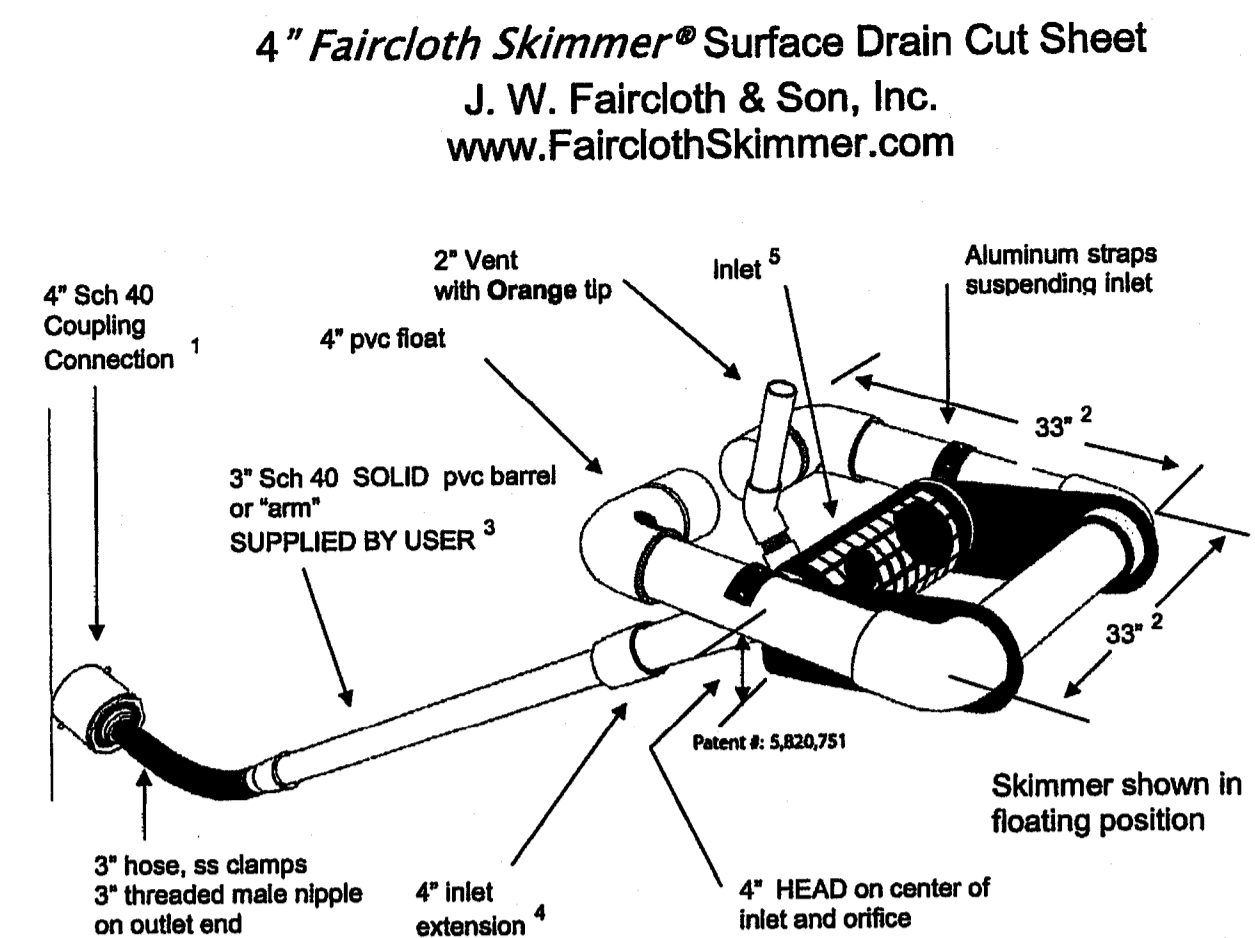


1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR THE STORM DRAIN BECOMES OPERATIONAL.
2. THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2-BY-4-IN. CONSTRUCTION- GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1 FT. BEYOND BOTH ENDS OF THE THROUGH OPENING. THE ANCHORS SHALL BE NAILED TO 2-BY-4-IN. STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.
3. THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30" AND 4 FT. LONGER THAN THE THROAT LENGTH OF THE INLET, 2 FT. ON EACH SIDE.
4. GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH.
5. THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE CUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET AND SECURELY FASTENED TO THE 2-BY-4-IN. FRAME.
6. TWO-INCH STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

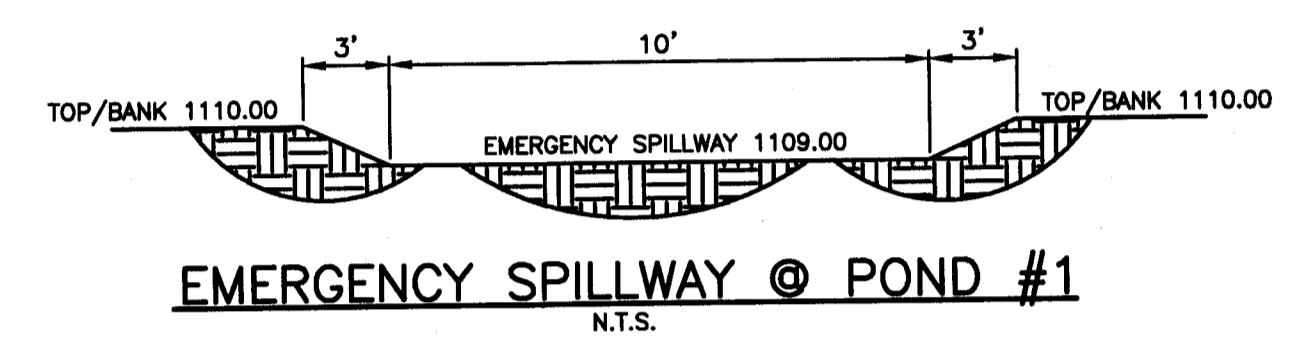


1. Coupling can be removed and hose attached to outlet using the threaded 3" nipple. Typical methods used: on a metal structure a steel stubout welded on the side at the bottom with a 3" threaded coupling or reducers; on a concrete structure with a hole or orifice at the bottom, use a steel plate with a hole cut in it and coupling welded to it that will fit over the hole in the concrete and bolted to the structure with sealant. It is possible to grout a 4" pvc pipe in a hole in the concrete to connect the skimmer but this is less secure than other methods.
2. Dimensions are approximate, not intended as plans for construction.
3. Barrel (solid, not foam core pipe) should be 1.4 times the depth of water with a minimum length of 8' so the inlet can be pulled to the side for maintenance. If more than 10' long weight may have to be added to inlet to counter the increased buoyancy.
4. Inlet tapers down from 4" maximum inlet to a 3" barrel and hose. Barrel is smaller to reduce buoyancy and tendency to lift inlet but is sufficient for flow through inlet because of slope. The inlet orifice can be reduced using the plug and cutter provided to control the outflow rate.
5. Inlet is 8" pipe between the straps with slots cut in the inlet and aluminum screen door (smaller than shown in illustration) for access to the 4" inlet and orifice inside.
6. Capacity 20,109 cubic feet per day maximum with 4" inlet and 4" head. Inlet can be reduced by installing a smaller orifice using the plug and cutter provided to adjust flow rate for the particular basin volume and drawdown time required.
7. Shipped assembled. User glues inlet extension and barrel, installs vent, cuts orifice in plug and attaches to outlet pipe or structure. Includes flexible hose, rope, orifice cutter, etc.

Temporary Sediment Basin Calculations Pond 1

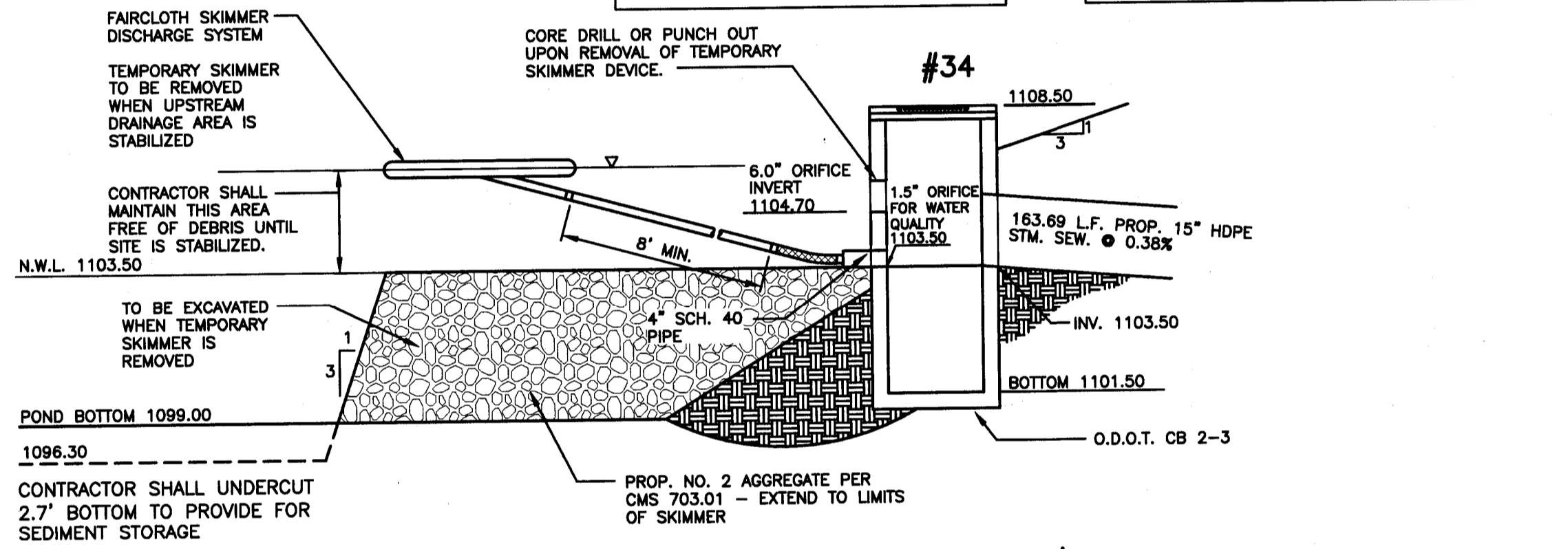
Basin Design Information and Calculations Use a Temporary Skimmer

Total Drainage Area:	3.84 Ac.
Disturbed Earth Area:	3.84 Ac.
Sediment Storage Volume Required (1,000 C.F./Ac.):	3,840 C.F.
Sediment Storage Volume Provided Below Skimmer Orifice:	3,448 C.F.
Dewatering Volume Required (1,800 C.F./Ac.):	6,912 C.F.
Dewatering Volume Provided Below Principal Spillway:	30,151 C.F.
Design Detention Volume:	46,564 C.F.
Bottom of Temporary Sediment Basin:	1099.00
Invert of Skimmer Orifice:	1103.00
Normal Water Level:	1108.10
Cleasout Elevation:	1108.50
Set Crest of Principal Spillway at:	1109.00
Set Crest of Emergency Spillway at:	1109.00
Top of Bank:	1110.00

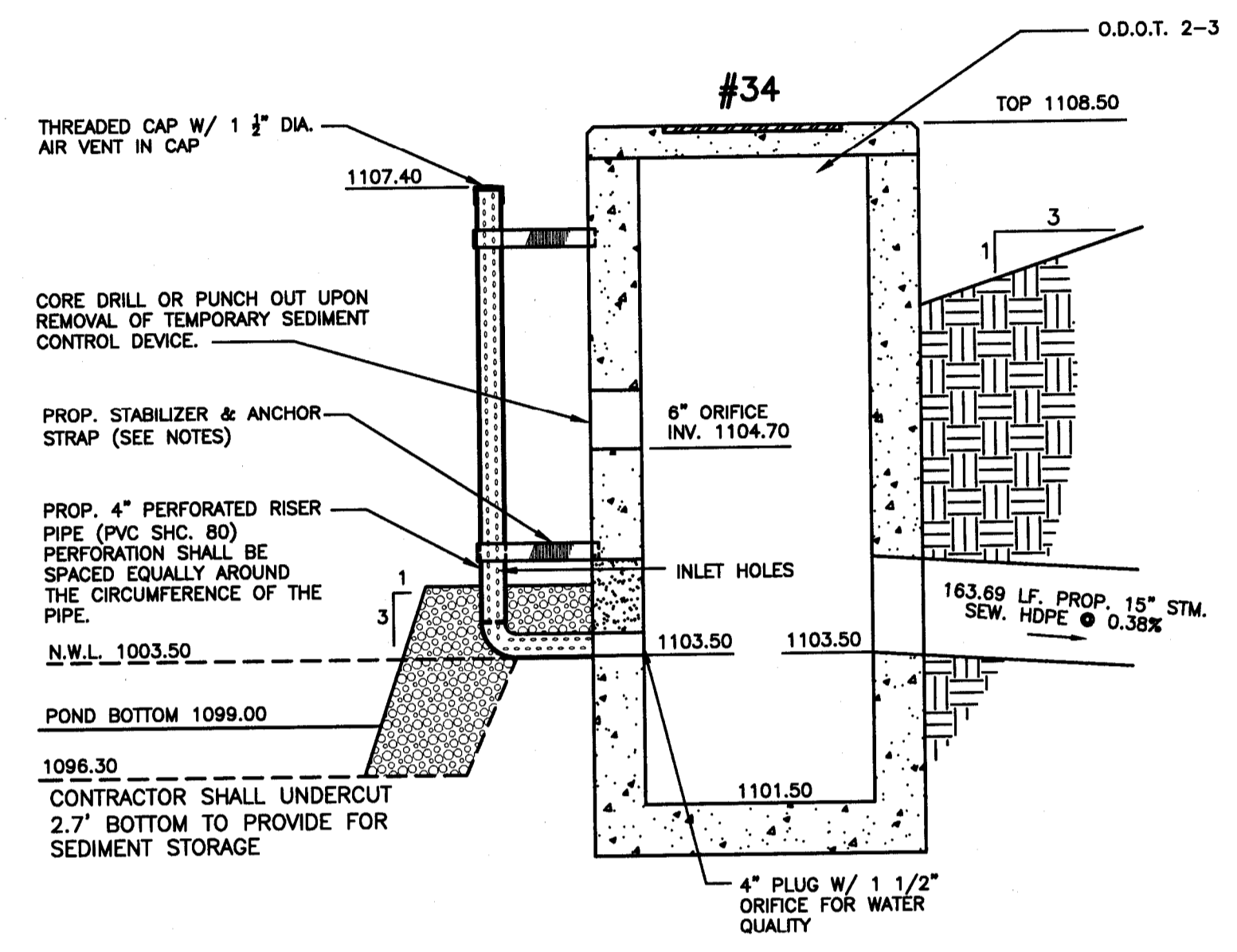


NOTE: WATER QUALITY ORIFICE PROVIDED FOR POST-DEVELOPED WATER QUALITY FOR RETENTION POND.

NOTE: SEE SD-22 FOR 1/2 ROUND CMP PIPE-HOOD DETAILS



TEMPORARY SEDIMENT CONTROL STRUCTURE/
OUTLET STRUCTURE #34 @ POND #1 (SOUTH)



OUTLET STRUCTURE #34 DETAIL FOR
DETENTION POND #1 (SOUTH)

Calculate Skimmer Size

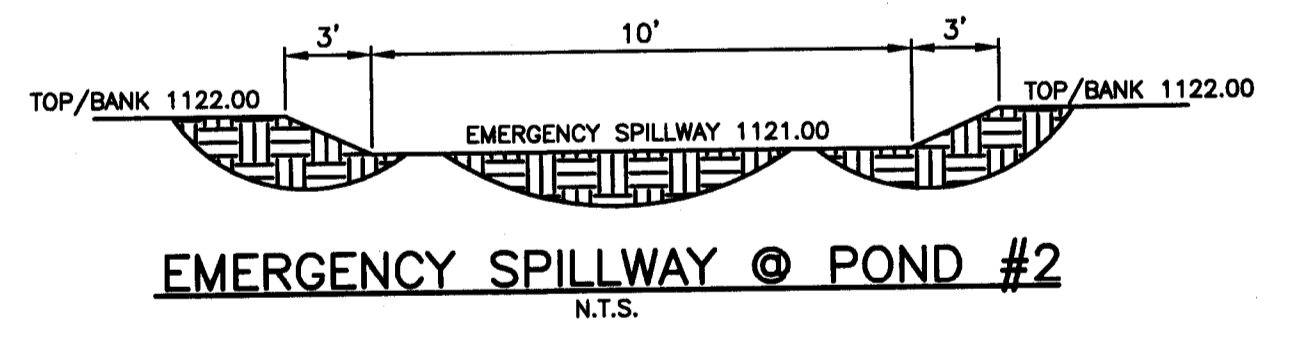
Basin Volume in Cubic Feet	6,912 Cu.Ft	Skimmer Size	2.5 Inch
Days to Drain*	2 Days	Orifice Radius	0.9 Inch[es]
		Orifice Diameter	1.9 Inch[es]

*In NC assume 3 days to drain

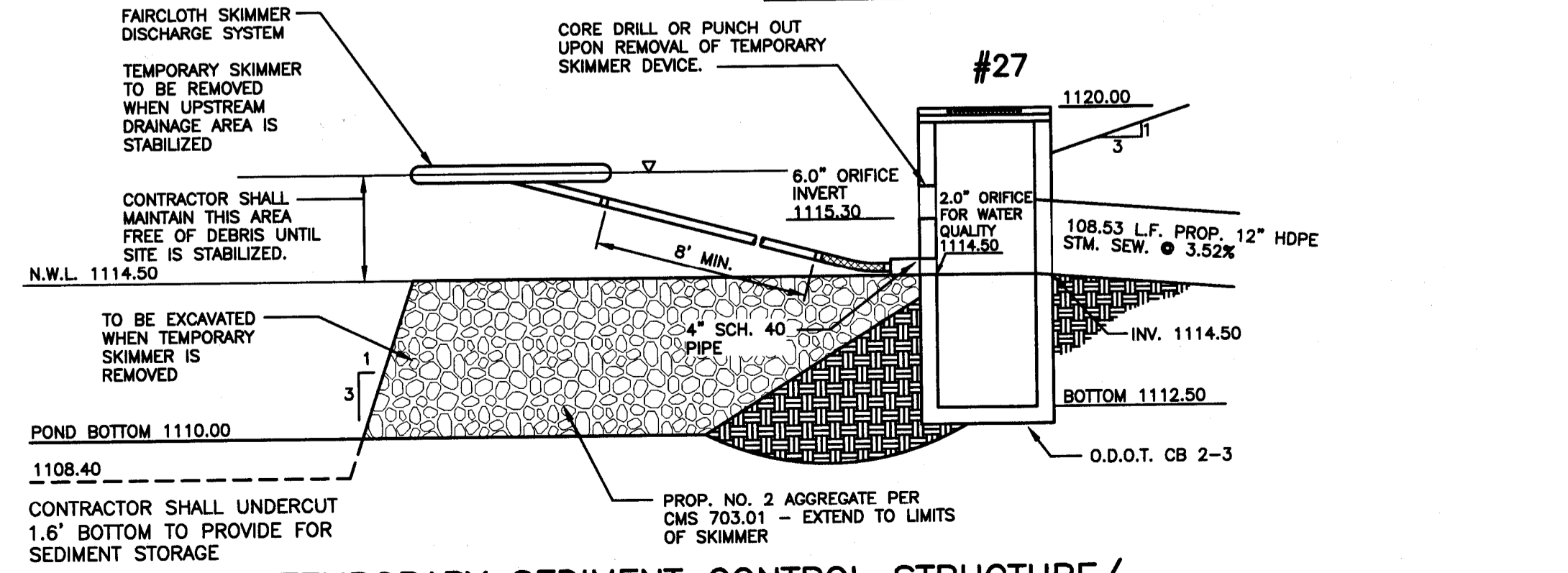
Temporary Sediment Basin Calculations Pond 2

Basin Design Information and Calculations Use a Temporary Skimmer

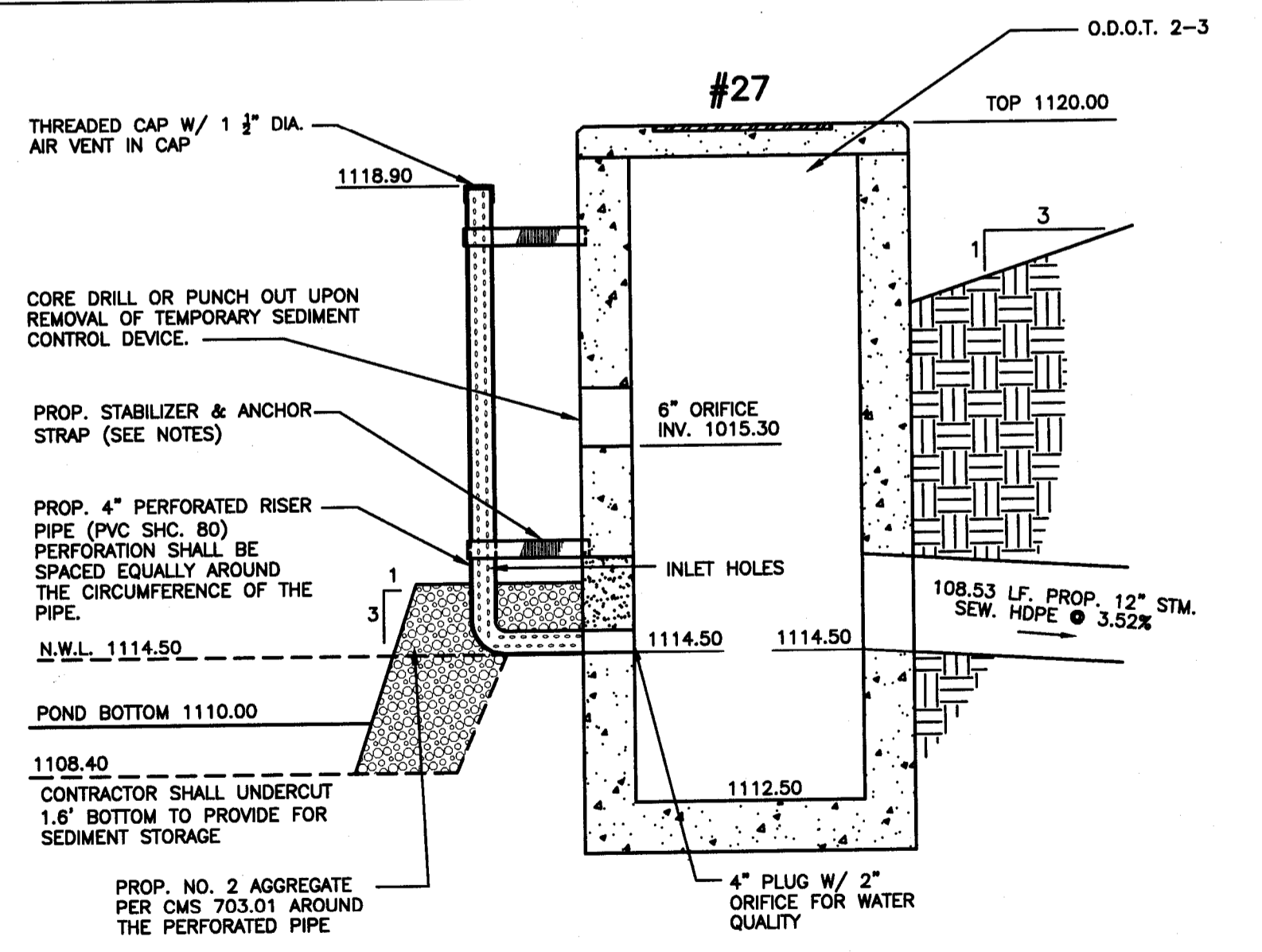
Total Drainage Area:	8.36 Ac.
Disturbed Earth Area:	8.36 Ac.
Sediment Storage Volume Required (1,000 C.F./Ac.):	8,360 C.F.
Sediment Storage Volume Provided Below Skimmer Orifice:	22,892 C.F.
Dewatering Volume Required (1,800 C.F./Ac.):	15,048 C.F.
Dewatering Volume Provided Below Principal Spillway:	85,118 C.F.
Design Detention Volume:	135,658 C.F.
Bottom of Temporary Sediment Basin:	1110.00
Invert of Skimmer Orifice:	1114.50
Normal Water Level:	1119.60
Cleasout Elevation:	1119.60
Set Crest of Principal Spillway at:	1120.00
Set Crest of Emergency Spillway at:	1121.00
Top of Bank:	1122.00



NOTE: WATER QUALITY ORIFICE PROVIDED FOR POST-DEVELOPED WATER QUALITY FOR RETENTION POND.



TEMPORARY SEDIMENT CONTROL STRUCTURE/
OUTLET STRUCTURE #27 @ POND #2 (NORTH WEST)



OUTLET STRUCTURE #27 DETAIL FOR
DETENTION POND #2 (NORTH WEST)

Calculate Skimmer Size

Basin Volume in Cubic Feet	15,048 Cu.Ft	Skimmer Size	3.0 Inch
Days to Drain*	2 Days	Orifice Radius	1.3 Inch[es]
		Orifice Diameter	2.6 Inch[es]

*In NC assume 3 days to drain

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465 S. HAMETOWN RD.
COPLEY TOWNSHIP, OHIO
STORM WATER POLLUTION PREVENTION
DETAILS & OUTLET STRUCTURE DETAILS

DRAWN BY:
T.G.W.
DATE:
JAN. 4, 2011
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DRAWING NO.
SD-22