

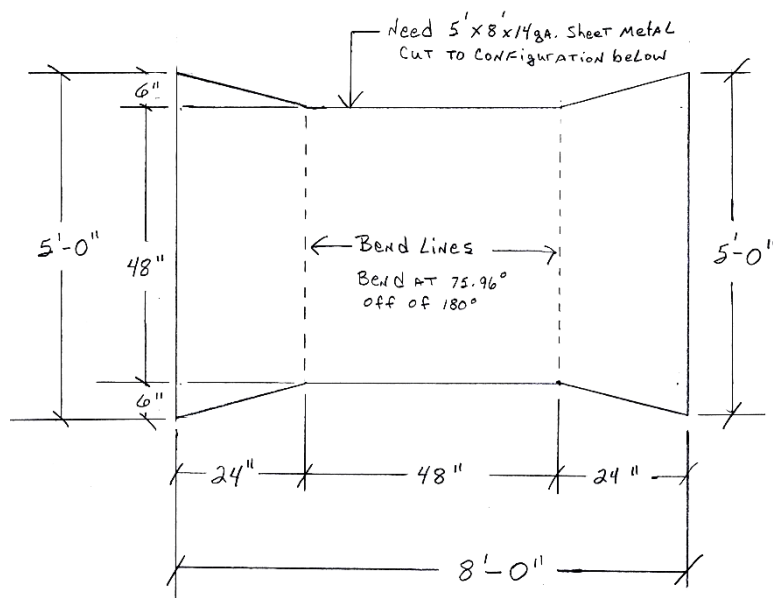
Biochar Kiln Drawings – Oregon Kiln and Ring of Fire Kiln

1. Oregon Kiln – Forestry Size: 5' x 4' x 2'

Oregon Kiln - Bill of Materials for (1) 5'x4'x2' Kiln		
pcs.	Type of Material	Purpose of Material
1	5' x 8' x 14 ga. sheet metal	Kiln body
2	5' x 2' x 14 ga. sheet metal	Kiln sides
4	5/8" dia. Round, 24" long	Handles
1	1/4" x 3 1/2" Flat Bar, 8" long	Corner braces for lift points
4	2" x 2" x 1/4" angle, 5' 6" long	Rim reinforcement
1	1 1/2" pipe coupling, inside threads	Drain hole
1	1 1/2" pipe plug	Drain plug
4	1/2" steel eye hooks and bolts	Lift hooks
Estimated Fabrication Cost – labor and materials (2017 prices)		\$700

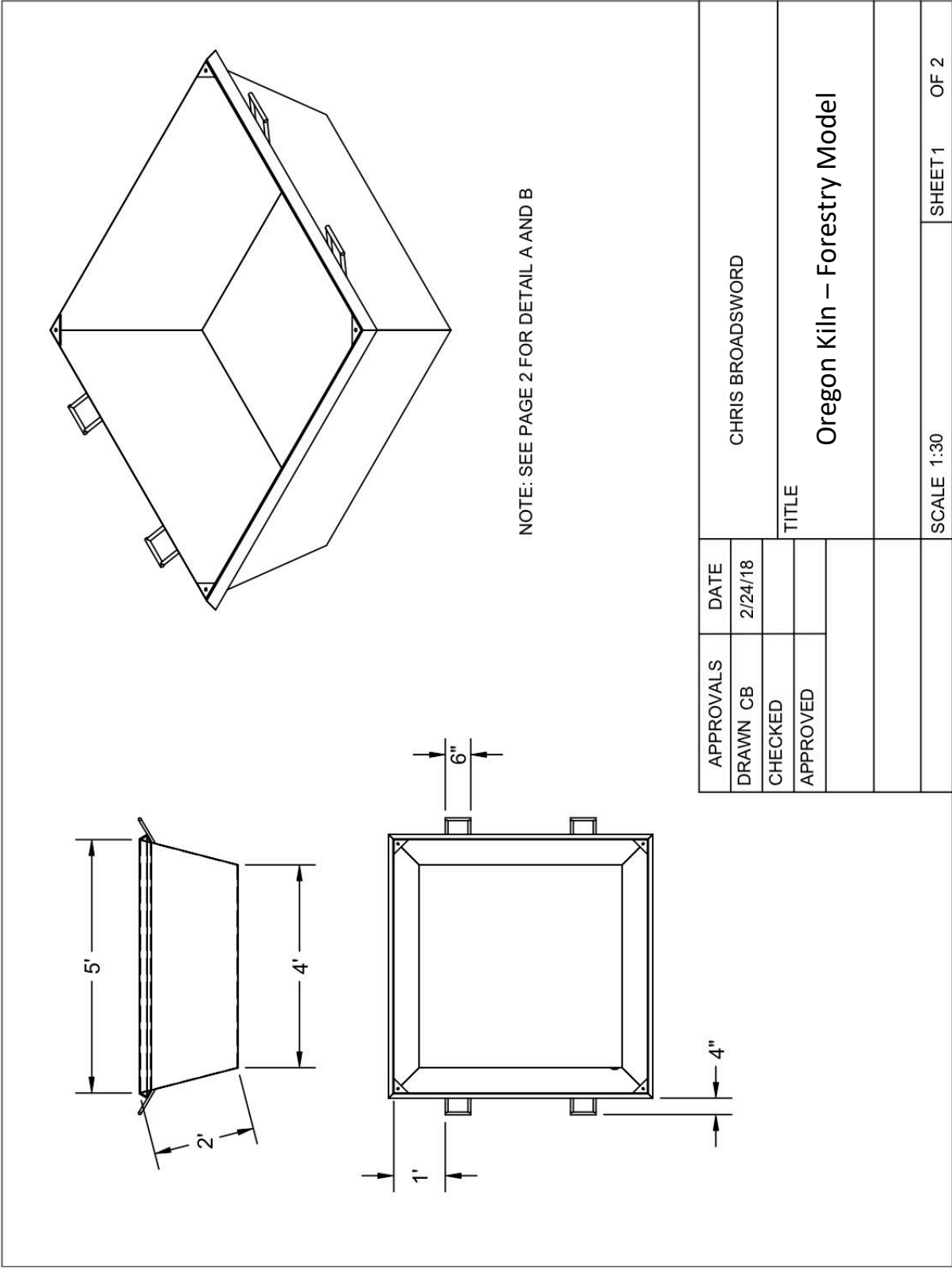
Fabrication Details

- Cut 5' x 8' sheet as shown and bend. Then weld on side panels for kiln body.
- Or cut panels separately and weld together.
- Drain hole and handle details shown in photograph

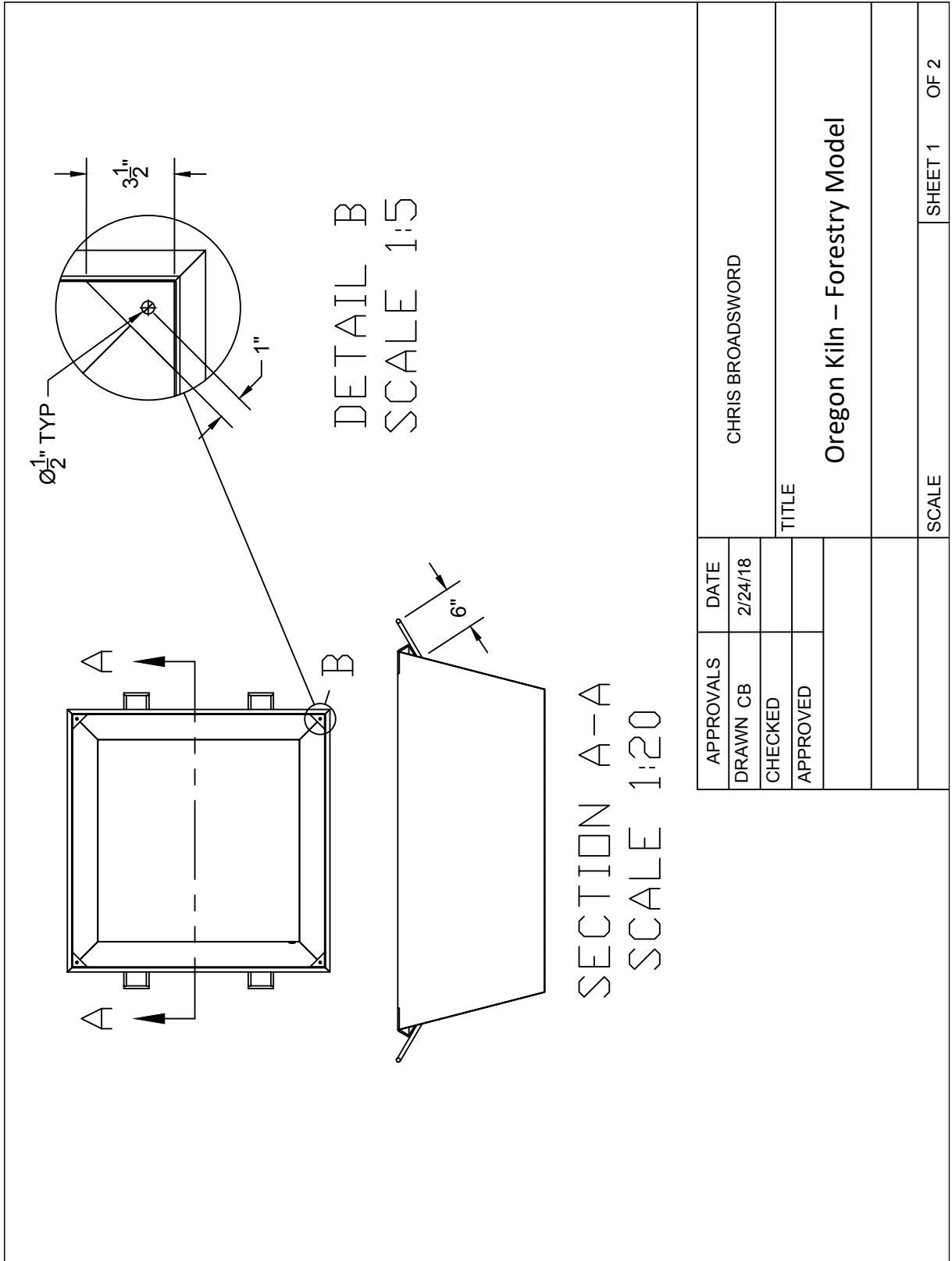


Handle and drain hole details of the Oregon Kiln.

This Biochar Practice Guideline was created in 2018 by South Umpqua Rural Community Partnership. Updates available at UBETBiochar.blogspot.com and WilsonBiochar.com. Free to share with attribution.



APPROVALS	DATE	CHRIS BROADSWORD
DRAWN CB	2/24/18	
CHECKED		
APPROVED		
		TITLE
		Oregon Kiln – Forestry Model
		SCALE 1:30
		SHEET 1 OF 2



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	SCALE	SHEET 1 OF 2

2. Ring of Fire Kiln

Ring of Fire Kiln - Bill of Materials for (1) Kiln and Heat Shield		
pcs.	Type of Material	Purpose of Material
3	44" x 78" x 18 ga. sheet metal	Kiln body
1	76" x 84" 16 ga. sheet metal	Kiln lid
1	18' x 1 1/2" Flat Bar or similar scrap	Kiln lid reinforcement
9	1" Drop Forged Light Duty C-Clamp	Kiln body section fasteners
12	24" x 44" corrugated steel roofing (salvage, free)	Outer heat shield
36	Stainless steel bolts	To fasten roofing sections
5	bricks	To rest heat shield on
Estimated Fabrication Cost – labor and materials (2017 prices)		\$800

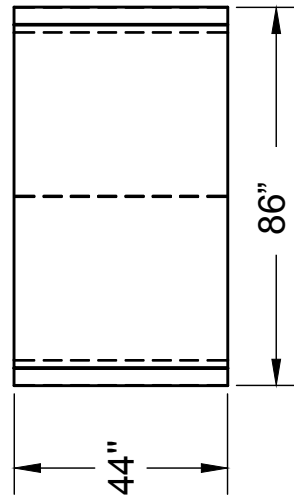
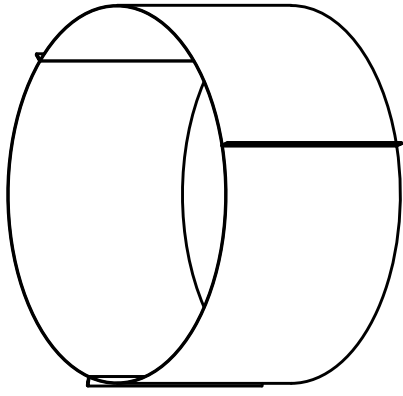
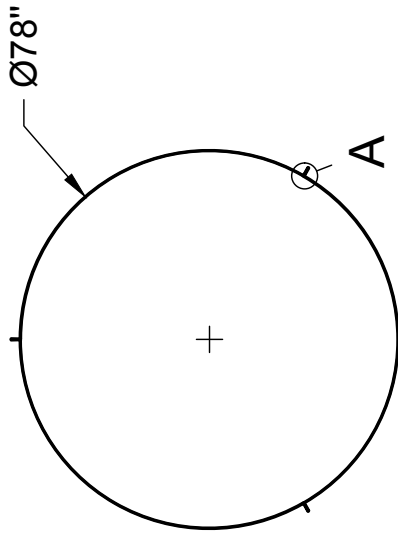
Fabrication Details

- Cut sheet metal pieces and bend flanges for kiln body.
- Cut kiln lid sections to give 4" overlap
- If desired, use scrap roofing for outer heat shield – drill holes and fasten sheets together with bolts

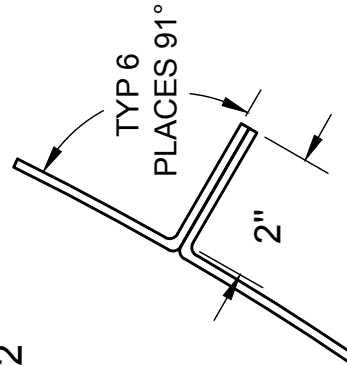


Above left: Use three clamps for each joint. Space clamps evenly.

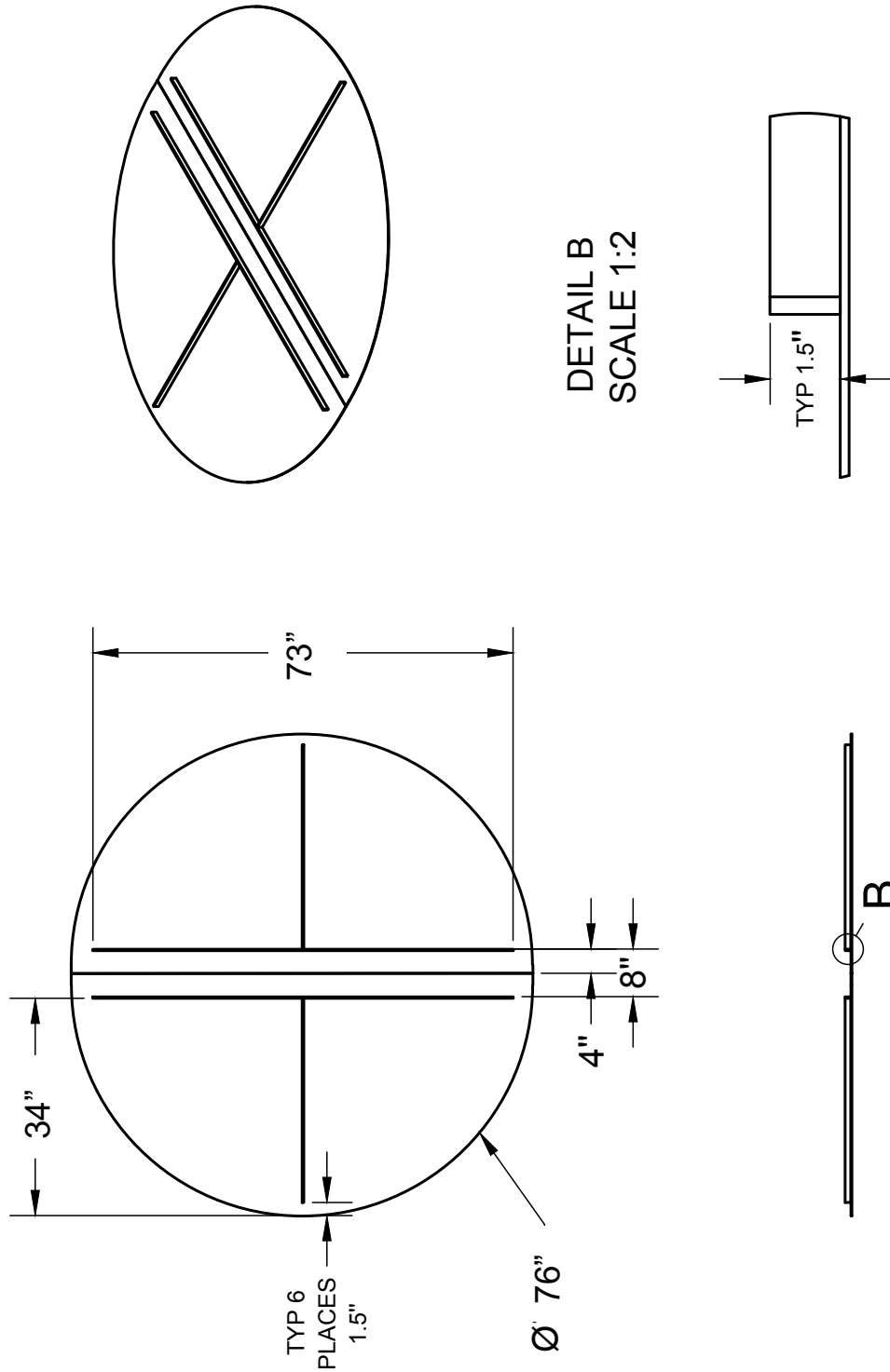
Above right: The kiln lid is in 2 pieces. Place down inside the kiln on top of hot char and make sure that the center sections overlap. Seal the rim with dirt.



DETAIL A
SCALE 1:2



Ring of Fire Kiln – Kiln Body Sections



Ring of Fire Kiln – Kiln Lid Sections

Note: Two piece lid. Place lid pieces separately on top of kiln with 4" overlap.