUM / DOUGLAS MAPLE	#2 POT	
	AS	54	AMELANCHIER ALNIFOLIA / SASKATOON BERRY	#2 POT	
	CR	36	CORNUS SERICEA / RED-OSIER DOGWOOD	#2 POT	
	MA	54	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	#1 POT	
	PW	35	PHILADELPHUS LEWISII / LEWIS'S MOCKORANGE	#1 POT	
	PC	17	PRUNUS VIRGINIANA / CHOKECHERRY	#1 POT	
	RL	38	RIBES LACUSTRE / BLACK GOOSEBERRY	#1 POT	
	RN	63	ROSA NUTKANA / NOOTKA ROSE	#1 POT	
	SB	20	SALIX BEBBIANA / BEBBS WILLOW	#1 POT	
	SA	22	SYMPHORICARPOS ALBUS / COMMON WHITE SNOWBERRY	#1 POT	
PATHWAY PLANTING					
	AI	30	ACHILLEA MILLEFOLIUM / COMMON YARROW	#1 POT.	
	AE	147	AGROSTIS EXARATA / SPIKE BENTGRASS	250CC PLUG	
	AM	22	ANAPHALIS MARGARITACEA / PEARLY EVERLASTING	#1 POT	
	AU	67	ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	#1 POT	
	FI	58	FESTUCA IDAHOENSIS / IDAHO FESCUE	250CC PLUG	
FLOOD FRINGE					
	CR2	174	CORNUS SERICEA / RED TWIG DOGWOOD	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.	
	BC2	11	POPULUS TRICHOCARPA / BLACK COTTONWOOD	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.	
	SD2	159	SALIX DRUMMONDIANA / DRUMMOND'S WILLOW	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.	
SOD/SEED					
	S1	926.7 m ²	FLOOD FRINGE / MID-BENCH RECLAMATION SEED MIX	SEED	
	S2	632.6 m ²	UPLAND RECLAMATION SEED MIX	SEED	



ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
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SCALE
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V: -

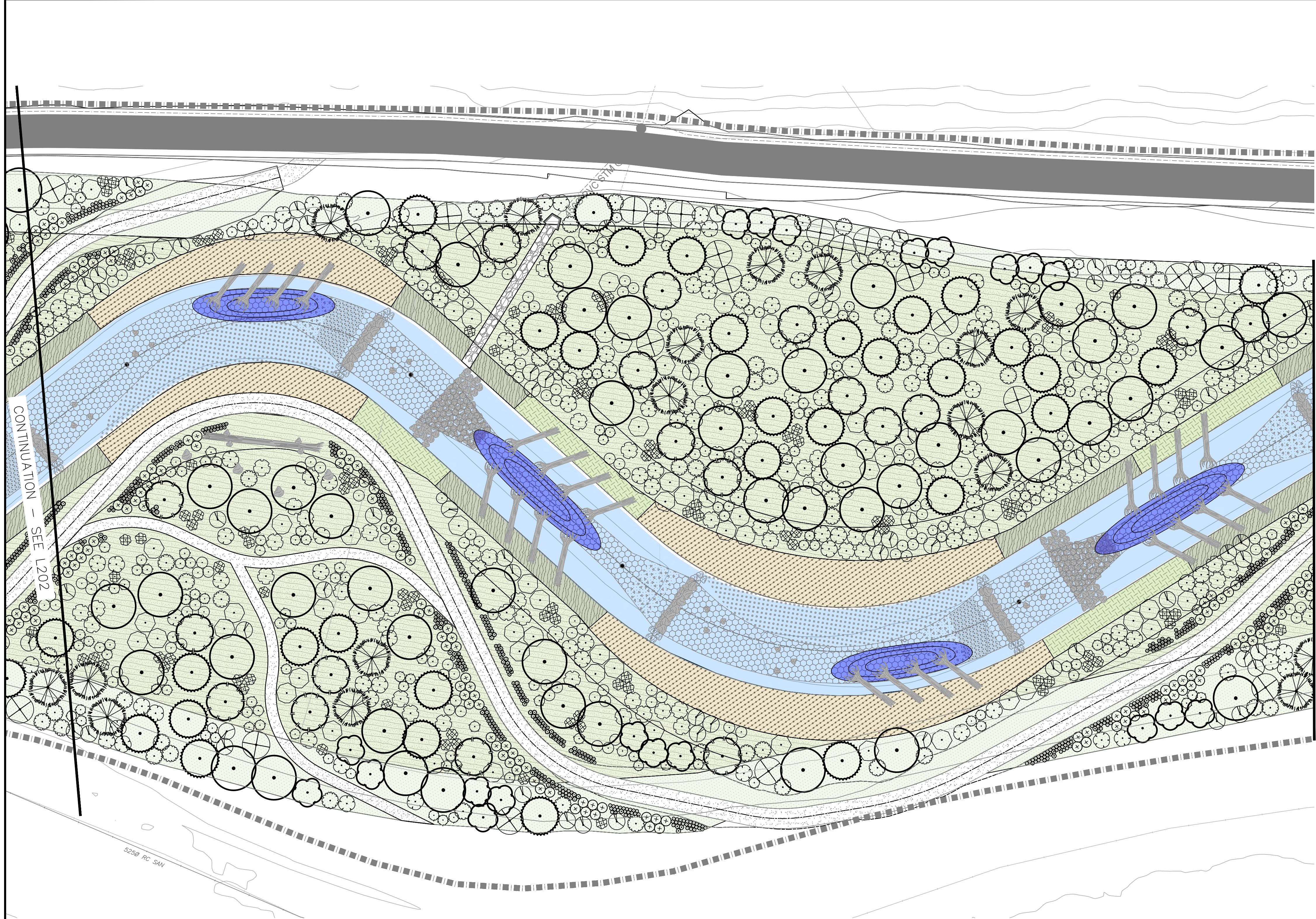
SHEET
3 OF 5

TITLE
LANDSCAPE PLANTING CHANNEL PLAN - EAST

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
L202

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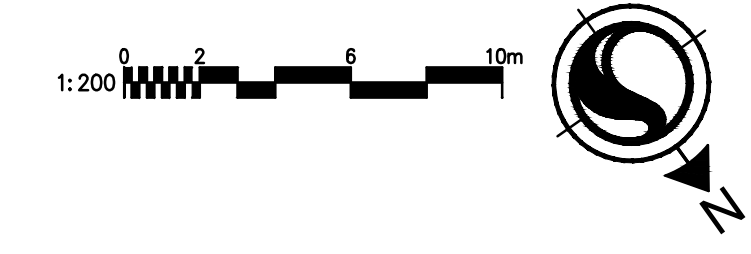


PLANT SCHEDULE L202-

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CAL/HT
TREES				
	PG	19	PICEA ENGELMANNII X GLAUCA / HYBRID WHITE X ENGELMANN SPRUCE	1.5M HT./B&B
	PP	16	PINUS PONDEROSA / PONDEROSA PINE	1.5M HT./B&B
	PT	20	POPULUS TREMULOIDES / QUAKING ASPEN	1.5M HT./B&B
	BC	48	POPULUS TRICHOCARPA / BLACK COTTONWOOD	1.5M HT./B&B
	PD	31	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	1.5M HT./B&B
SHRUBS				
	AG	80	ACER GLABRUM / DOUGLAS MAPLE	#2 POT
	AS	76	AMELANCHER ALNIFOLIA / SASKATOON BERRY	#2 POT
	CR	101	CORNUS SERICEA / RED-OSIER DOGWOOD	#2 POT
	MA	113	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	#1 POT
	PW	57	PHILADELPHUS LEWISII / LEWIS'S MOCKORANGE	#1 POT
	PC	22	PRUNUS VIRGINIANA / CHOKECHERRY	#1 POT
	RL	111	RIBES LACUSTRE / BLACK GOOSEBERRY	#1 POT
	RN	104	ROSA NUTKANA / NOOTKA ROSE	#1 POT
	SB	118	SALIX BEBBIANA / BEBB'S WILLOW	#1 POT
	SA	81	SYMPHORICARPOS ALBUS / COMMON WHITE SNOWBERRY	#1 POT
PATHWAY PLANTING				
	AI	69	ACHILLEA MILLEFOLIUM / COMMON YARROW	#1 POT
	AE	398	AGROSTIS EXARATA / SPIKE BENTGRASS	250CC PLUG
	AM	41	ANAPHALIS MARGARITACEA / PEARLY EVERLASTING	#1 POT
	AU	146	ARCTOSTAPHYLOS UVA-URSI / KINNICKINICK	#1 POT
	FI	172	FESTUCA IDAHOENSIS / IDAHO FESCUE	250CC PLUG
FLOOD FRINGE				
	CR2	180	CORNUS SERICEA / RED TWIG DOGWOOD	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
	BC2	52	POPULUS TRICHOCARPA / BLACK COTTONWOOD	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
	SD2	122	SALIX DRUMMONDIANA / DRUMMOND'S WILLOW	LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
SOD/SEED				
	S1	3,061 m ²	FLOOD FRINGE / MID-BENCH RECLAMATION SEED MIX	SEED
	S2	1,055 m ²	UPLAND RECLAMATION SEED MIX	SEED

CONTINUATION - SEE L204

CONTINUATION - SEE L202



29.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	LM	LM	MG	ISSUED FOR PROPOSAL



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TITLE
LANDSCAPE PLANTING CHANNEL PLAN - CENTRAL
POLSON PARK NATURALIZATION
PHASE 2
DRAWING NUMBER
L202

PLANT SCHEDULE L201-

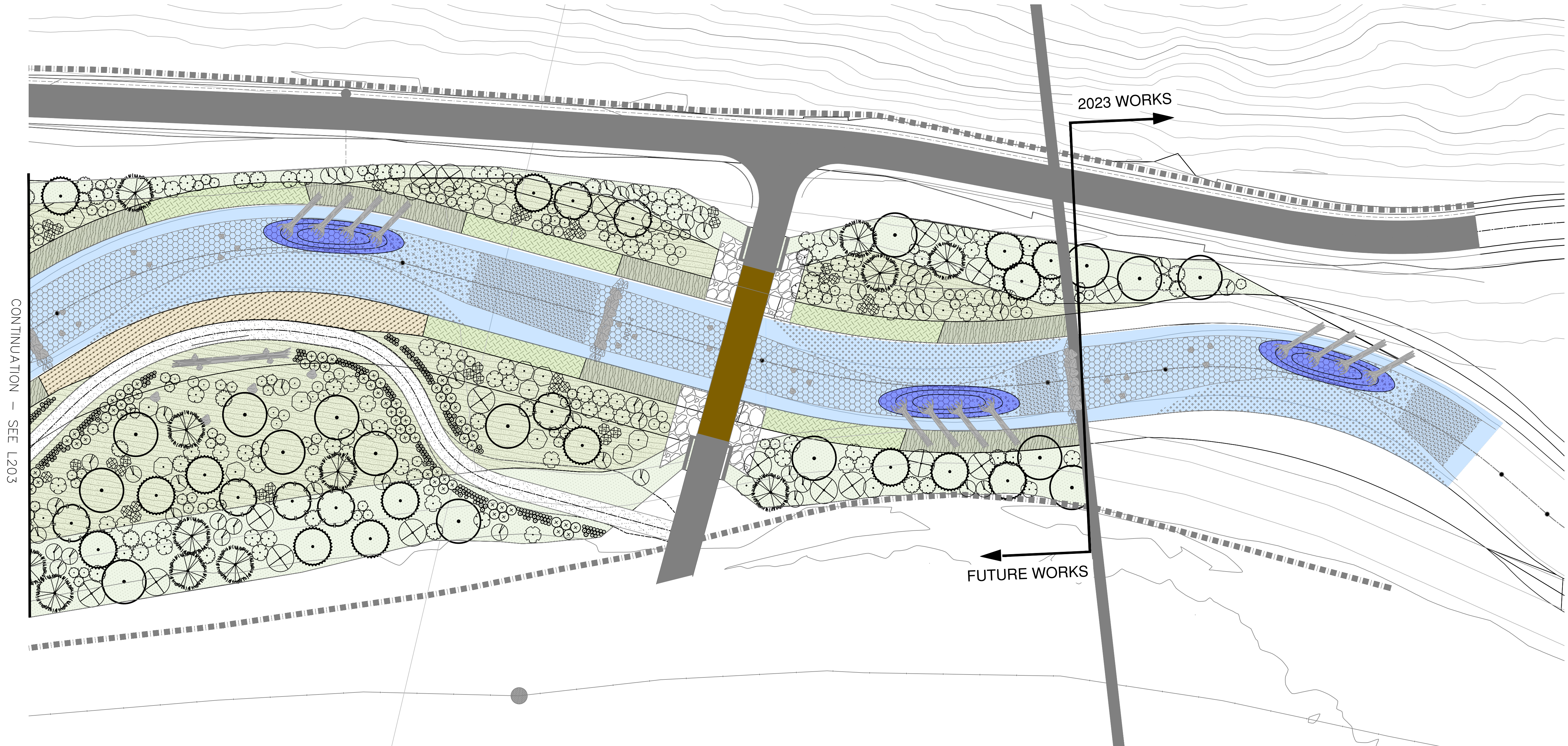
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CAL/HT	DETAIL
TREES					
	PG	5	PICEA ENGELMANNII X GLAUCA / HYBRID WHITE X ENGELMANN SPRUCE	1.5M HT./8&8	
	PP	9	PINUS PONDEROSA / PONDEROSA PINE	1.5M HT./8&8	
	PT	3	POPULUS TREMULOIDES / QUAKING ASPEN	1.5M HT./8&8	
	BC	25	POPULUS TRICHOCARPA / BLACK COTTONWOOD	1.5M HT./8&8	
	PD	13	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	1.5M HT./8&8	

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
SHRUBS				
	AG	41	ACER GLABRUM / DOUGLAS MAPLE	#2 POT
	AS	35	AMELANCHIER ALNIFOLIA / SASKATOON BERRY	#2 POT
	CR	61	CORNUS SERICEA / RED-OSIER DOGWOOD	#2 POT
	MA	29	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	#1 POT
	PW	36	PHILADELPHUS LEWISII / LEWIS'S MOCKORANGE	#1 POT
	PC	18	PRUNUS VIRGINIANA / CHOKECHERRY	#1 POT
	RL	48	RIBES LACUSTRE / BLACK GOOSEBERRY	#1 POT
	RN	46	ROSA NUTKANA / NOOTKA ROSE	#1 POT
	SB	86	SALIX BEBBIANA / BEBB'S WILLOW	#1 POT
	SA	30	SYMPHORICARPOS ALBUS / COMMON WHITE SNOWBERRY	#1 POT

DETAIL	PATHWAY PLANTING	
•	AI	83 ACHILLEA MILLEFOLIUM / COMMON YARROW #1 POT.
•	AE	313 AGROSTIS EXARATA / SPIKE BENTGRASS 250CC PLUG
•	AM	60 ANAPHALIS MARGARITACEA / PEARLY EVERLASTING #1 POT
⊙	AU	103 ARCTOSTAPHYLOS UVA-URSI / KINNIKINICK #1 POT
•	FI	59 FESTUCA IDAHOENSIS / IDAHO FESCUE 250CC PLUG

DETAIL	FLOOD FRINGE	
	CR2	241 CORNUS SERICEA / RED TWIG DOGWOOD LIVE-STAKE, 1.5M LENGTH, 50MM DIA.
	SD2	141 SALIX DRUMMONDIANA / DRUMMOND'S WILLOW LIVE-STAKE, 1.5M LENGTH, 50MM DIA.

DETAIL	SOD/SEED	
	S1	1,437 m² FLOOD FRINGE / MID-BENCH RECLAMATION SEED MIX SEED
	S2	737 m² UPLAND RECLAMATION SEED MIX SEED



CONTINUATION - SEE L203

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29.01.2024

ISSUE No.	DATE	DESIGNED	DRAWN	CHECKED	DESCRIPTION
0	24/01/29	LM	LM	MG	ISSUED FOR PROPOSAL



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TITLE
LANDSCAPE PLANTING CHANNEL PLAN - WEST

POLSON PARK NATURALIZATION
PHASE 2

DRAWING NUMBER
L204