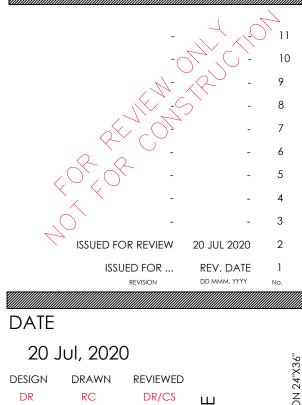


# bienenstock natural playgrounds





REVIEWED

ECHNICAL REVISED

# GENERAL NOTES

# <u>CLIENT</u>

- 1. THE CLIENT FOR THIS PROJECT IS:
- NAME: ANDREW GABB

NAME: DAVE REXWORTHY

- PH: 205-509-0203
- 2. THE DESIGNER FOR THIS PROJECT IS:

# PH: 1-800-306-3319 ext. 150

- 3. CONTACT THE GENERAL CONTRACTOR FOR SITE
- ACCESS, SCHEDULING AND COORDINATION.
- 4. OBTAIN CONSTRUCTION MANAGERS APPROVAL OF REMOVALS, LAYOUTS, WORKMANSHIP AND MATERIALS AS NEEDED AND WHERE NOTED IN THE DRAWINGS AND SPECIFICATIONS.
- 5. SPECIFIED VENDOR COMPONENTS MAY ONLY BE SUBSTITUTED IF THE CLIENT APPROVES THE SUBSTITUTION.

# **DESIGN CRITERIA**

- 6. SPECIFIED VENDOR COMPONENTS MAY ONLY BE SUBSTITUTED FOR COMPONENTS EQUAL IN QUALITY, SIZE AND MATERIALS.
- 7. THIS CONTRACT MUST BE CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING CODES (AS APPLICABLE TO THE SITE LOCATION):
- 7.a. FEDERAL, PROVINCIAL/STATE AND/OR MUNICIPAL CODE 7.b. LOCAL & NATIONAL BUILDING CODE.
- 7.c. CAN/CSA-Z614-14 (R2015) CANADIAN STANDARDS ASSOCIATION.
- 8. ALL PATHWAYS MUST HAVE A SLOPE NO GREATER
- THAN 20:1 (5%) UNLESS OTHERWISE STATED. 9. ALL TREES THAT REQUIRE REMOVAL AND/OR RELOCATION MUST FOLLOW LOCAL MUNICIPAL CODE
- FOR REMOVING AND TRANSPLANTING TREES. 10. LOCAL CODES WILL BE FOLLOWED TO PROTECT EXISTING TREES THAT REQUIRE A TREE PROTECTION
- ZONE. 11. CONSTRUCTION DRAWINGS MAY BE SCALED WHEN PRINTED ON 24"x36". IF THERE IS A CONFLICT BETWEEN SCALED DIMENSION AND WRITTEN DIMENSION; THE ORDER OF PRECEDENCE IS WRITTEN, THEN SCALED.
- 12. IF THERE IS A CONFLICT AMONG THE GENERAL NOTES, 31. ALL PLANTS MUST BE HEALTHY AND FREE OF DISEASE, DETAILS AND DRAWINGS, THE ORDER OF PRECEDENCE IS NOTES, THEN DRAWINGS, THEN DETAILS.

# DRAINAGE

- 13. THIS DRAINAGE PLAN USES  $\frac{3}{4}$ " CLEAR GRAVEL TO CREATE A FRENCH DRAIN INFILTRATION BED UNDERNEATH PLAY SURFACING.
- 14. ALL DRAIN PIPES PRESENT ARE TO BE A MINIMUM 102mm [4"] DIA. UNLESS OTHERWISE STATED
- 15. PERFORATED DRAIN PIPE TO BE CONNECTED TO SOLID PIPE USING FLEXIBLE COUPLING.
- 16. ALL OTHER CONNECTIONS ARE TO BE SOLID COUPLING 36. PLANT MATERIAL MUST BE IRRIGATED IMMEDIATELY OR REDUCER.

# CONCRETE

- 17. ALL CONCRETE TO HAVE A MINIMUM 15 MPA. UNLESS
- OTHERWISE STATED. 18. ALL SELF-MIXING CONCRETE TO BE QUIKRETE - POST MIX BAGGED CONCRETE OR EQUIVALENT.
- 19. IF USING SELF-MIXING CONCRETE, FOLLOW MANUFACTURER'S SPECIFICATIONS WHEN MIXING,
- POURING, AND CURING. 20. IF USING READY MIX CONCRETE, ALLOW CONCRETE TO CURE FOR A MIN. 7 DAYS.
- 21. ENSURE ALL SURFACES HAVE A 1 % SLOPE TO SHED WATER.

# WOOD TREATMENT

- 22. PRESSURE TREATED (P.T.) WOOD MAY ONLY BE USED FOR NON-VISIBLE FRAMING.
- 23. P.T. WOOD MAY BE COPPER AZOLE (C.A.) OR
- AMMONICAL COPPER QUATERNARY (A.C.Q.). 24. CHROMATED COPPER ARSENATE (C.C.A.) IS NOT ACCEPTABLE.
- 25. THE SPECIES OF TREES USED ARE CAREFULLY SELECTED DUE TO THEIR HIGHER TANNIN LEVELS AND RESISTANCE TO ROT.
- 25.a. LOCUST, OAK, WALNUT, CEDAR, LARCH AND SILVER MAPLE ARE PREFERRED SPECIES. 25.b. ASH, PINE AND SUGAR MAPLE ARE GUARANTEED TO
- BE INFESTED WITH INSECTS AND AS A RESULT, THEIR SALE AND TRANSPORT IS REGULATED IN MANY JURISDICTIONS.

# STRUCTURAL STEEL

- 26. UNLESS OTHERWISE NOTED, ALL STEEL COMPONENTS, HARDWARE AND FASTENERS (WITH THE EXCEPTION OF CONCRETE REINFORCEMENT BARS) ARE TO BE EITHER HOT-DIPPED GALVANIZED, STAINLESS STEEL, OR COATED WITH EXTERIOR GRADE RUST-PREVENTATIVE PAINT.
- 26.a. GALVANIZED STEEL MAY NOT COME INTO CONTACT WITH MILD STEEL.
- 26.b. GALVANIZED STEEL MAY NOT COME INTO CONTACT WITH STAINLESS STEEL.
- 27. ALL WELDING SHALL BE DONE BY A FULLY CERTIFIED COMPANY & SHALL CONFORM TO CSA STANDARD w47.1
- 28. ALL FIELD-WELDS OF GALVANIZED STEEL MEMBERS SHALL BE TOUCHED UP WITH ZINC COAT.

# SITE SECURITY

29. SITE SECURITY IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. FENCING/HOARDING WILL BE SET PRIOR TO INSTALLATION AND WILL REMAIN INTACT UNTIL SUBSTANTIAL PERFORMANCE IS REACHED.

# PLANTS AND PLANTING

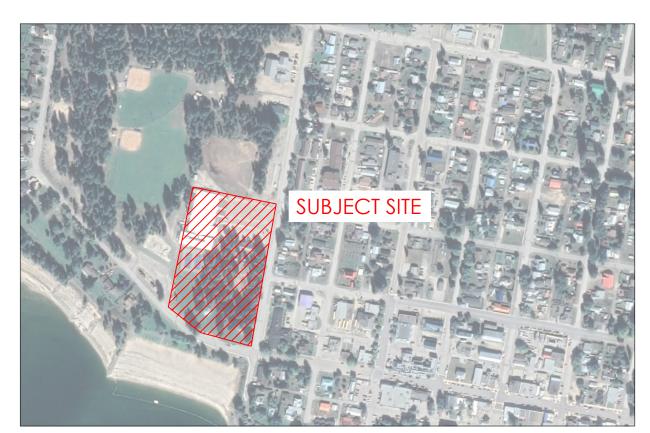
- 30. IF THE SPECIFIED PLANTS ARE NOT AVAILABLE (SPECIES AND/OR SIZE), PLANT SUBSTITUTIONS MUST BE APPROVED BY THE DESIGNER PRIOR TO DELIVERY.
- INSECTS PESTS.
- 32. FOLLOW CSA/ASTM STANDARDS FOR ALLOWABLE PLANT SPECIES.
- 33. ROOTS OF PLANT MATERIAL MUST BE PROTECTED AT ALL TIMES FROM FROST, WIND AND SUN.
- 34. SCHEDULE DELIVERIES SO THAT PLANT MATERIAL SPENDS A MINIMAL AMOUNT OF TIME IN STORAGE ON SITE.
- 35. ALL PLANTS MUST BE INSTALLED PROPERLY AND AT THE CORRECT LEVEL RELATIVE TO FINISHED GRADE. ROOT FLARE OF WOODY PLANTS SHALL BE 25 - 50mm [1"-2"] ABOVE FINISHED GRADE.
- AFTER PLANTING.

**DESIGNER NOTES** 

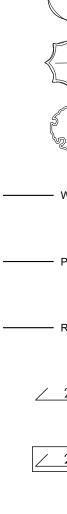
# SURVEY INFORMATION:

THIS CONSTRUCTION DOCUMENT PACK HAS BEEN CREATED WITH THE ASSUMPTION OF THE CONSTRUCTION SITE BEING FLAT. NO SURVEY HAS BEEN OBTAINED AS PER CLIENTS REQUEST. CONTRACTOR WILL HAVE TO ADJUST MEASUREMENTS & ELEVATIONS IN THIS DOCUMENT TO BE IN ACCORDANCE WITH REAL WORLD MEASUREMENTS.

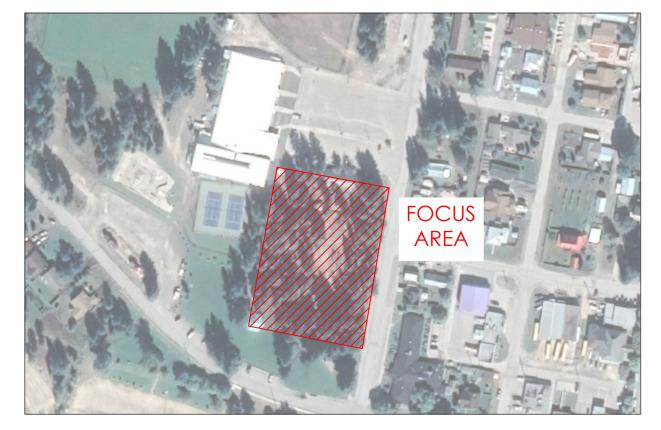
VICINITY MAP



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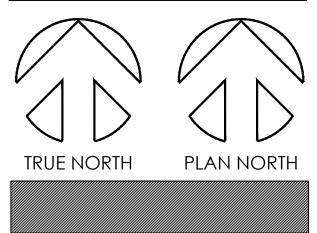




HNICAL LEG	END	SURFACING LEG	END
	PROPOSED TREE: DECIDUOUS		MULCH
	PROPOSED TREE: CONIFEROUS		ENGINEERED WOOD FIBER
++	PROPOSED SHRUB: DECIDUOUS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SOD
WL	LINE TYPE WORK LIMIT		CONCRETE
PSZ	LINE TYPE PROTECTIVE SAFETY ZONE		GRAVEL
RCZ	LINE TYPE RECOMMENDED CLEARANCE ZONE		
<u> </u>	PROPOSED SLOPE		
<u> </u>	PROPOSED SLOPE SUB GRADE		
+ 123.4	ELEVATION PROPOSED		
+ 123.4	ELEVATION PROPOSED SUB GRADE		

# bienenst natural playgrounds

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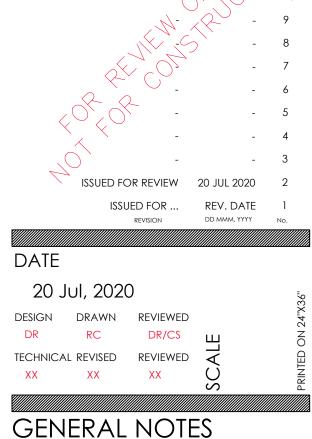
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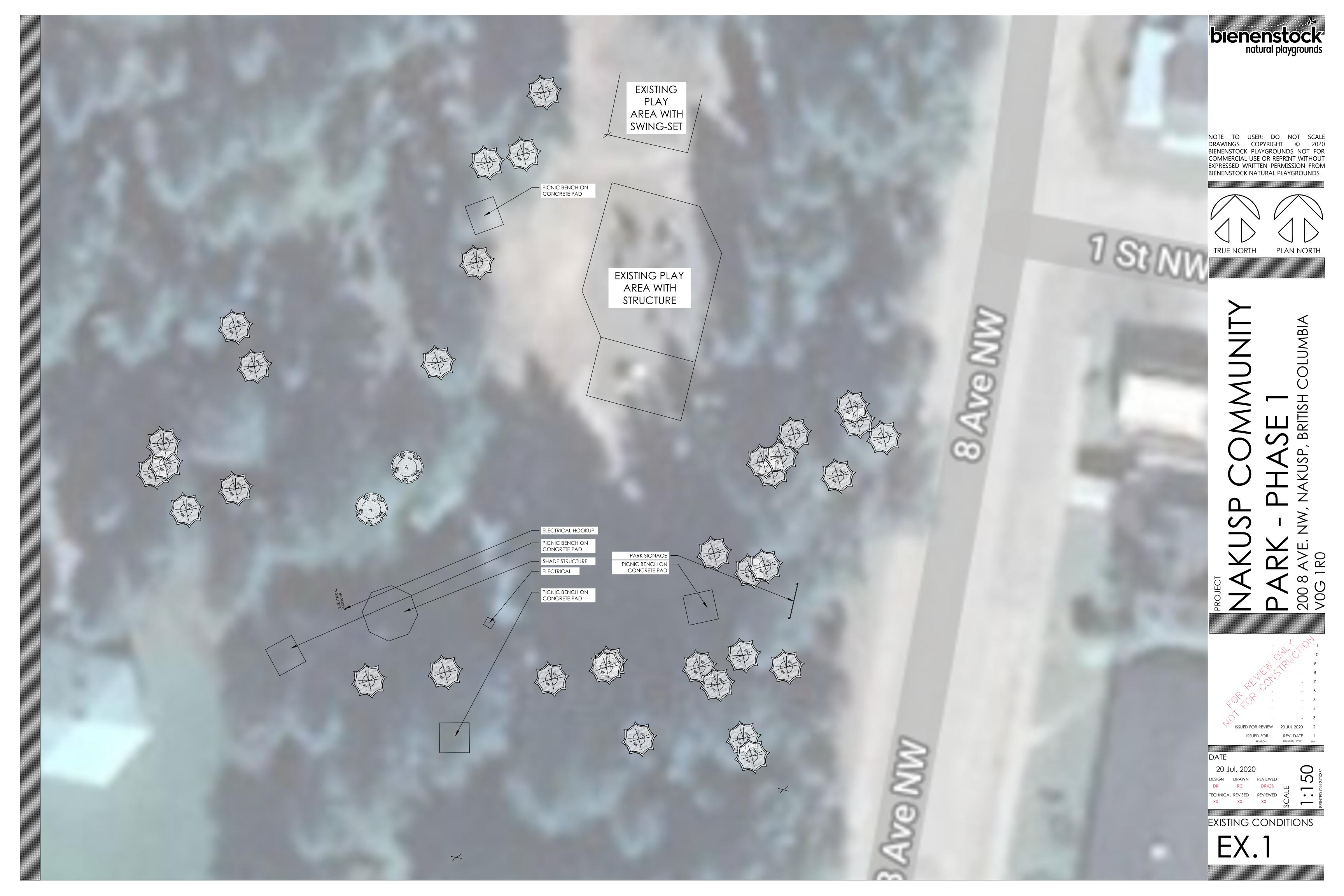
# ABBREVIATIONS

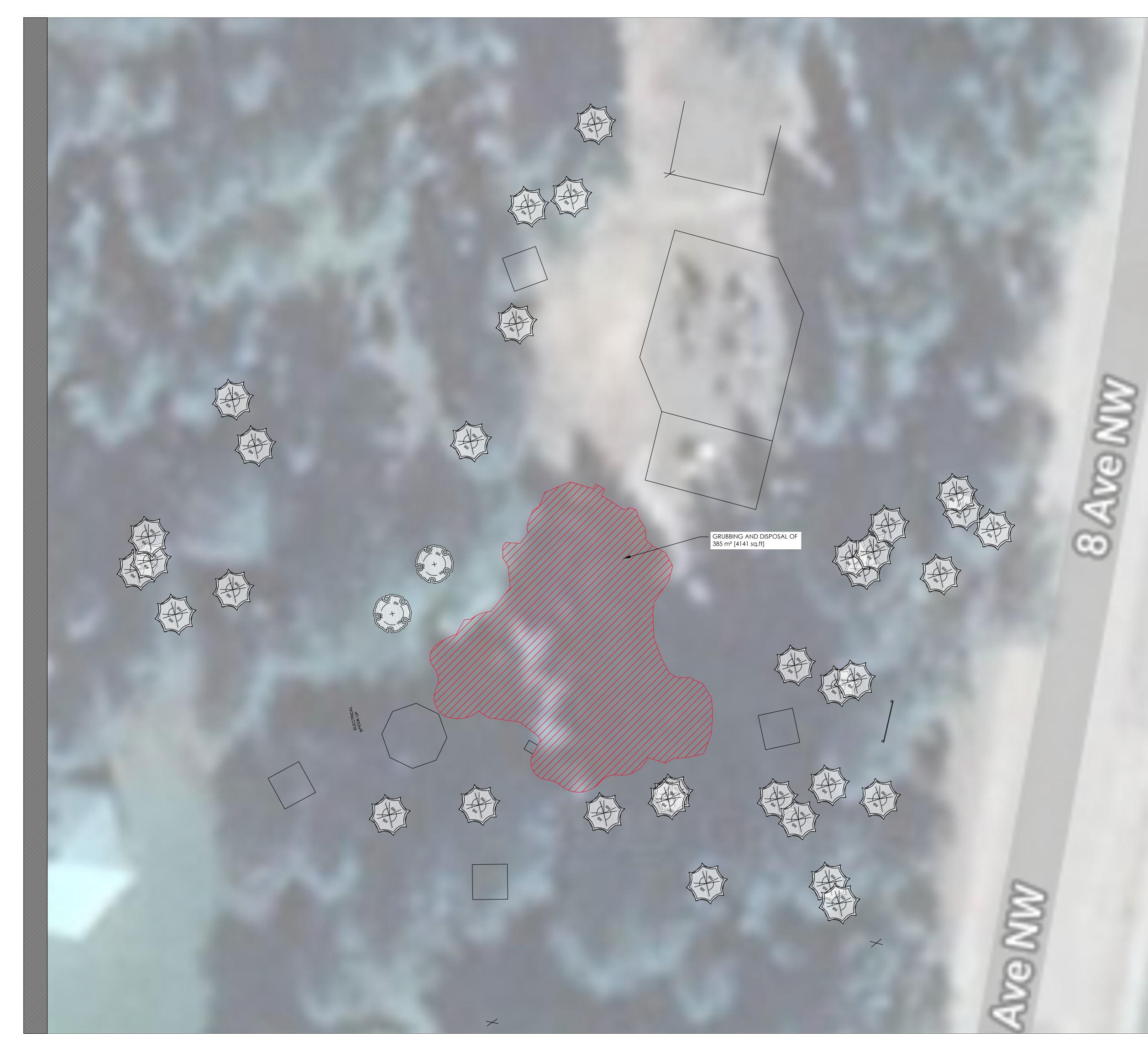
- C.I.P. CAST-IN-PLACE
- C/W COMPLETE WITH
- Ø DIAMETER
- E.W.F. ENGINEERED WOOD FIBRE
- H.P.B. HIGH PERFORMANCE BEDDING
- ht. Height
- H.D.G. HOT DIPPED GALVANIZED
- MAX. MAXIMUM
- MIN. MINIMUM
- N.I.C. NOT IN CONTRACT
- N.T.S. NOT TO SCALE
- O.C. ON CENTRE
- P.T. PRESSURE TREATED
- S.P.D.D. STANDARD PROCTER DRY DENSITY
- T.P. TREE PROTECTION
- TYP. TYPICAL
- U.N.O. UNLESS NOTED OTHERWISE
- L.M LINEAR METER
- L.F LINEAR FOOT
- TC TOP OF COMPONENT
- TF TOP OF FOOTING
- TL TOP OF LOG
- TB TOP OF BOULDER
- N.I.C NOT IN CONTRACT
- U.N.O UNLESS NOTED OTHERWISE

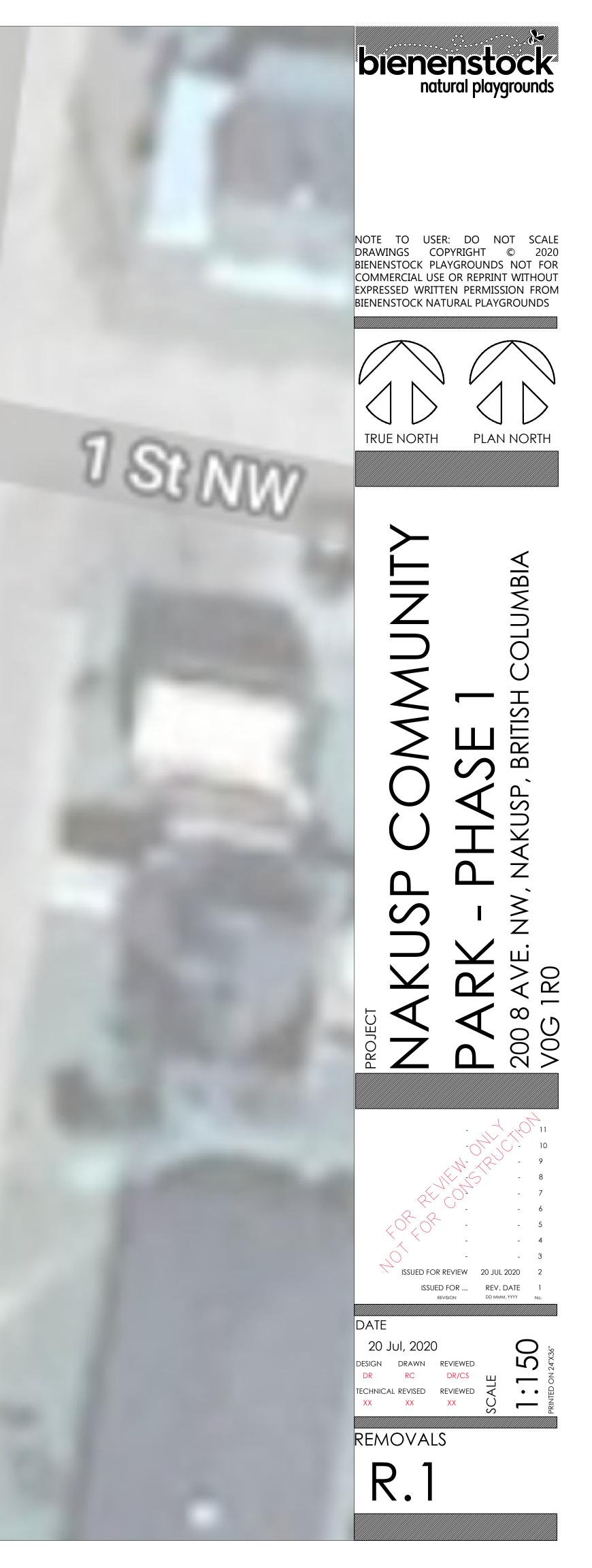
- SHEET INDEX
- COVER COVER
- GN.1 GENERAL NOTES
- EX.1 EXISTING CONDITIONS
- R.1 REMOVALS
- l.1 SITE PLAN
- L.2 LAYOUT
- L.3 LAYOUT
- G.1 GRADING
- D.1 DRAINAGE
- P.1 PLANTING PLAN
- P.2 PLANTING LAYOUT
- DtP.1 Details Planting
- DtS.1 Details Surfacing
- DtC.1 Details Component
- DtC.2 Details Component DtC.3 Details - Component
- DtC.4 Details Component

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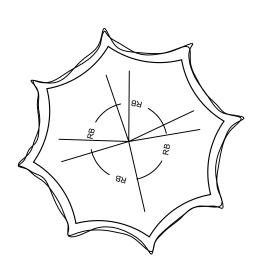


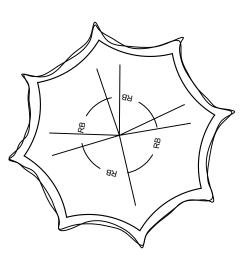


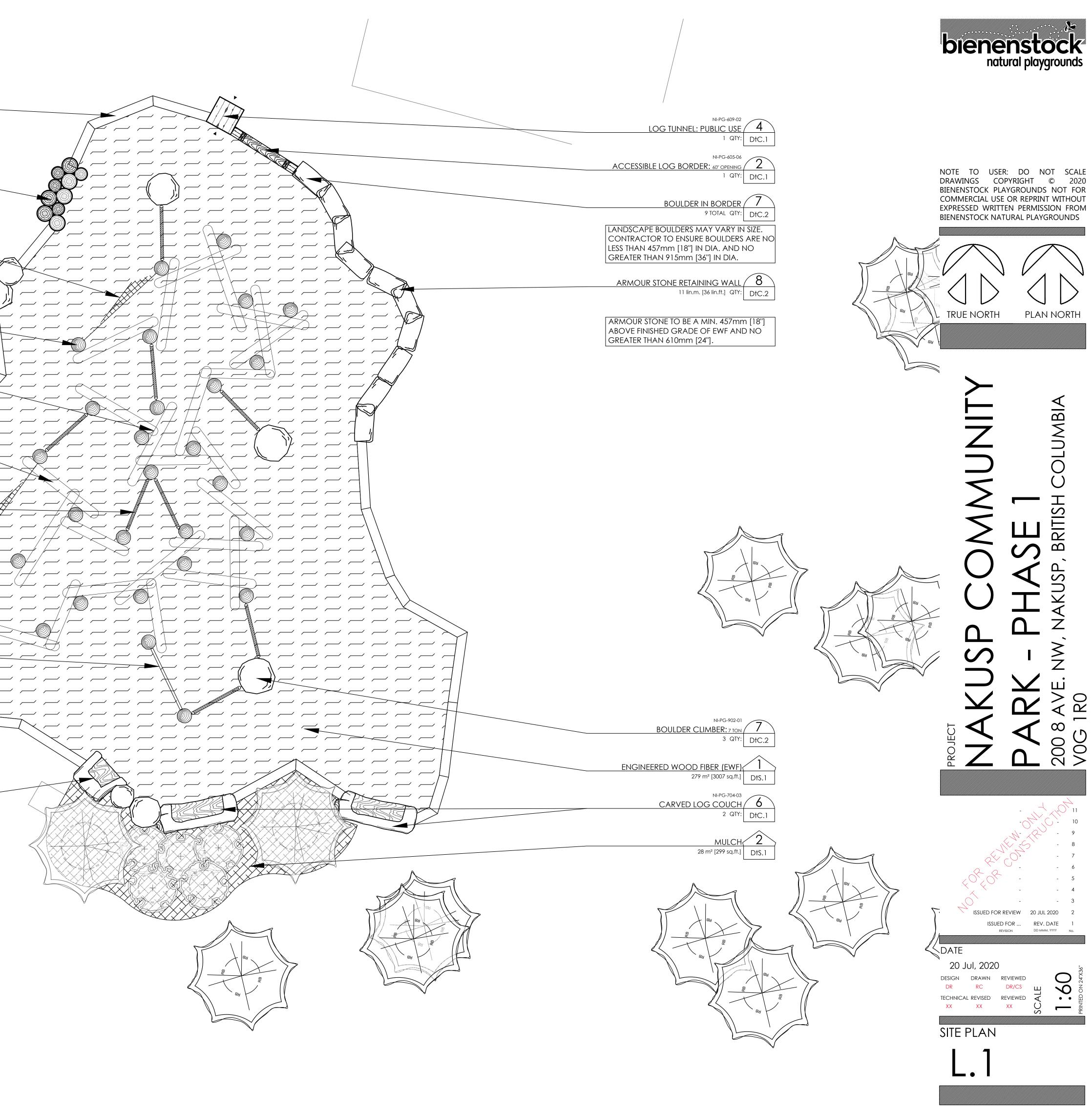


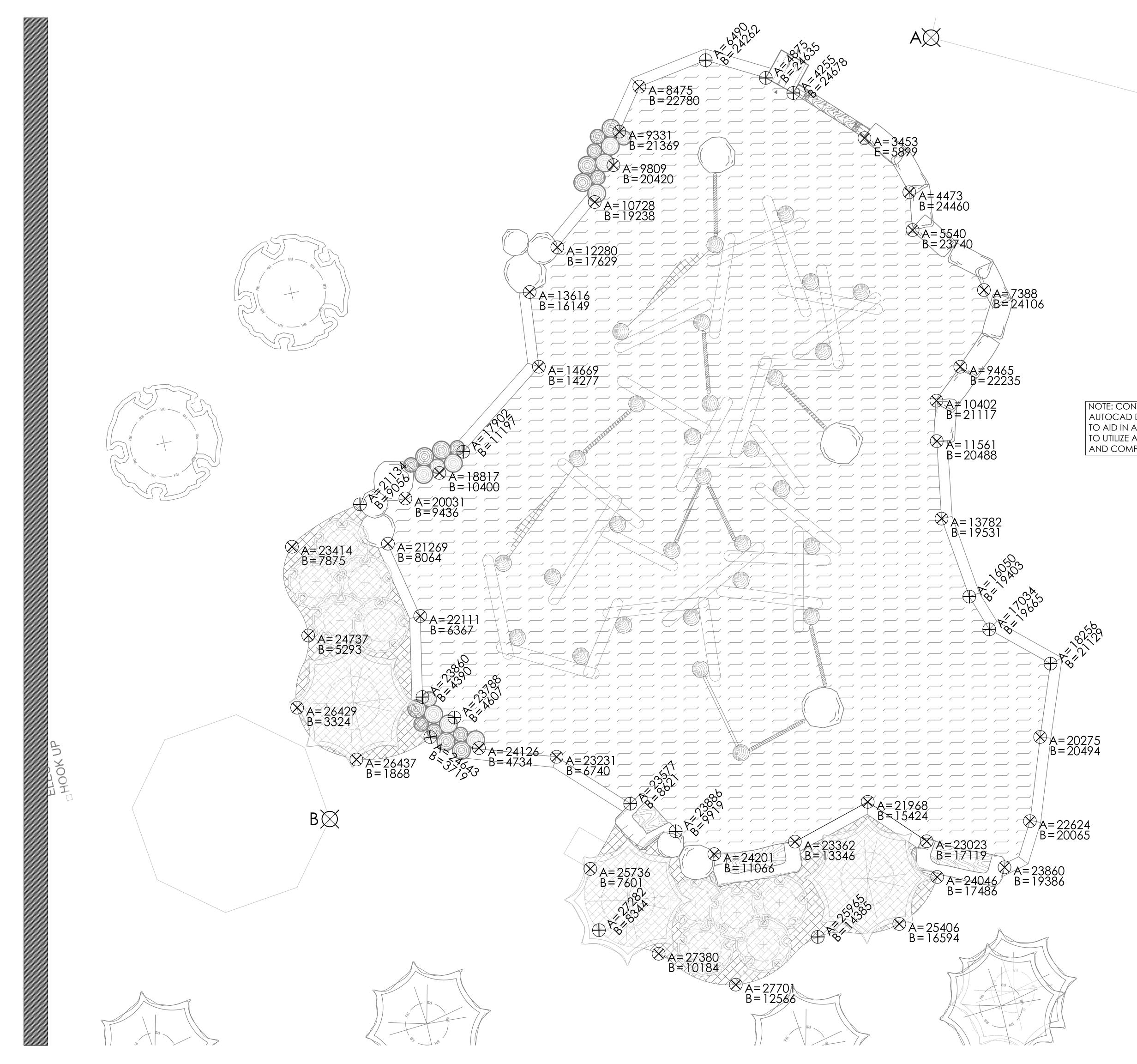


NI-PG-605-01 HORIZONTAL LOG BORDER: 12" DIA. SOFTWOOD	
DtC.1 QTY: 47 lin.m. [154 lin.ft.]	
3 NI-PG-606-10.01/.03 LOG CLUSTER: VERISON 4A & 3A DtC.1 QTY: VERSION 4A (x1) & VERSION 3A (x2)	
8 NET CLIMBER DtC.4 QTY: 2 TOTAL	
THE TWO NETS ARE IDENTICAL IN SIZE AND THE DISTANCE BETWEEN THE POSTS MUST BE ACCURATE ARE PER DRAWING. SEE DETAIL FOR DIMENSIONS.	
9 NI-PG-601-02 WACKY POST(S): HARDWOOD DtC.3 QTY: 29 TOTAL	
DtC.3 QTY: 1 COMPOSITE STUCTURE NI-PG-8002 LOG BEAM: VARIOUS LENGTHS DtC.3 QTY: 26 TOTAL	
BEAM LENGTHS MAY VARY BETWEEN 8'-12', DEPENDING ON THE FINAL POSITION AND DIA. OF WACKY POSTS. CONTRACTOR TO VARIFY BEAM LENGTHS ONCE POSTS HAVE BEEN SET.	
ENSURE ENDS OF BEAM EXTENT A MIN. 305mm [12"] BEYOND CONNECTION POINTS.	
3 DtC.2 NI-PG-606-10.01/.03 LOG CLUSTER: VERISON 4A & 3A QTY: VERSION 4A (x1) & VERSION 3A (x1)	
9 SHIP-ROPE CLIMBER DtC.4 QTY: 8 TOTAL	
ROPE LENGTHS MAY VARY DEPENDING ON THE FINAL POSITION AND DIA. OF WACKY POSTS. ROPES MUST BE TIGHT WITH LITTLE SLACK. IT IS RECOMMENDED THAT THE ROPES BE MEASURED ONSITE AND ORDER AFTER THE WACKY POSTS HAVE BEEN INSTALLED.	
2 MULCH DtS.1 AREA:	
9 PULL-UP BAR DtC.4 QTY: 1	
PULL-UP BAR IS TO BE 2210mm [87"] IN LENGTH AT WHICH THE BAR STARTS 76mm [3"] INTO DIA. OF FIRST POST WHEREAS 229mm [9"] IS HOUSED IN FIRST POST. BAR IS TO BE SET 3" INTO SECOND POST AND SECURED. WACKY POSTS ARE TO BE PLACE 1905mm [75"] APART FROM INSIDE OF POSTS. THESE MEASUREMENTS ARE BASED ON THE WACKY POSTS BEING 305mm [12"] IN DIA.	
DIA. OF POSTS MAY VERY, CONTRACTOR IS TO ADJUST ACCORDINGLY.	
3 NI-PG-606-10.01/.03 LOG CLUSTER: VERISON 4A & 3A DtC.1 QTY: VERSION 4A (x1) & VERSION 3A (x2) NI-PG-704-01	
5 CARVED LOG ARMCHAIR DtC.1 QTY: 1	



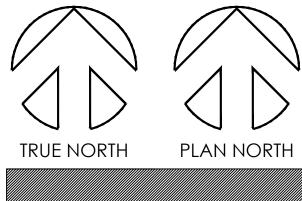


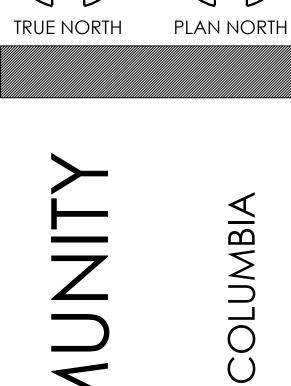






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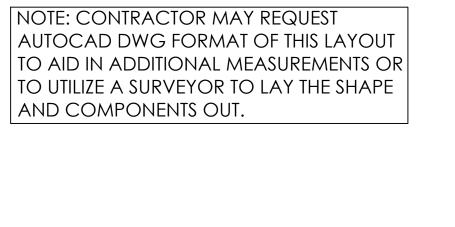


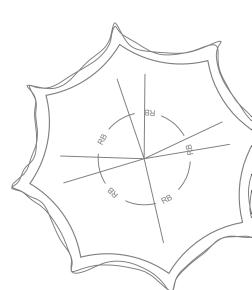


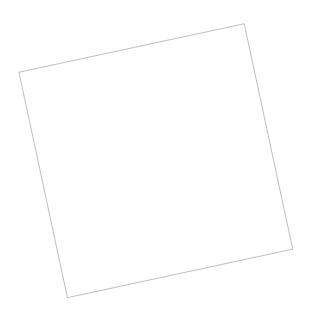
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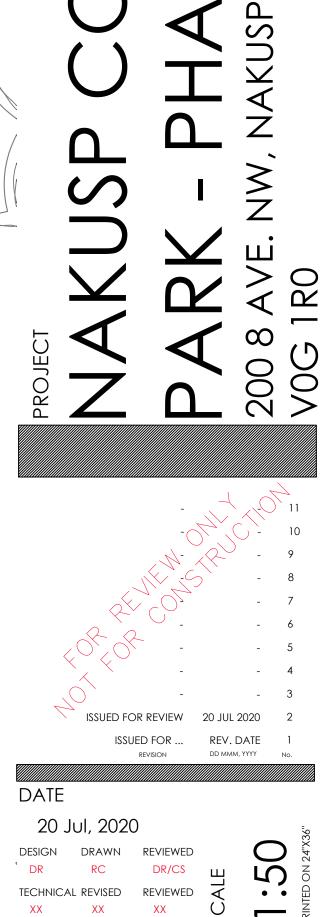
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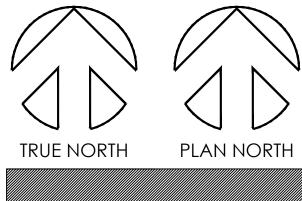


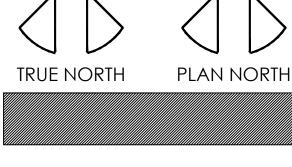
**LAYOUT** 





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20 Jul, 2020

DESIGN DRAWN REVIEWED

TECHNICAL REVISED REVIEWED

RC

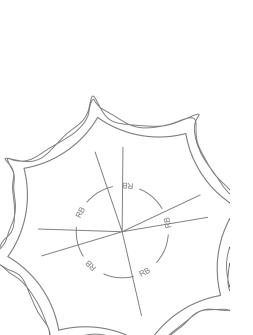
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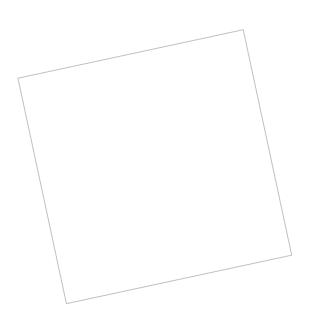
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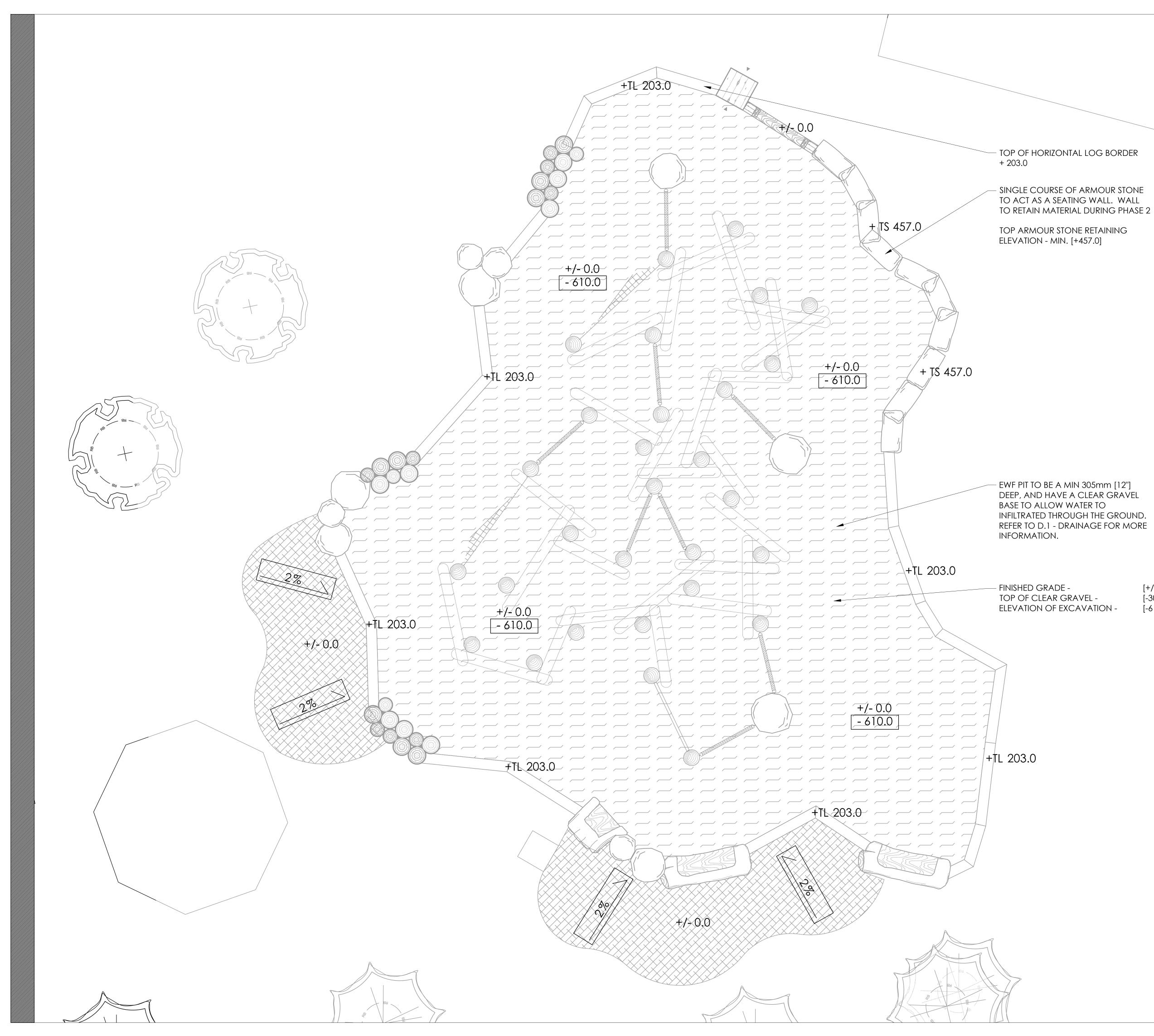
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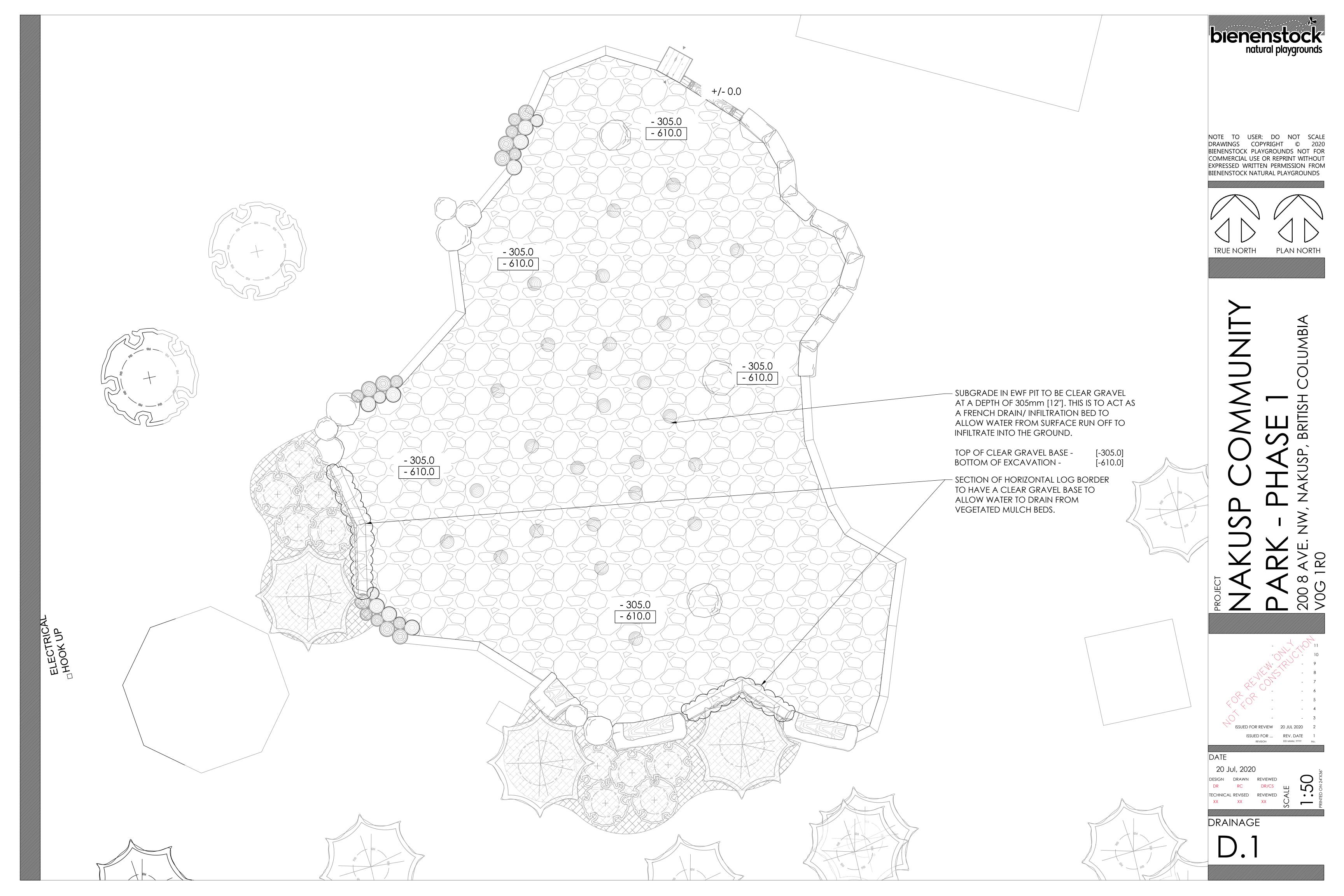


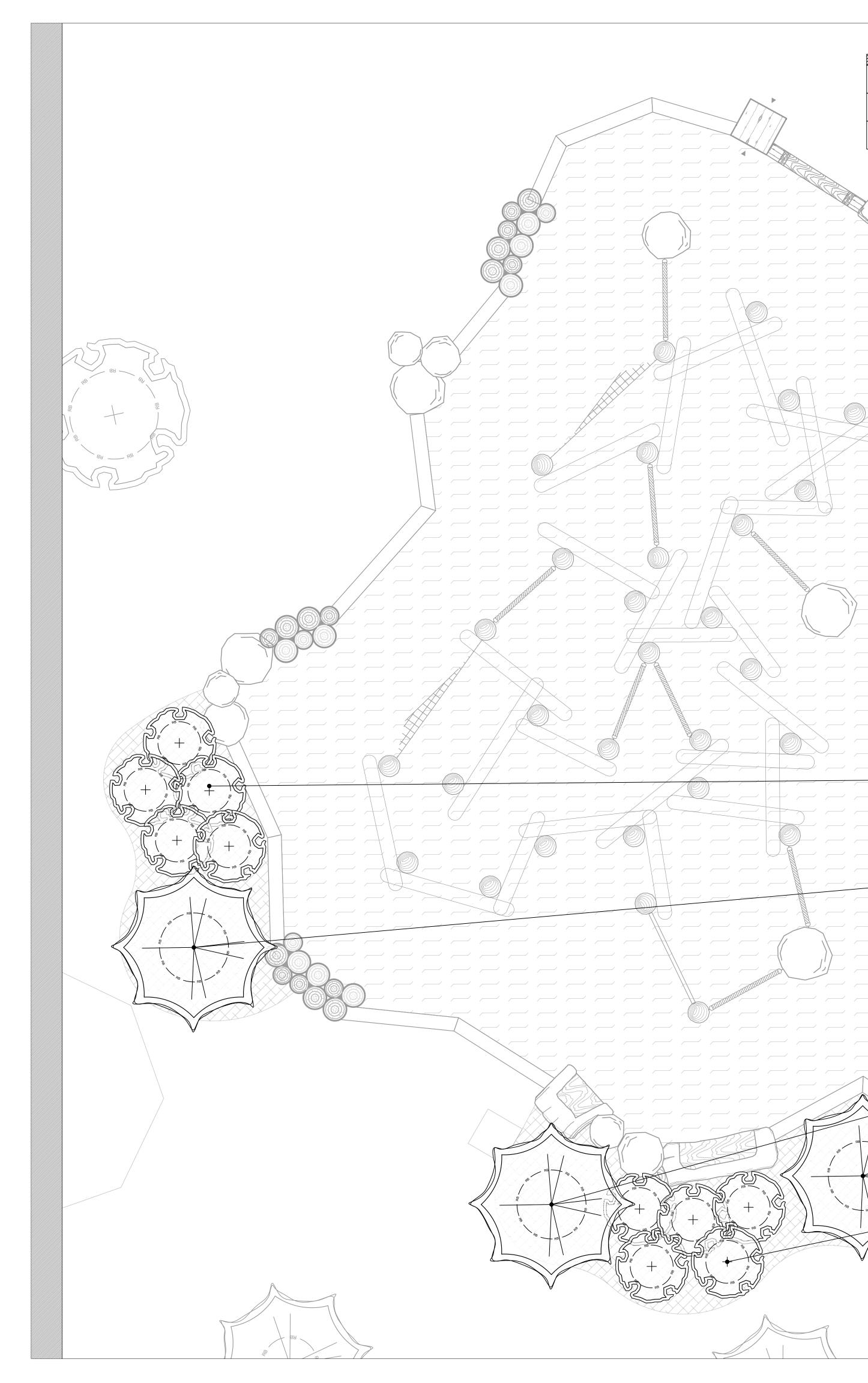


NOTE: CONTRACTOR MAY REQUEST AUTOCAD DWG FORMAT OF THIS LAYOUT TO AID IN ADDITIONAL MEASUREMENTS OR TO UTILIZE A SURVEYOR TO LAY THE SHAPE AND COMPONENTS OUT.

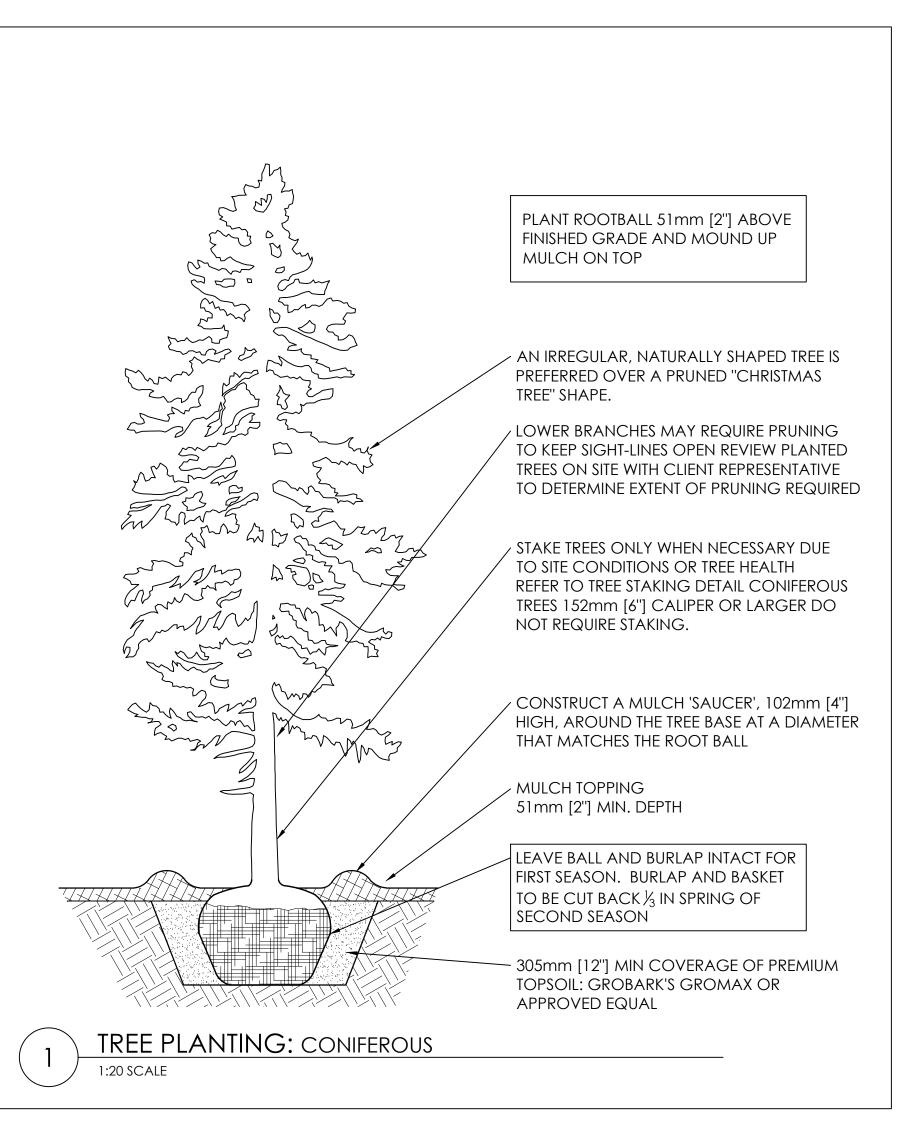


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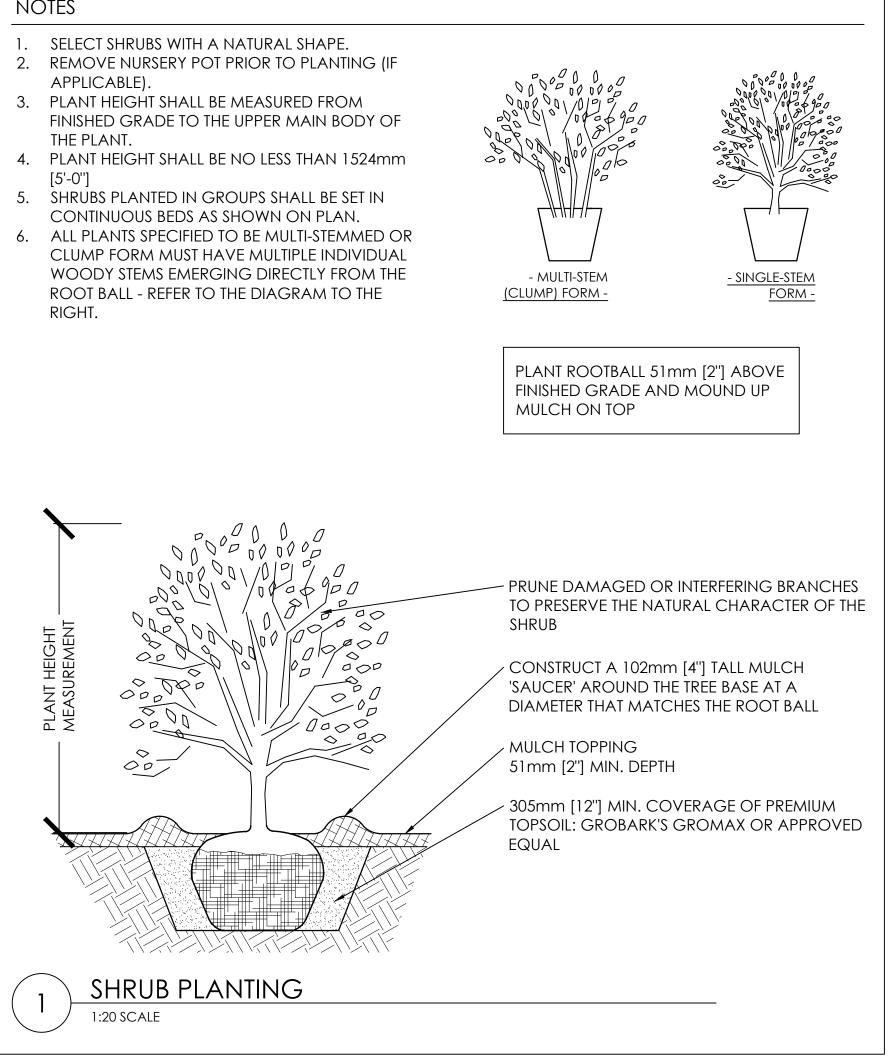




G	QTY KEY	SIZE	BOTANICAL NAME	COMMON NAME	NOTES	hiononstock
	3 AG	3 m HT.	ABIES GRANDIS	GRAND FIR		bienenstock natural playgrounds
	5 AA	2 m HT.	AMELACHIER ALNIFOLIA	SASKATOON	MULTI-STEM SHRUB	
	5 CS	2 m HT.	CORNUS STOLONIFERA	RED-TWIG DOGWOOD	MULTI-STEM SHRUB	
						NOTE TO USER: DO NOT SCALE
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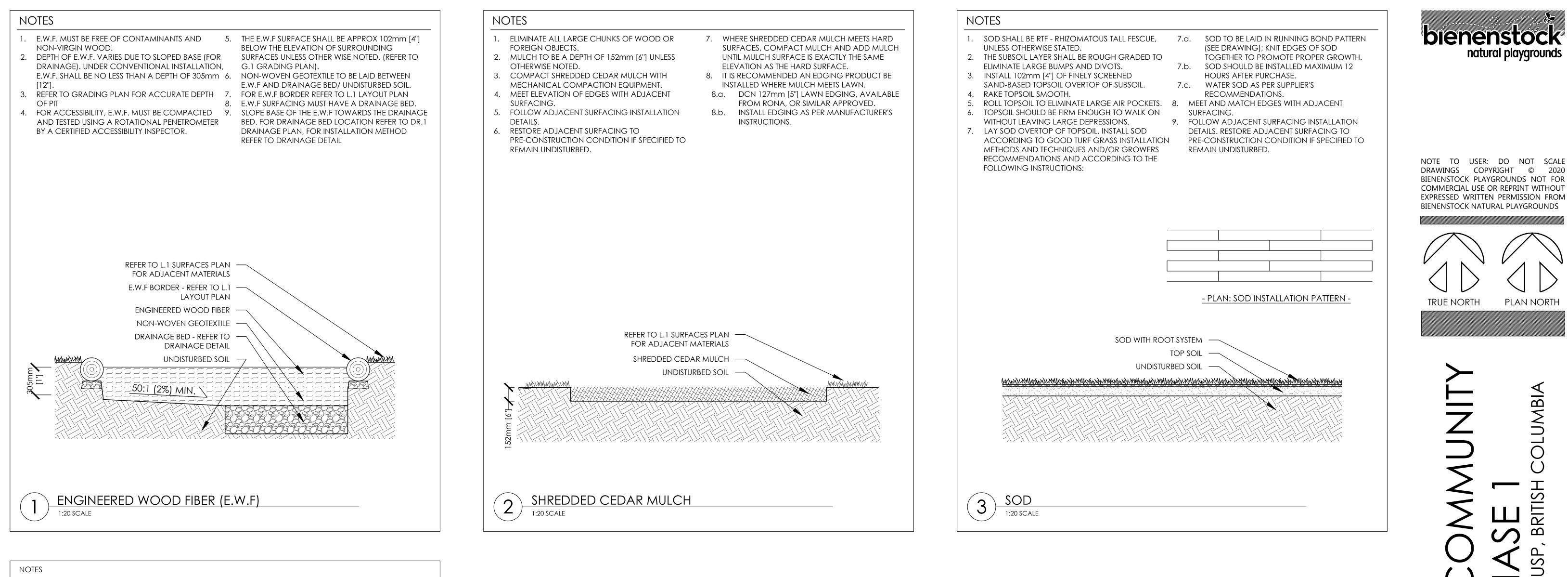


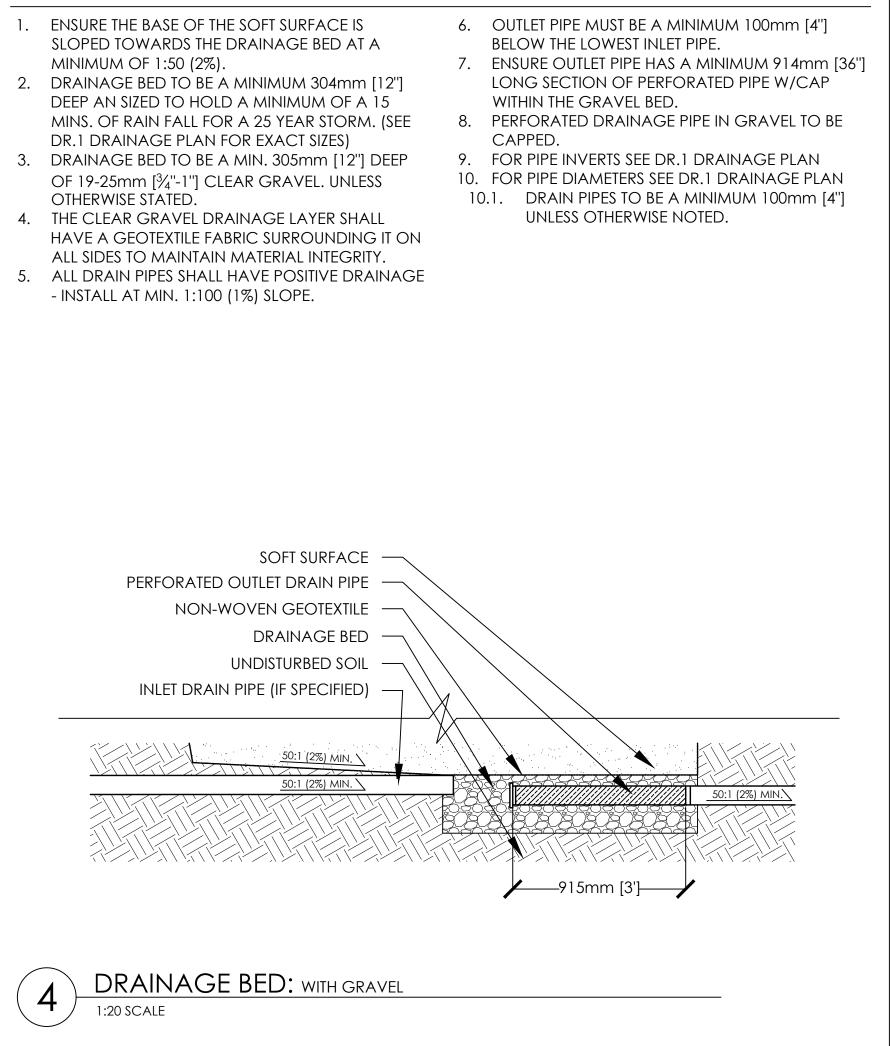




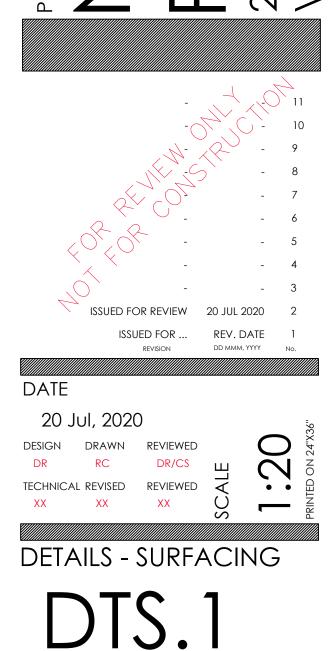
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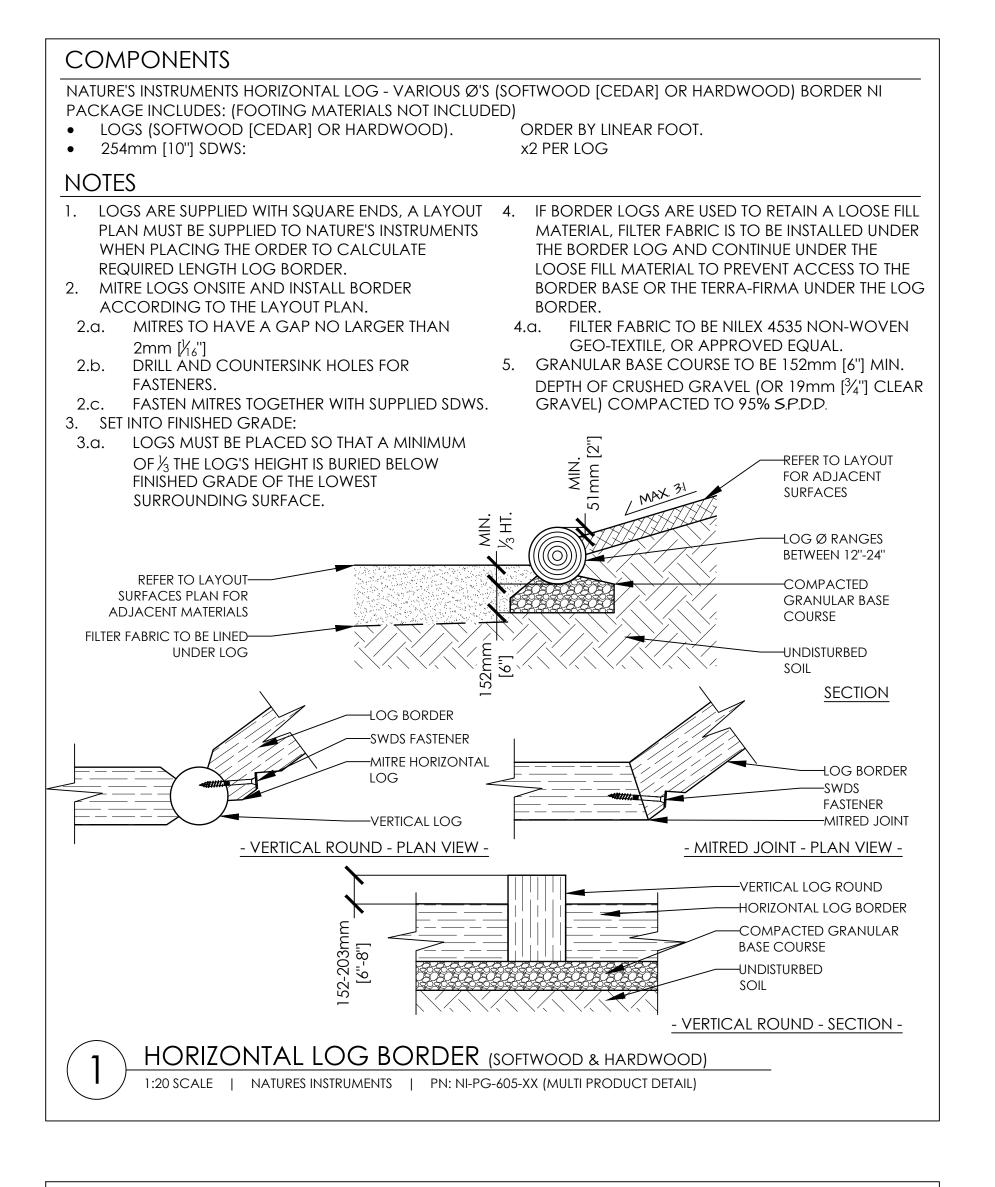




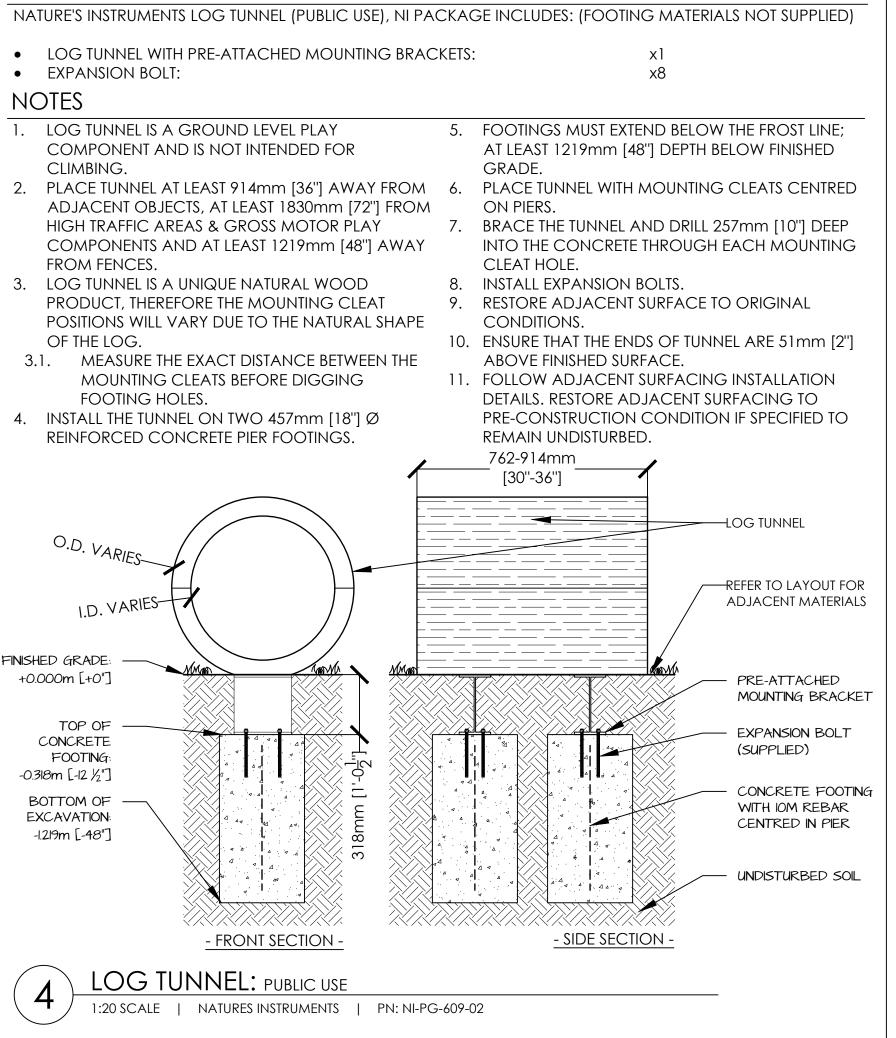
# KUSP COMMI RK - PHASE 1 AVE. NW, NAKUSP, BRITSH C

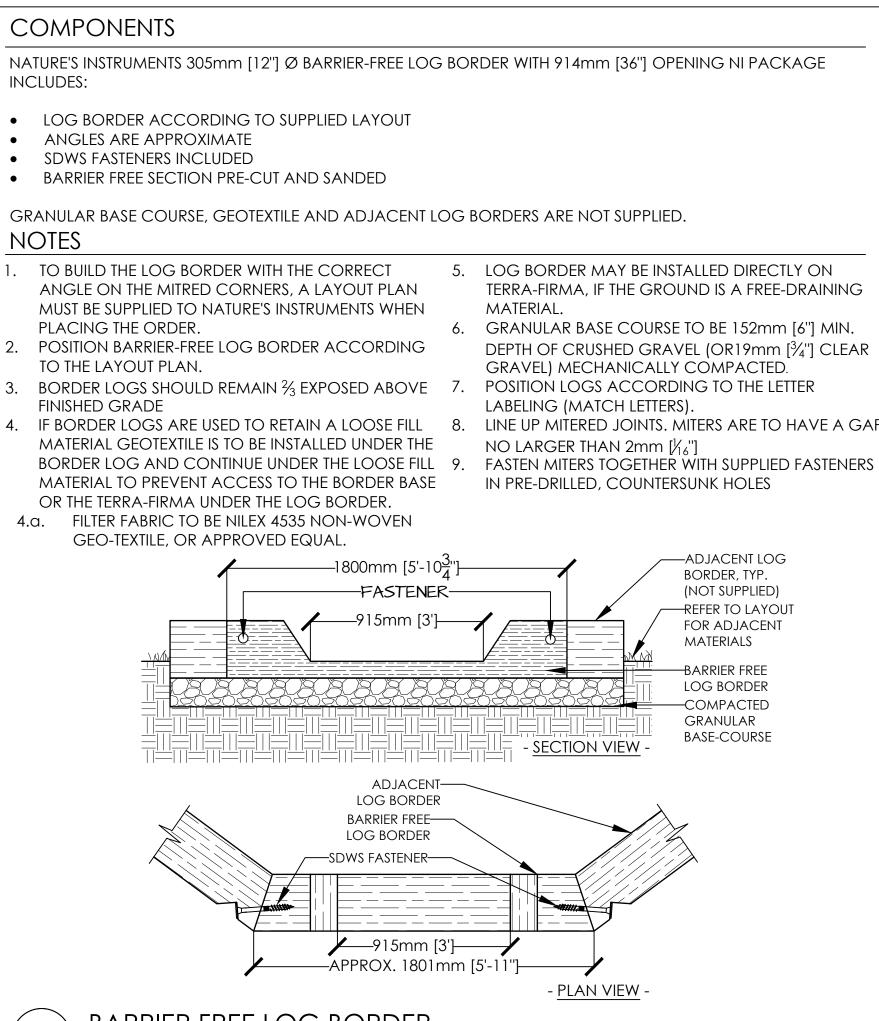


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# COMPONENTS





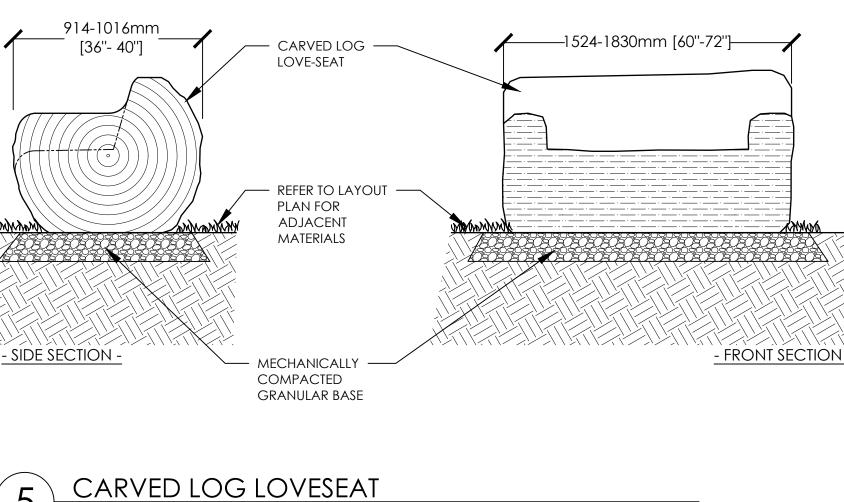
BARRIER FREE LOG BORDER (914mm [36"] OPENING) 1:20 SCALE | NATURES INSTRUMENTS | PN: NI-PG-605-05

# COMPONENTS

	TURE'S INSTRUMENTS CARVED LOG LOVESEAT NI PACKAGE INCLUDES: DOTING MATERIALS NOT SUPPLIED)	
•	FULLY ASSEMBLED CARVED HARDWOOD LOG LOVESEAT	xl

# NOTES

- 1. PLACEMENT OF LOVE-SEAT TO ALLOW FOR CIRCULATION; IT IS RECOMMENDED THAT AT LEAST 914mm [36"] CLEAR SPACE BE ALLOCATED AROUND ALL SIDES OF THE LOVE-SEAT. 1219mm [48"] CLEAR SPACE IS PREFERRED.
- 2. GRANULAR BASE COURSE TO BE 152mm [6"] MIN. DEPTH OF CRUSHED GRAVEL (OR 19mm [3/4"] CLEAR GRAVEL) MECHANICALLY COMPACTED.
- ENSURE GRANULAR BASE IS LEVEL AND PLACE COUCH.
- 4. FOLLOW ADJACENT SURFACING INSTALLATION DETAILS. RESTORE ADJACENT SURFACING TO PRE-CONSTRUCTION CONDITION IF SPECIFIED TO REMAIN UNDISTURBED.

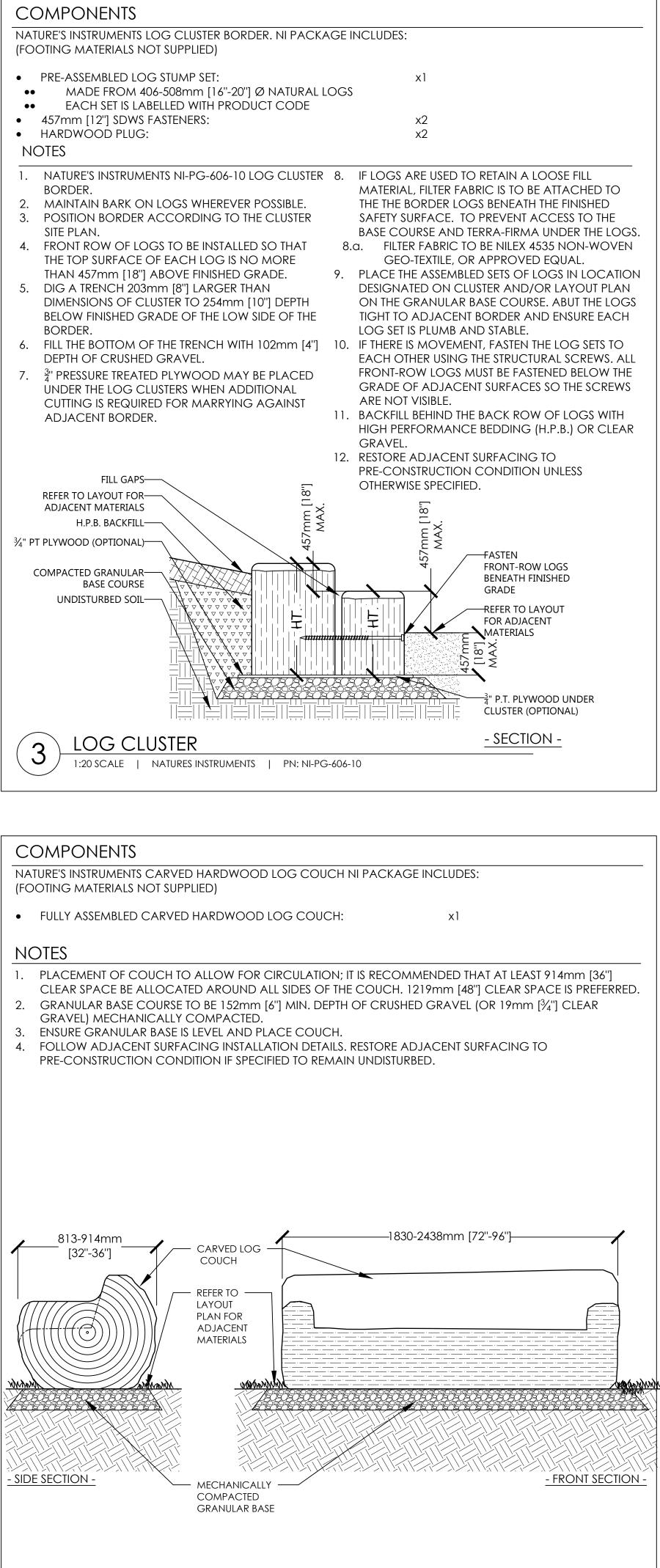


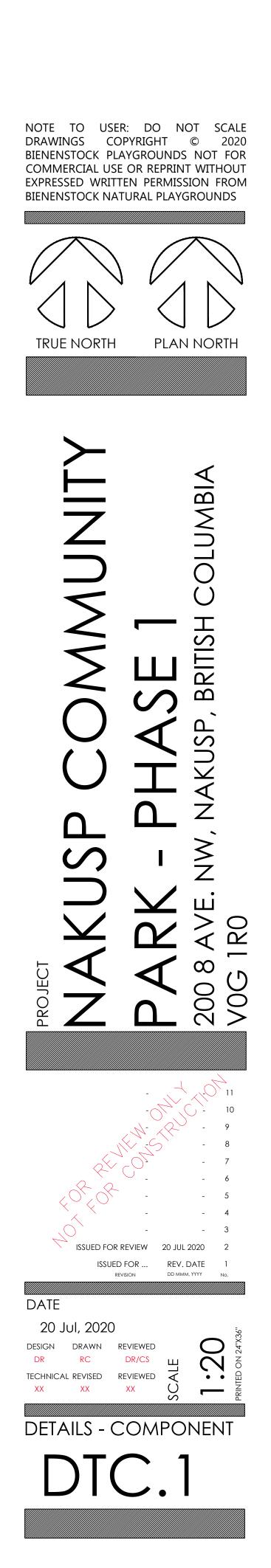
1:20 SCALE | NATURES INSTRUMENTS | PN: NI-PG-704-02

- ••
- ••
- BORDER
- SITE PLAN.
- BORDER.
- ADJACENT BORDER.

FILL GAPS
ADJACENT MATERIALS H.P.B. BACKFILL
34" PT PLYWOOD (OPTIONAL)
COMPACTED GRANULAR BASE COURSE
UNDISTURBED SOIL $\longrightarrow$
<u>    </u> 

6

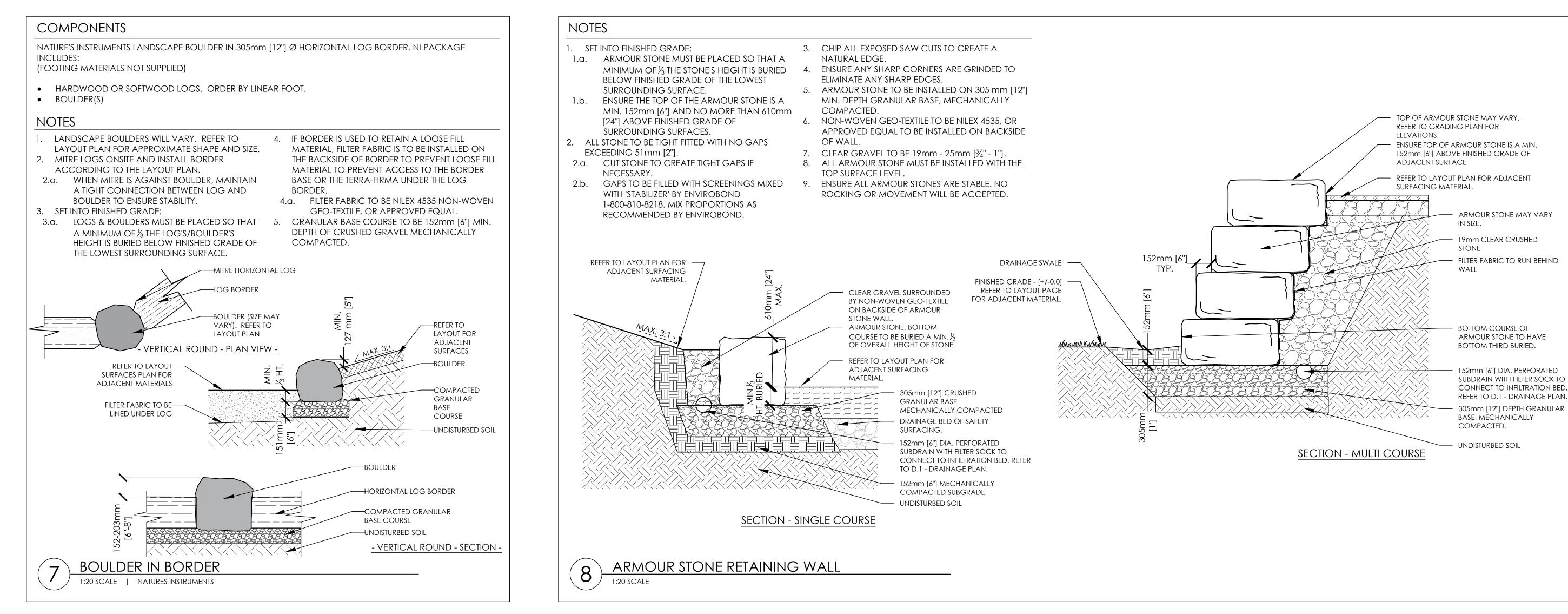




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CARVED LOG COUCH



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# COMPONENTS

NATURE'S INSTRUMENTS CUSTOM BALANCE CUMBER INCLUDES: (FOOTING MATERIALS NOT SUPPLIED)

NATURE'S INSTRUMENTS CUSTOM BALANCE CLIMBER INCLUDES: (F	OOTING M
<ul> <li>7 TON SINGLE BOULDER CLIMBER:</li> <li>12" Ø WACKY POST - HARDWOOD:</li> </ul>	x3 x29
<ul> <li>LOG BEAM (VARIOUS SIZES)</li> </ul>	
•• NI-PG-8002-01 - 8' IN LENGTH:	x6
•• NI-PG-8002-02 - 10' IN LENGTH:	x17
•• NI-PG-8002-03 - 12' IN LENGTH:	x3
<ul> <li>NI-PG-8001 - SHIP-ROPE (VARIOUS SIZES)</li> <li>CONTRACTOR TO CONFIRM LENGTH</li> </ul>	x8
<ul> <li>PULL-UP BAR</li> <li>CONTRACTOR TO CONFIRM LENGTH</li> </ul>	xl
• NI-PG-8003-02 - NET CLIMBER 'B':	x2

# INSTALLATION NOTES

1.	TRIANGULATE ALL THE WACKY POSTS AND BOULDER LOCATIONS.		
1.a.	SEE PAGE L.3 FRO TRIANGULATIONS.		
2.	START WITH THE FIXED SIZE COMPONENTS TO ENSURE YOU HAVE THE CORRECT SPACING REQUIRED.		
2.a.	NETS - MUST HAVE 3411mm [11"-2 $\frac{1}{4}$ "] DISTANCE BETWEEN THE POSTS.		
2.b.	PULL UP BAR - MUST HAVE 1905mm [75"] DISTANCE BETWEEN THE POSTS.		
3.	BOULDER - DIA. MAY VARY BUT IT IS RECOMMENDED THAT THE BOULDER BE A MINIMUM OF 7 TONS		
	AND HAVE A DIA. NO LESS THAN 914mm [36"]. THE HEIGHT MUST BE NO LESS THAN 914mm [36"] AND		
	NO GREATER THAN 1829mm [72"] ABOVE FINISHED GRADE.		
4.	INSTALL REMAINING WACKY POSTS ACCORDING TO THE LAYOUT AND AS PER MANUFACTURER'S		
	DETAILS PROVIDED.		
5.	ONCE CONCRETE IS CURED, BEAMS AND ROPES CAN BE INSTALLED.		
5.a.	CONTRACTOR MAY PURCHASE ROPES AND BEAMS THROUGH NATURE'S INSTRUMENTS.		
	CONTRACTOR WILL HAVE TO SUPPLY EXACT LENGTHS REQUIRED FOR EACH COMPONENT.		
5.b.	CONTRACTOR MAY SUBSTITUTE ALTERNATES FOR THESE COMPONENTS BUT MUST HAVE THEM		
	APPROVED BY BIENENSTOCK NATURAL PLAYGROUNDS.		
6.	WHEN ATTACHING SHIP-ROPE, ENSURE ROPE IS 152mm [6"] TO 457mm [18"] OFF GROUND AND		
	ENSURE PITCH FOLLOWS CSA SAFETY STANDARDS.		
7.	START PLACING BEAMS TO WACKY POSTS FOLLOWING CSA STANDARDS.		
7.1.	BEAM CAN BE NO GREATER THAT 1016mm [40"] OFF OF FINISHED GRADE OF SAFETY SURFACE.		
7.2.	IF MULTIPLE BEAMS ARE TO BE ATTACHED TO ONE WACKY POST, ENSURE BEAM IS A MIN. 305mm		
	[12"] FROM ANOTHER BEAM ATTACHMENT.		
7.3.	ENSURE BEAMS HAVE NO GREATER THAN A 15° PITCH.		
7 4			

ENSURE ENDS OF BEAM EXTEND A MIN. 305mm [12"] BEYOND CONNECTION POINTS 7.4.

# COMPONENTS

NATURE'S INSTRUMENTS SINGLE BOULDER CLIMBER INCLUDES:

GRANITE BOULDER: •• MANUFACTURER'S SIGNAGE: ••

GRAVEL, CONCRETE, REBAR & PROTECTIVE SAFETY SURFACING ARE NOT SUPPLIED.

# NOTES

- 1. INSTALLED HEIGHT OF BOULDER TO BE 915mm
- [36"] TO 1524mm [60"] ABOVE FINISHED GRADE. 2. BOULDER MUST BE PLACED AT LEAST 1830mm [72"] AWAY FROM ADJACENT OBJECTS AND MUST HAVE A PROTECTIVE SAFETY SURFACE SUITABLE FOR A 2438mm [96"] FALL HEIGHT,
- REFER TO CONSULTANTS RECOMMENDATIONS. 3. A PLAYGROUND MANUFACTURER'S SIGN IS REQUIRE. RECOMMENDED THAT CONTRACTOR GETS APPROVAL ON BOULDER FROM THE MANUFACTURER AS IT WILL FALL UNDER THE MANUFACTURE'S INSURANCE.

# INSTALLATION

- 4. EXCAVATE MATERIAL TO RECOMMENDED DEPTH TO ACCOUNT FOR THE 305mm [12"] SAFETY SURFACING AND 203mm [8"] CONCRETE PAD.
- 5. ONCE EXCAVATION IS COMPLETE, LEVEL AND MECHANICALLY COMPACT SUBGRADE.
- 6. PLACE BOULDER ON MECHANICALLY COMPACTED SUBGRADE IN ACCORDANCE WITH LAYOUT PLAN PROVIDED.
- 7. ENSURE BOULDER PLACEMENT ALLOWS FOR INTENDED PLAY USE.

FOOTING

8. CONCRETE PAD TO BE 203 mm [8"] THICK AND MUST EXTEND AT LEAST 610 mm [24"] BEYOND ALL SIDES OF THE BOULDER.

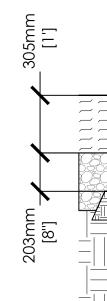
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- 9. ALL STEEL REINFORCEMENT MUST HAVE AT LEAST 76mm [3"] CONCRETE COVERAGE.
- 9.a. PLACE BOULDER ON MECHANICALLY COMPACTED SOIL 10.  $PLACE \frac{1}{2}$ " DIA. REBAR EVERY 305mm [12"]
- AROUND BOULDER CIRCUMFERENCE AND SPACE EVENLY.
- 11.  $\frac{1}{2}$ " DIA. REBAR TO BE DRILLED 6" INTO BOULDER AS PER LAYOUT AND TIE TOGETHER. 12. ENSURE TOP OF CONCRETE TO BE MIN. 305mm
- [12"] BELOW FINISHED GRADE.
- 13. ALLOW FOR CONCRETE TO CURE IN ACCORDANCE TO MANUFACTURE'S SPECIFICATIONS.

## SAFETY SURFACING

- 14. ONCE CONCRETE HAS CURED, SAFETY
- SURFACING CAN THEN BE INSTALLED. 15. REFER TO LAYOUT PAGE FOR ADJACENT SURFACING MATERIAL.



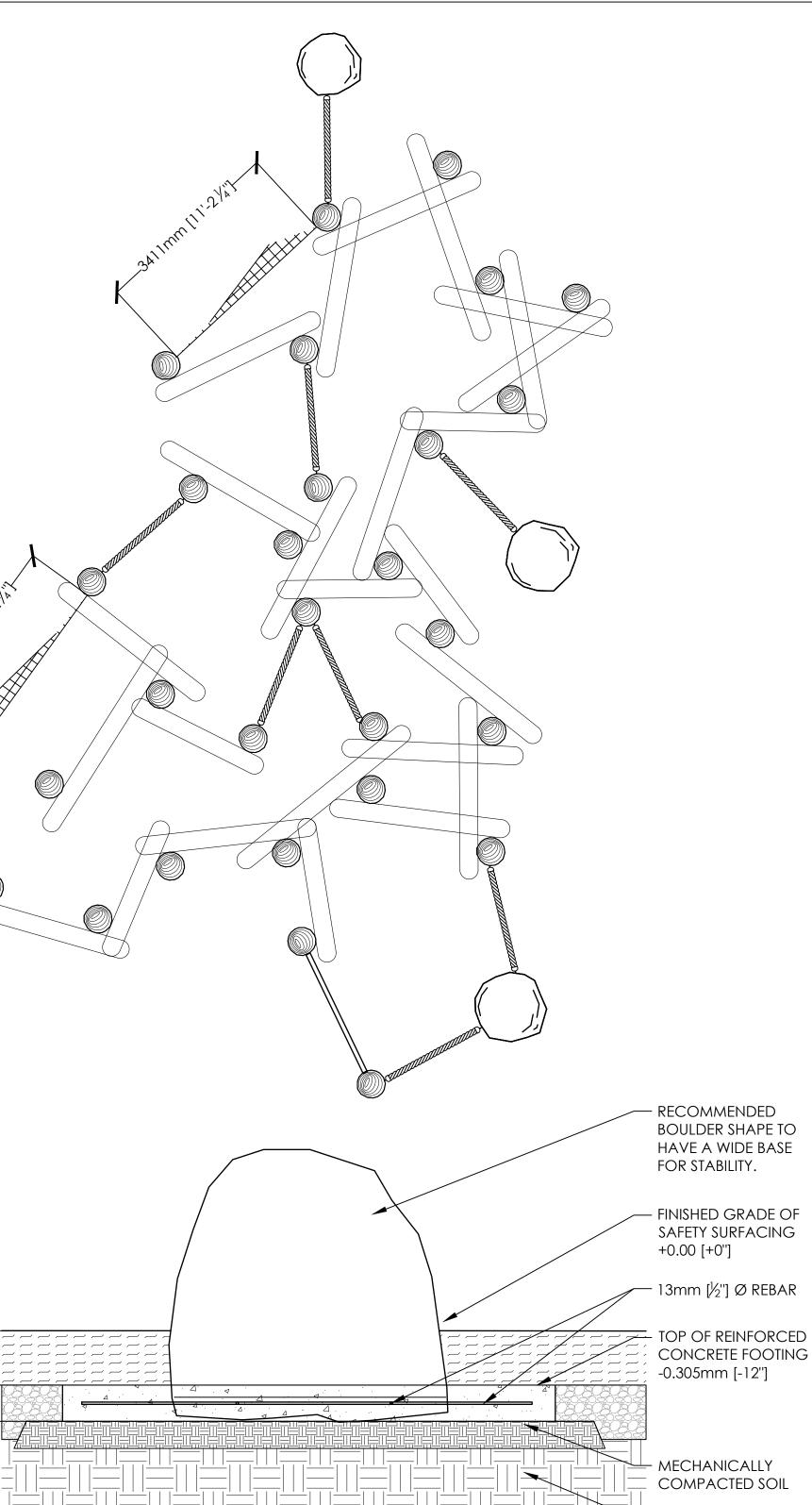
APPROX 610mm [24'']

SINGLE BOULDER CLIMBER 1:20 SCALE | NATURES INSTRUMENTS | PN: NI-PG-902-01



**BALANCE CLIMBER** 

1:20 SCALE | NATURES INSTRUMENTS | CUSTOM



# COMPONENTS

ANCHORSEAL WAX FLEXTRA SILICONE (IF NECESSARY)

# NOTES

- 1. INTENDED USE: WACKY POST IS TO BE USED WITH FEET PLANTED FIRMLY ON THE GROUND.
- 2. WACKY POSTS TO BE INSTALLED AS A SET OF 4 POSTS IN SQUARE PATTERN MAX 1219mm [48"] O.C. SPACING.
- 2.a. ADDITIONAL POSTS AND TREES CAN BE SPACED FROM 1219mm - 1830mm [48"-72"] O.C.
- 2.b. ENSURE ADDITIONAL POST ARE INSTALLED IN A RANDOM PATTERN OF VARYING HEIGHTS AND ANGLES.
- 3. WACKY POSTS MUST BE PLACED AT LEAST 1219mm [48"] AWAY FROM ADJACENT OBSTACLES, OTHER COMPONENTS AND PATHWAYS.
- 4. FOOTING HOLE TO BE AT LEAST 1219mm [48"] BELOW FINISHED GRADE, AND MUST EXTEND TO THE FROST LINE FOR YOUR REGION.
- 5. THE DIAMETER OF THE FOOTING HOLE MUST BE AT LEAST 203mm [8"] LARGER THAN THE DIAMETER OF THE WACKY POST.
- 6. PLACE WACKY POST IN THE CENTRE OF THE FOOTING HOLE AND BRACE AT THE DESIRED HEIGHT.
- 6.a. INSTALLED HEIGHT OF WACKY POST VARIES: POSTS TO BE NO SHORTER THAN 1524mm [60"] AND NO TALLER THAN 1830mm [72"] ABOVE FINISHED
- SURFACE. 7. FILL BOTTOM OF HOLE WITH A 152mm [6"] LIFT OF CLEAR GRAVEL TO HELP WITH
- PLACING POST. 8. FILL FOOTING HOLE WITH CONCRETE SO THAT WACKY POST HAS AT LEAST 76mm [3"] OF CONCRETE ON.

# COMPONENTS

NATURE'S INSTRUMENTS LOG BEAM (VARIOUS SIZES) INCLUDES:

 BEAM (LENGTH AS SPECIFIED IN LAYOUT): • ATTACHMENT HARDWARE: •• D-SHACKLE, EYEBOLT, NUTS AND WASHERS

# BEAM FASTENING

- ALL BEAM ATTACHMENTS ARE TO FOLLOW CSA SAFETY STANDARDS.
- [40"] OFF OF GROUND.
- 1.b. ENSURE BEAM IS A MIN. 305mm [12"] AWAY FROM ANOTHER BEAM ATTACHMENT. 1.c. ENSURE BEAMS HAVE NO GREATER THAN A 15° PITCH.
- 1.d. ENSURE ENDS OF BEAM EXTENT A MIN. 305mm [12"] BEYOND CONNECTION POINTS.
- 2. ONLY ATTACH LOG BEAM IN LOCATIONS WHERE
- POST IS AT LEAST 203mm [8"] DIAMETER. 3. SECURE LOG BEAM IN POSITION AND MARK OUT
- ATTACHMENT LOCATIONS ON LOG BEAM AND CLIMBER LOG.
- 4. PRE-DRILL HOLES FOR ALUMINIUM SPACERS IN LOG BFAM.
- 5. INSERT ALUMINIUM SPACERS INTO LOG BEAM AND
- ON CLIMBER LOG. 6. PRE-DRILL HOLES FOR ALUMINIUM SPACERS IN

NUT & WASHER

WOOD PLUG



UNDISTURBED SOIL



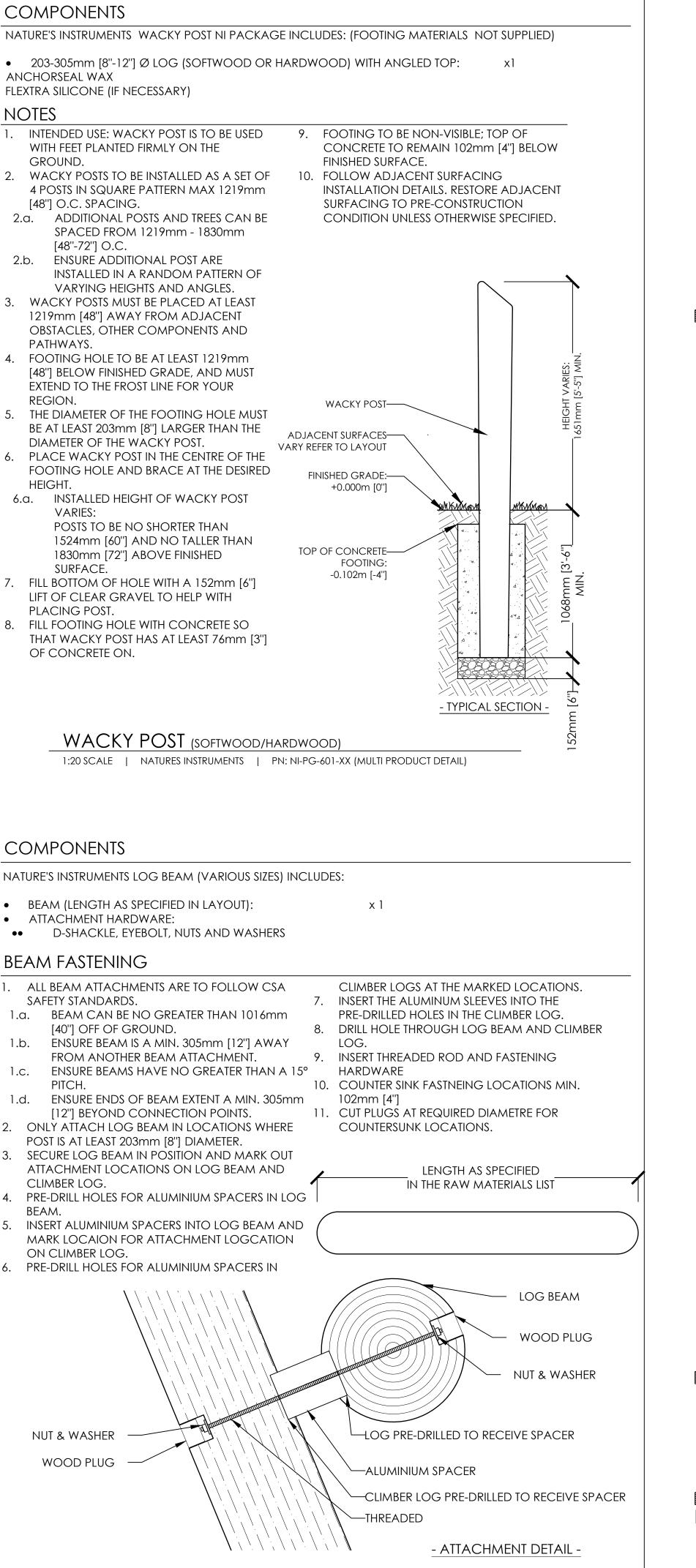


REBAR TO BE SET MINIMUM 152mm [6"] INTO BOULDER

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# COMPONENTS

NATURE'S INSTRUMENTS SHIP-ROPE (VARIOUS SIZES) INCLUDES:

- SHIP ROPE (CONTRACTOR TO SPECIFY DESIRED LENGTH):
- ATTACHMENT HARDWARE: • D-SHACKLE, EYEBOLT, NUTS AND WASHERS
- CONCRETE ANCHORING EPOXY (IF REQUIRED)

# SHIP-ROPE FASTENING

- LOCATE SHIP-ROPE ATTACHMENTS IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:
- 1.a. ONLY ATTACH IN LOCATIONS WHERE POST IS AT LEAST 203mm [8"] Ø.
- 1.b. SHIP-ROPE ATTACHMENTS TO BE AT 90° TO THE ANGLE OF THE POST. 1.c. THE SHIP-ROPE ATTACHMENTS MUST BE
- LOCATED ON THE UNDERSIDE OF ANGLED POSTS SO THAT PINCH POINTS ARE AVOIDED WHEN THE ROPE SWINGS DOWNWARDS.
- 2. HOLD SHIP ROPES IN POSITION AND MARK OUT ATTACHMENT LOCATIONS ON CLIMBERS. ENSURE SHIP ROPE ARE NOT TAUT - ALLOW A SLIGHT SWINGING MOTION.
- 3. IF SHIP-ROPE IS ATTACHED TO A POST, DRILL A 79mm [3<sup>1</sup>/<sub>8</sub>"] Ø HOLE FOR 76mm [3"] ALUMINUM SLEEVE.
- 3.a. ENSURE DEPTH OF HOLE IS 38 mm [1 ½"]. USING THE CENTRE MARK FROM THE FORSTNER BIT. DRILL 16mm [%"] Ø HOLE ALL THE WAY THROUGH THE LOG.
- 4.a. ENSURE THE 16mm [5/1] HOLE COMES OUT ON THE BACKSIDE OF THE LOG.

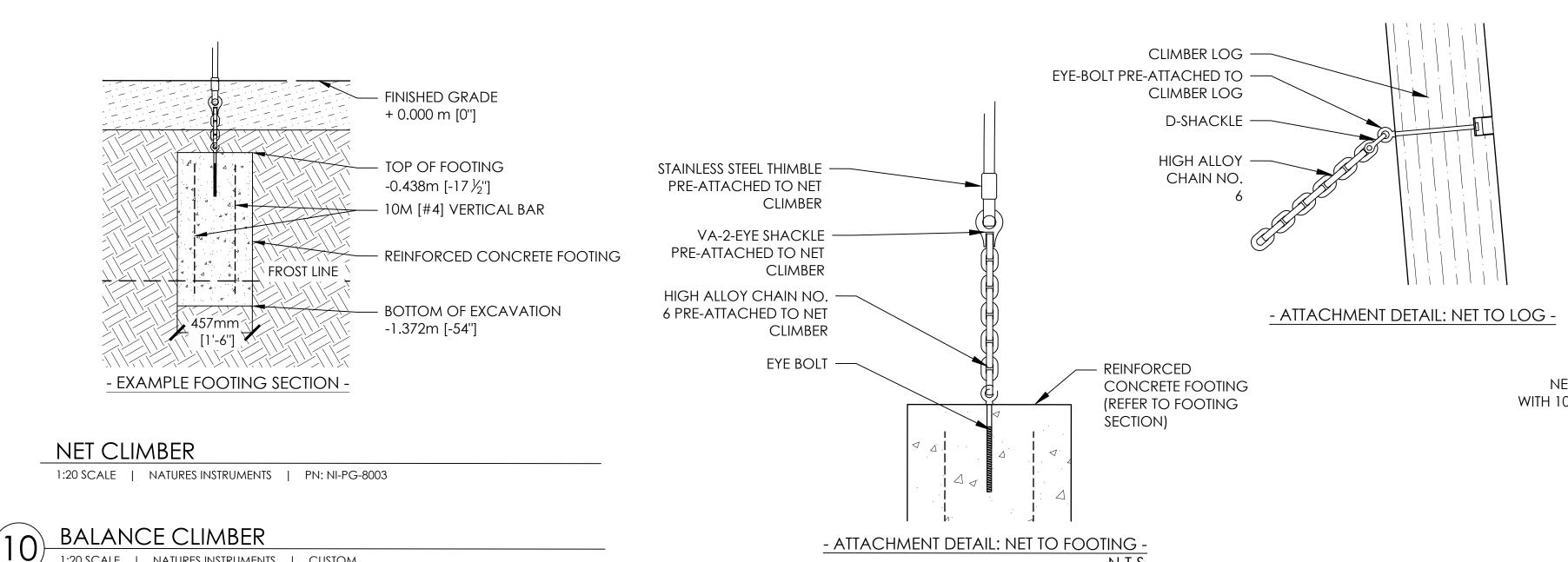
5. USE A 16mm [5/1] DOWEL TO PLUG HOLE ON BACKSIDE OF LOG.

x 1

- DRILL A 54mm  $[2 \]$  Ø HOLE IN THE CENTRE OF THE 16mm [5/3"] DOWEL.
- 6.a. ENSURE THIS HOLE IS DEEP ENOUGH TO ACCEPT NUT, WASHER AND 25mm [1"] PLUG. 7. INSERT THE ALUMINUM SLEEVES INTO THE
- PRE-DRILLED HOLES.
- 8. SLIDE HEAT SHRINK OVER THE END OF THE SHIP-ROPE.
- 9. PRE-ATTACH EYE-BOLT TO SHIP ROPE THEN INSERT THROUGH EACH SLEEVE AND PRE-DRILLED HOLE IN THE POST.
- 10. THREAD A NUT & WASHER ONTO THE END OF EACH EYEBOLT
- 11. FASTEN SHIP-ROPE TO THE INSTALLED EYE-BOLTS. 12. HEAT SHRINK WRAP SEAM BETWEEN ALUMINUM SLEEVE AND SHIP-ROPE.

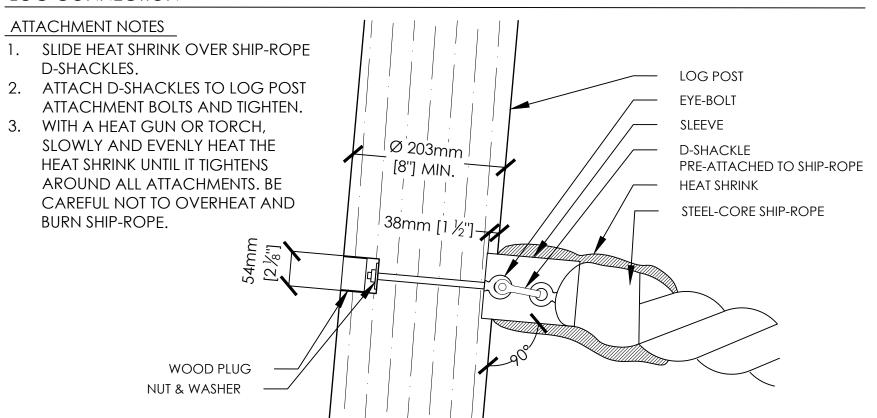
THE BACKSIDE OF THE LOG.	
	ATTACHMENT NOTES
LENGTH (SHACKLE TO SHACKLE) AS SPECIFIED LAYOUT	1. PRE-DRILL $\frac{1}{6}$ " Ø HOLE INTO BOULDE ALLOW FOR A $\frac{1}{2}$ " Ø THREADED EYE- EPOXY.
*	<ol> <li>ENSURE THIS HOLE IS A MIN. 10'</li> <li>RECOMMENDED TO DRILL THE A DOWNWARD ANGLE (10°).</li> <li>BLOW OUT HOLE TO ENSURE NO CONTAMINATION WILL TEAR O ENSURE GOOD ADHESION.</li> <li>SLIDE HEAT SHRINK OVER SHIP-ROPI D-SHACKLES.</li> <li>ATTACH D-SHACKLES TO BOUL ATTACHMENT BOLTS AND TIGH</li> <li>HEAT SHRINK WRAP MAY NEED LAYERED IN ORDER TO MATCH</li> </ol>
SHIP-ROPE: various sizes	THE WIDTH OF SHIP-ROPE.
1:20 SCALE   NATURES INSTRUMENTS   PN: NI-PG-8001-XX (MULTI-PRODUCT DETAIL)	<ol> <li>WITH A HEAT GUN, SLOWLY AND EV HEAT THE HEAT SHRINK UNTIL IT TIGH</li> </ol>
COMPONENTS	COMPONENTS
NATURE'S INSTRUMENT'S NI-PG-8003 CLIMBING NET GAME. NI PACKAGE INCLUDES:	NET CLIMBER FASTENING:
(FOOTING MATERIALS NOT SUPPLIED	NET CLIMBER PASTERING.
	1. SLIDE HEAT SHRINK WRAP
<ul> <li>STEEL-CORE NET CLIMBER WITH PRE-ATTACHED D-SHACKLES: x 1</li> <li>INCLUDES 4-8 PIECES OF HEAT SHRINK WRAP AND 4-8 TURNBUCKLES</li> <li>EACH ATTACHMENT POINT WILL BE LABELLED</li> </ul>	ATTACHMENT POINTS. 2. ATTACH THE D-SHACKLES PRE-INSTALLED & LABELED
• 13mm [ <sup>1</sup> / <sub>2</sub> "] x 203mm [8"] GALVANIZED EYE-BOLT: x 4	CLIMBER.
REDHEAD A7 ACRYLIC EPOXY	<ol> <li>ATTACH SUPPLIED TURNBU AND ENSURE FULLY OPEN</li> </ol>
FOOTING NOTES	4. STRETCH OUT THE ATTACH
	NET IS TAUT IN THE ORIENTA DRAWINGS.
<ol> <li>DEPTH OF CONCRETE FOOTING MUST EXTEND TO THE FROST LINE FOR YOUR REGION; 914-1219mm [36"-48"] BELOW FINISHED GRADE.</li> </ol>	5. MARK THE ATTACHMENT P
2. CONCRETE TO BE 32 MPa WITH A MAXIMUM SLUMP OF 76mm [3"].	FOOTING AND DRILL A 14r
3. CONCRETE TO BE REINFORCED WITH 2 @ 10M VERT. BARS.	LOCATION.

4. ALL STEEL REINFORCEMENT MUST BE PLACED AT LEAST 51mm [2"] FROM SOIL AND 76mm FROM FORMS.

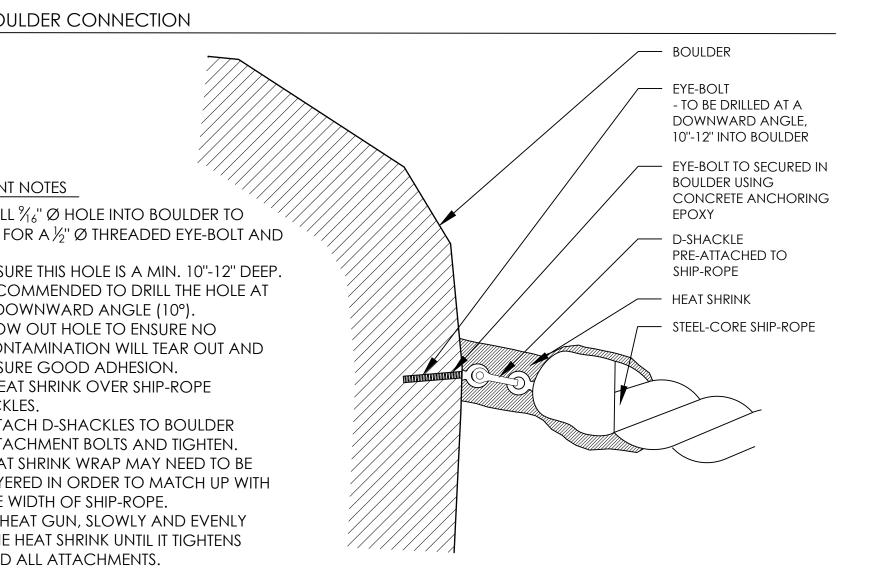


1:20 SCALE | NATURES INSTRUMENTS | CUSTOM

# LOG CONNECTION

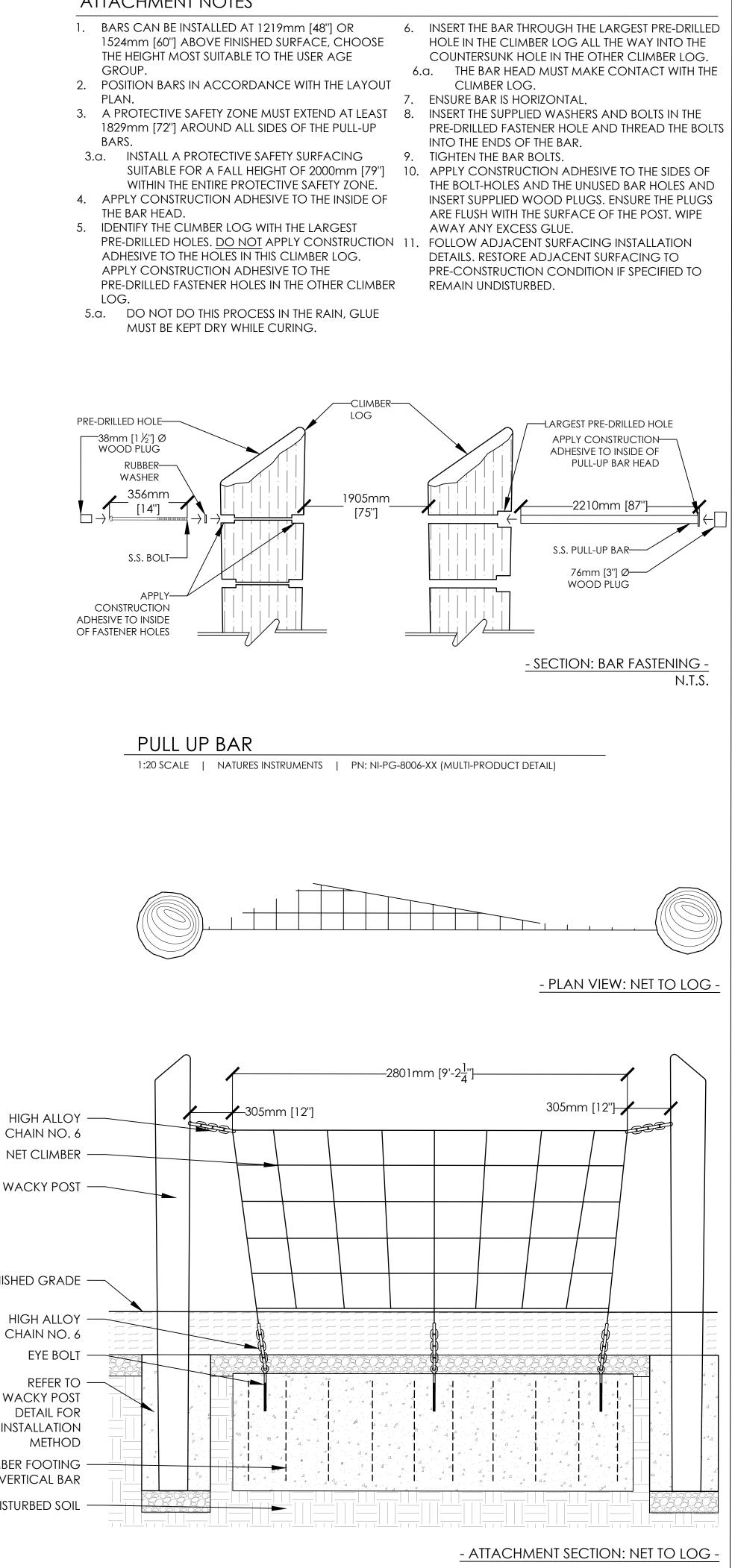


# **BOULDER CONNECTION**



# ATTACHMENT NOTES

- GROUP.
- PLAN.
- BARS
- THE BAR HEAD.
- LOG.



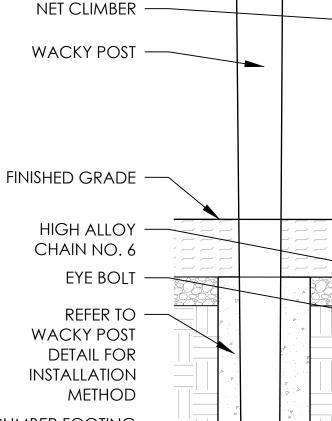
# OMPONENTS

- CLIMBER FASTENING:
- SLIDE HEAT SHRINK WRAP ONTO THE NET AT THE ATTACHMENT POINTS.
- ATTACH THE D-SHACKLES ON THE NET TO THE PRE-INSTALLED & LABELED EYE BOLTS IN THE CLIMBER.
- ATTACH SUPPLIED TURNBUCKLES TO THE D-SHACKLES 9. AFTER THE CLIMBER HAS BEEN FASTENED TO THE AND ENSURE FULLY OPEN THE TURNBUCKLES STRETCH OUT THE ATTACHMENT POINTS UNTIL THE NET IS TAUT IN THE ORIENTATION SHOWN IN THE
- DRAWINGS. MARK THE ATTACHMENT POINTS ON THE CONCRETE
- FOOTING AND DRILL A 14mm [%] Ø HOLE IN EACH 10.a. POSITION HEAT SHRINK TO COVER ALL EXPOSED LOCATION. CLEAN OUT HOLES, FILL WITH EPOXY AND THREAD
- EYE BOLTS INTO PLACE.

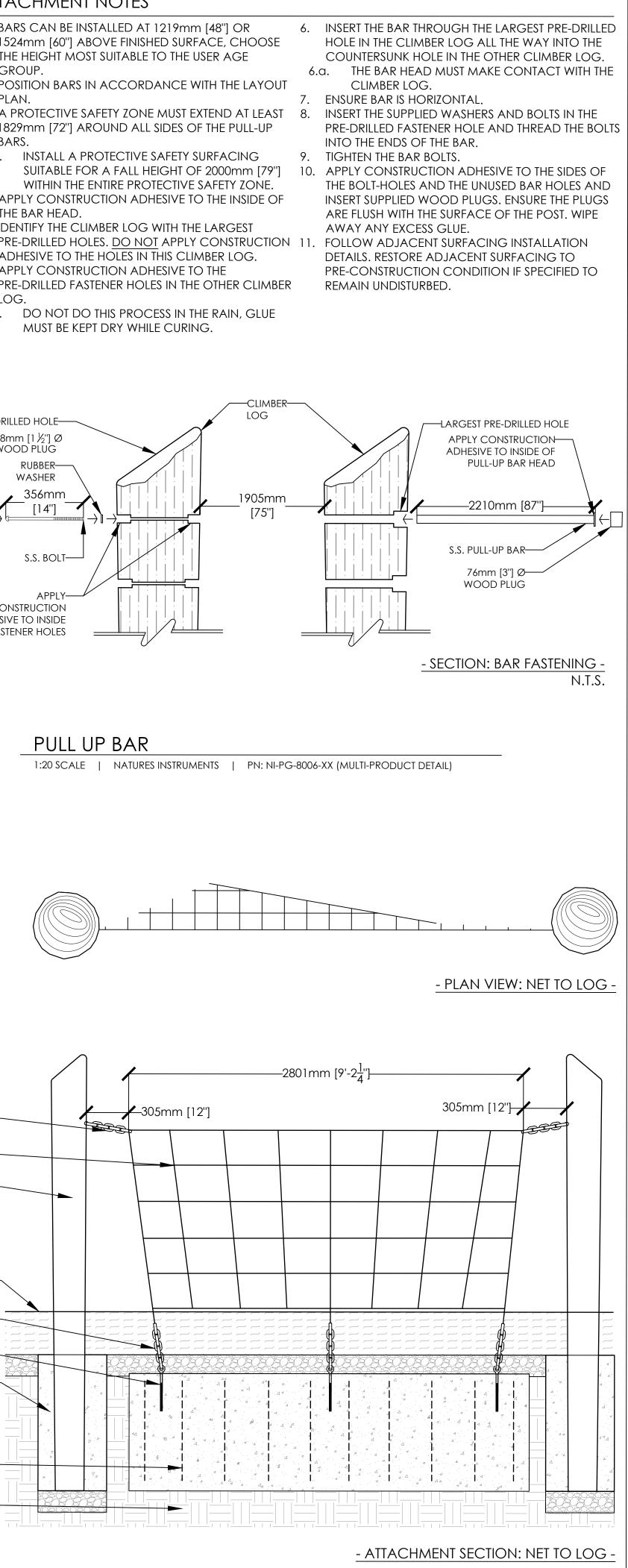
- 7. ONCE EPOXY HAS FULLY CURED, ATTACH THE
- TURNBUCKLES TO THE EYE-BOLTS IN THE FOOTINGS. DO NOT TIGHTEN THE TURNBUCKLE CRANK UNTIL THE 8 CLIMBER IS SECURED TO THE FOOTINGS.

NET CLIMBER TIGHTENING:

- FOOTINGS, TIGHTEN ALL D-SHACKLES AND THEN TIGHTEN TURNBUCKLES UNTIL NET CLIMBER IS TAUT FROM ALL ATTACHMENT POINTS.
- 10. ALL ATTACHMENT POINTS MUST BE COVERED WITH HEAT SHRINK WRAP:
- ATTACHMENT BOLTS AND D-SHACKLES. 10.b. WITH A HEAT GUN, SLOWLY AND EVENLY HEAT THE HEAT SHRINK UNTIL IT TIGHTENS AROUND ALL ATTACHMENTS.



NET CLIMBER FOOTING WITH 10M #4 VERTICAL BAR UNDISTURBED SOIL



- ATTACHMENT DETAIL: NET TO FOOTING -N.T.S.





NOTE TO USER: DO NOT SCALE

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