

TOUGH MUDDER SYDNEY

12TH – 13TH OCTOBER, 2013

FERNHILL ESTATE



This document is for the confidential use of
the recipients only

OBSTACLE LIST

- | | |
|----------------------|-----------------------|
| 1. Dirty Ballerina | 11. Mud Mile #1 |
| 2. Glory Blades | 12. Berlin Walls |
| 3. Kiss of Mud | 13. Boa Constrictor |
| 4. Arctic Enema | 14. Electric Eel |
| 5. Walk the Plank | 15. Balls to the Wall |
| 6. King of the Mount | 16. Mud Mile #2 |
| 7. Water Logged | 17. Cage Crawl |
| 8. Warrior Carry | 18. Funky Monkey |
| 9. Hold Your Word | 19. Everest |
| 10. Trench Warfare | 20. Electroshock |



Tough Mudder

Sydney #2

Fernhill Estates

12th - 13th October 2013

OBSTACLE LIST

- | | |
|-------------------------|--------------------------|
| 1. Dirty Ballerina | 11. Mud Mile #1 |
| 2. Glory Blades | 12. Berlin Walls |
| 3. Kiss of Mud | 13. Boa Constrictor |
| 4. Arctic Enema | 14. Electric Eel |
| 5. Walk the Plank | 15. Balls to the Wall |
| 6. King of the Mountain | 16. Mud Mile #2 |
| 7. Water Logged | 17. Cage Crawl |
| 8. Warrior Carry | 18. Funky Monkey |
| 9. Hold Your Wood | 19. Everest |
| 10. Trench Warfare | 20. Electroshock Therapy |

Legend

① = Obstacle

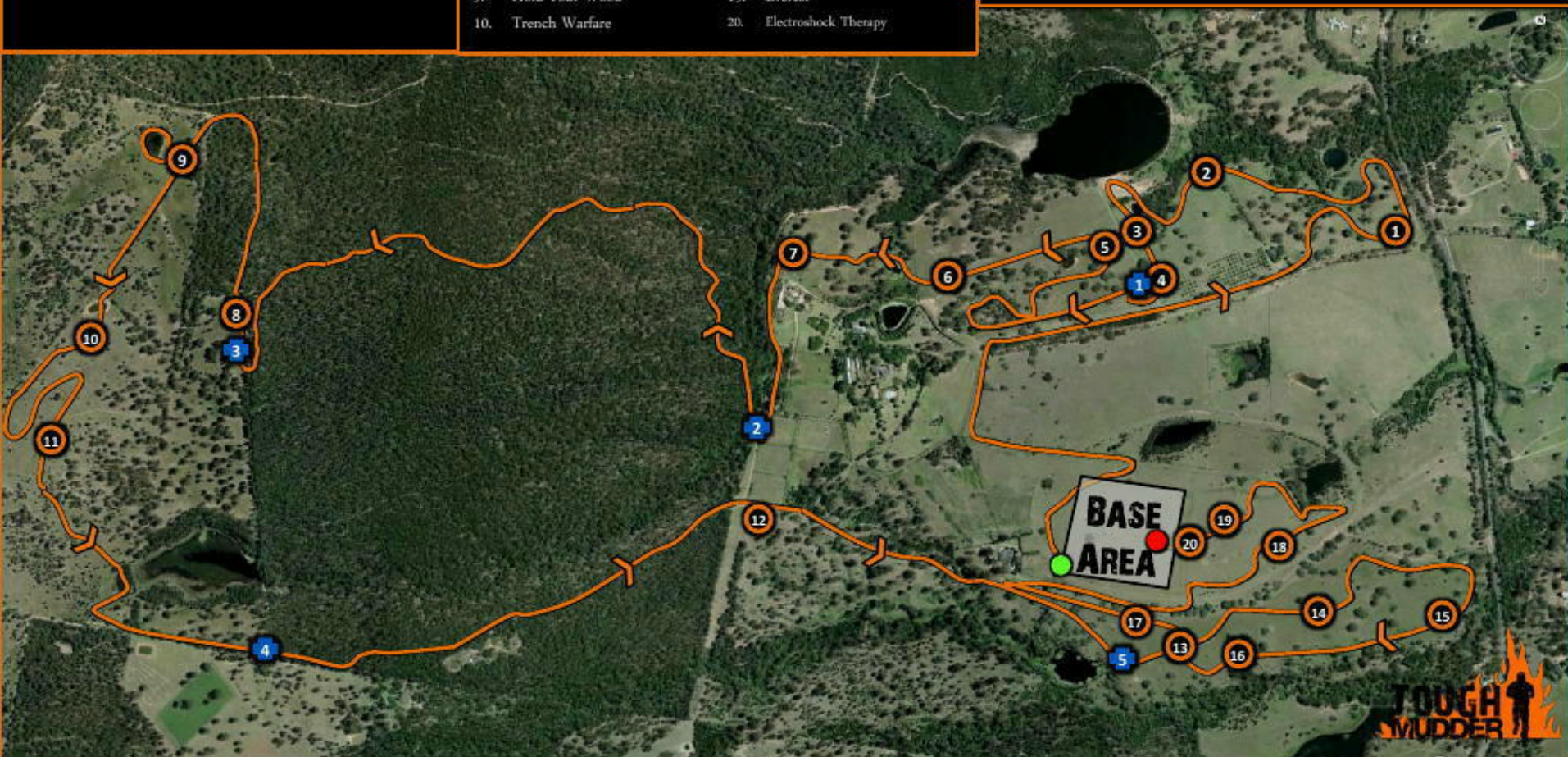
1 = Water Station

~ = Course Route

● = Start

> = Course Direction

● = Finish



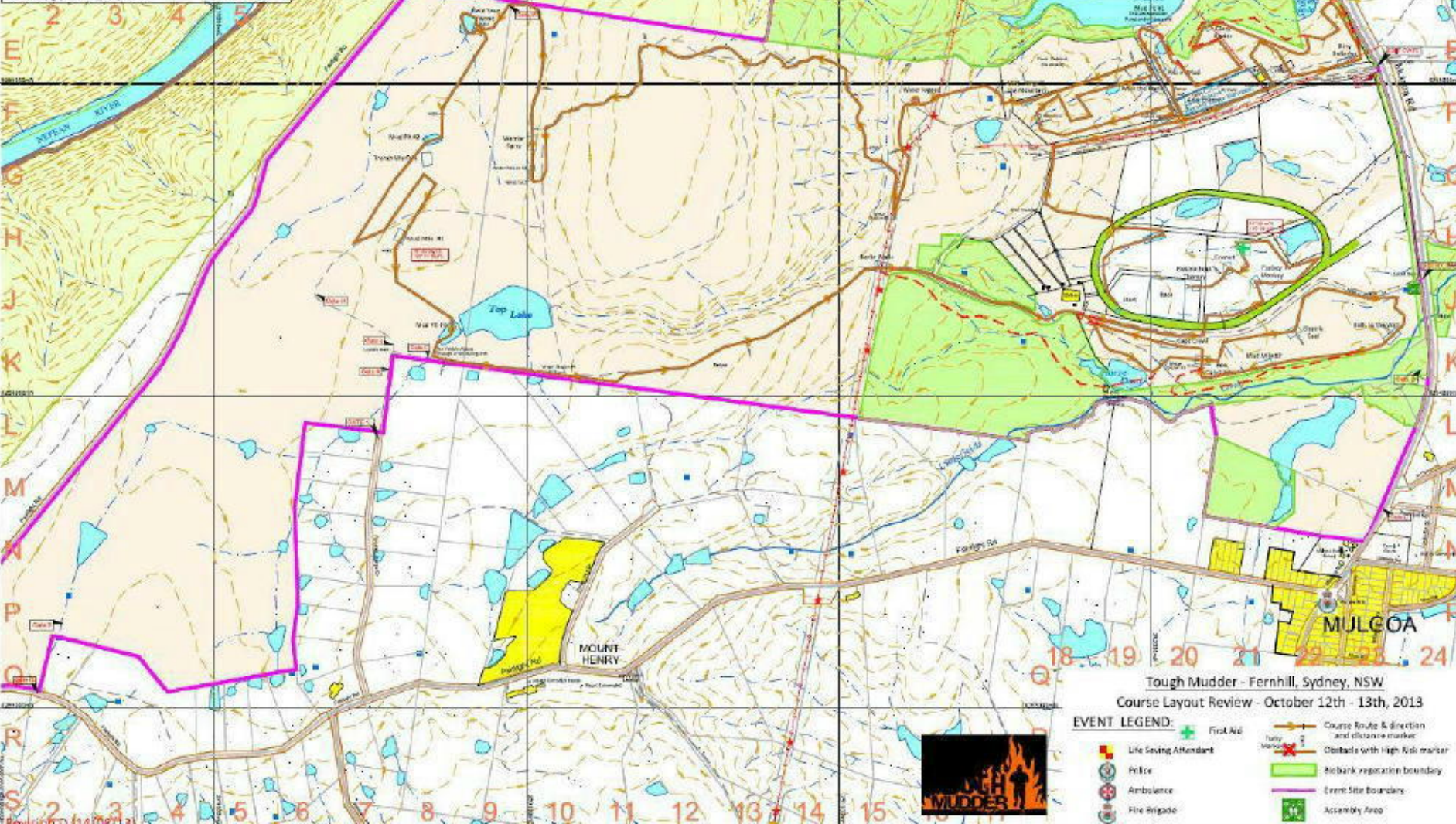
This document is for the confidential use of
the recipients only



2013

- MOBILITY LEGEND:**
- Public Vehicle Access (with direction)
 - Spectator Paths
 - Car Parking
 - Vehicle Access Track
 - Public Road (Minor)
 - Public Road (Major)
 - Urban/Residential Area

Scale 1:50,000
1:1" = 100m
1:1" = 100m



Revision D (14/08/13)

Tough Mudder - Fernhill, Sydney, NSW
Course Layout Review - October 12th - 13th, 2013

- EVENT LEGEND:**
- First Aid
 - Life Saving Attendant
 - Police
 - Ambulance
 - Fire Brigade
 - Course Route & direction
 - Obstacle with high risk marker
 - Rebank vegetation boundary
 - Event Site Boundaries
 - Assembly Area



THE DIRTY BALLERINA



This document is for the confidential use of
the recipients only





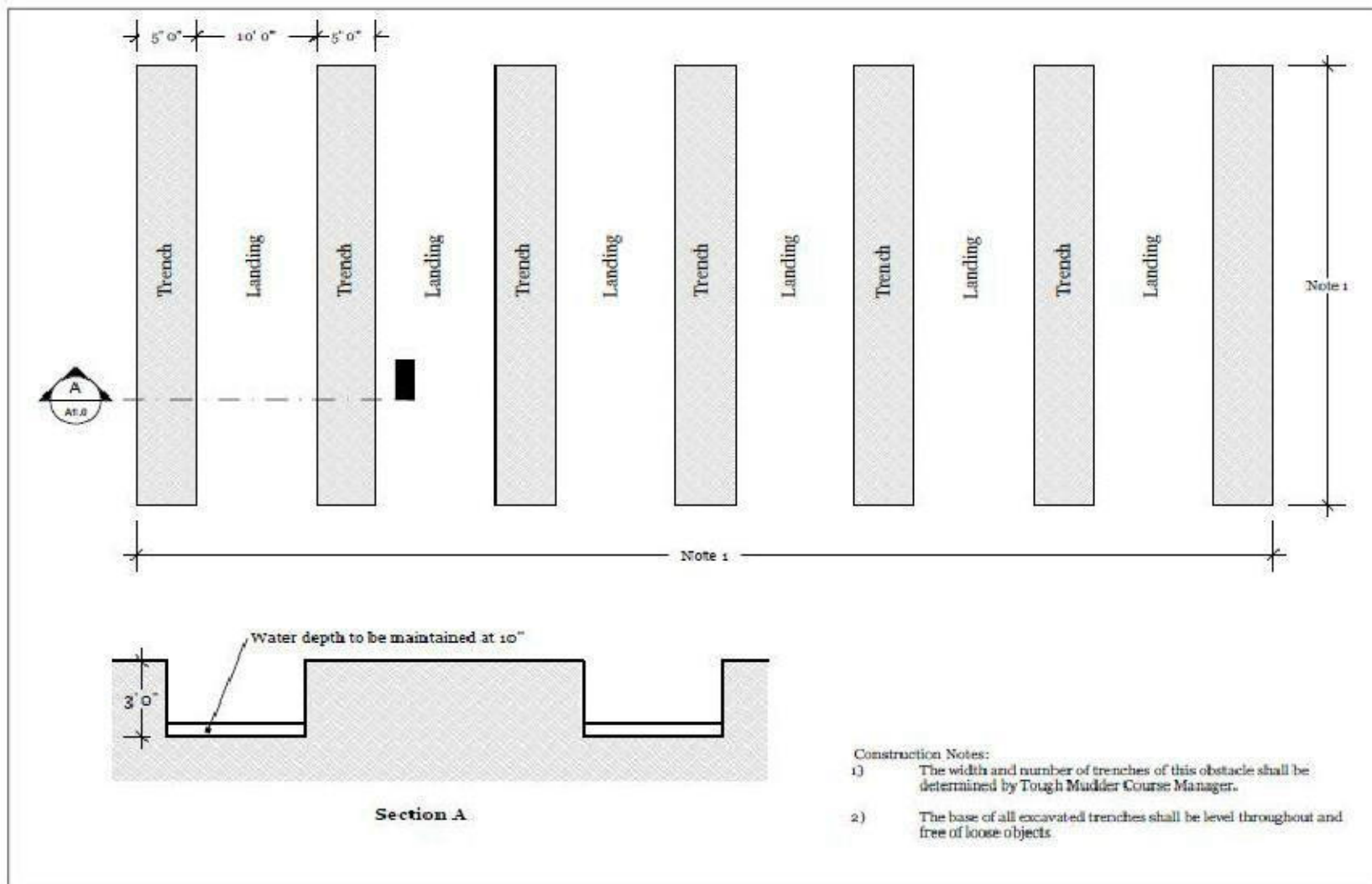
OBSTACLE TYPE: Agility / Balance

EXCAVATION REQUIRED: 10'x5'x3' per pit

Water Needed: 12,300 US gal per pit

Dirty Ballerina

DESCRIPTION: This is a jumping/ hurdle obstacle where participants must jump over a series of wide pits. Each pit is 5' wide, with 10' earth platforms between the pits.



TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

DIRTY BALLERINA
1 of 1

REVISIONS		
REV	DATE	REMARKS
1	02/22/18	INITIAL
2	02/19/18	CHANGED DIMENSIONS AND UPDATED NOTES
3		
4		
5		

A 1.0

GLORY BLADES



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Upper Body

EXCAVATION REQUIRED: No

Water Needed: No

Glory Blades

DESCRIPTION: This obstacle consists of two sets of (4) walls 12' wide and 7'-8' tall and leaning forward towards the participants.



- Construction Notes:
- 1) The number of lanes shall be determined by Tough Mudder Course Manager.
 - 2) Final structure shall be clean of protruding nails, screws, or sharp edges of any kind.
 - 3) Contractor to install Tough Mudder Purchased Branding using standard 1-5/8" course thread #2 screws
 - 4) When applying the Branding, the top should be sandwiched between a 2"x6" Beam and the Wall Face. The overlap between the 2"x6" beam and the shall be 2 inches. The screws used to fasten the 2"x6" beam must not be over tightened or penetrate the Branding.
 - 5) Branding shall be supplied by Tough Mudder Course Representative. When fastening Branding to wall, it should be located on Center. Contractor to coordinate final placement with Tough Mudder Course Representative.
 - 6) Contractor to return all branding materials to Tough Mudder Logistics Coordinator immediately following event.



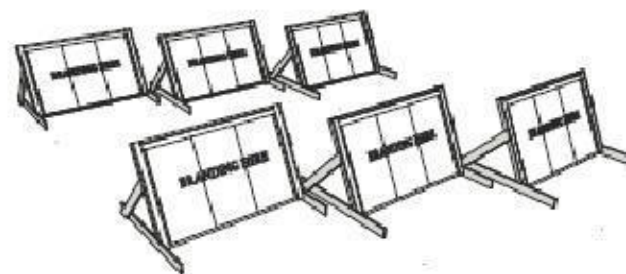
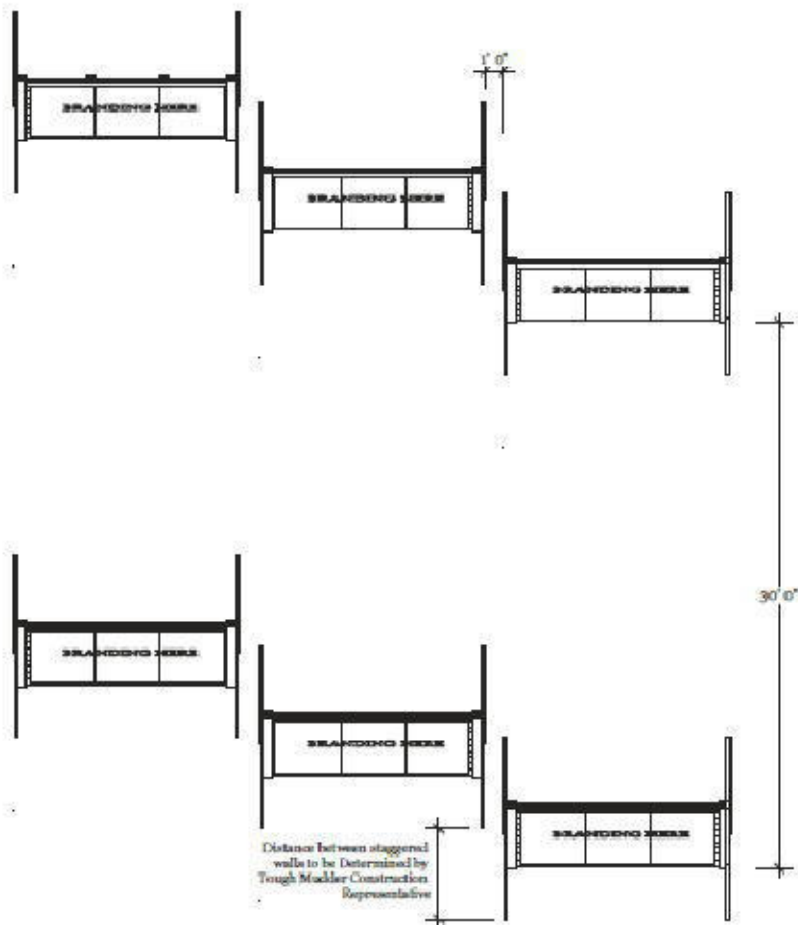
TOUGH MUDDER LLC
63 PEARL STREET, #231
BROOKLYN, NY 11201

GLORY BLADES
1 of 2

REVISIONS		
NO.	DATE	REVISION
1	08/01/00	INITIAL
2	08/01/00	CHANGED TO INITIAL, CLINT, BILLY, DART, AND CLINT, DART
3	08/01/00	
4	08/01/00	

A	1.0
---	-----

This document is for the confidential use of
the recipients only



Construction Notes:

- 1) The number of lanes shall be determined by Tough Mudder Course Manager.
- 2) Final structure shall be clean of protruding nails, screws, or sharp edges of any kind.
- 3) Contractor to install Tough Mudder Furnished Branding using standard 1-5/8" course thread #2 screws
- 4) When applying the Branding, the top should be sandwiched between a 2"x6" Beam and the Wall Face. The overlap between the 2"x6" beam and the shall be 2 inches. The screws used to fasten the 2"x6" beams must not be over tightened or penetrate the Branding.
- 5) Branding shall be supplied by Tough Mudder Course Representative. When fastening Branding to wall, it should be located on Center. Contractor to coordinate final placement with Tough Mudder Course Representative.
- 6) Contractor to return all branding materials to Tough Mudder Logistics Coordinator immediately following event.



TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

GLORY BLADES
2 of 2

REVISIONS	
NO.	REMARKS
1	INITIAL
2	CHANGING TO PERFEAL CLUT, BRANDING DETAILS AND CLUTS, NOTED
3	
4	
5	

A L11

KISS OF MUD



This document is for the confidential use of
the recipients only





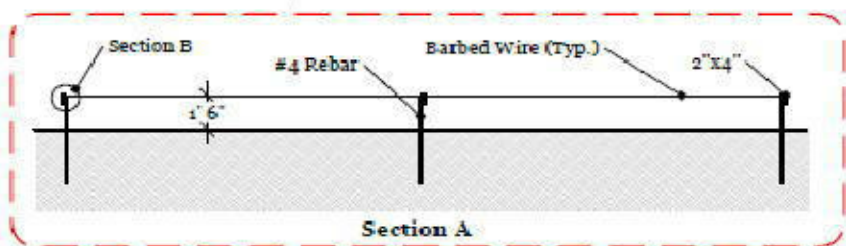
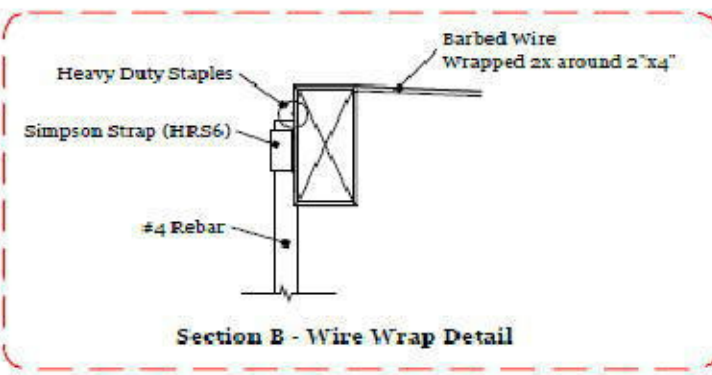
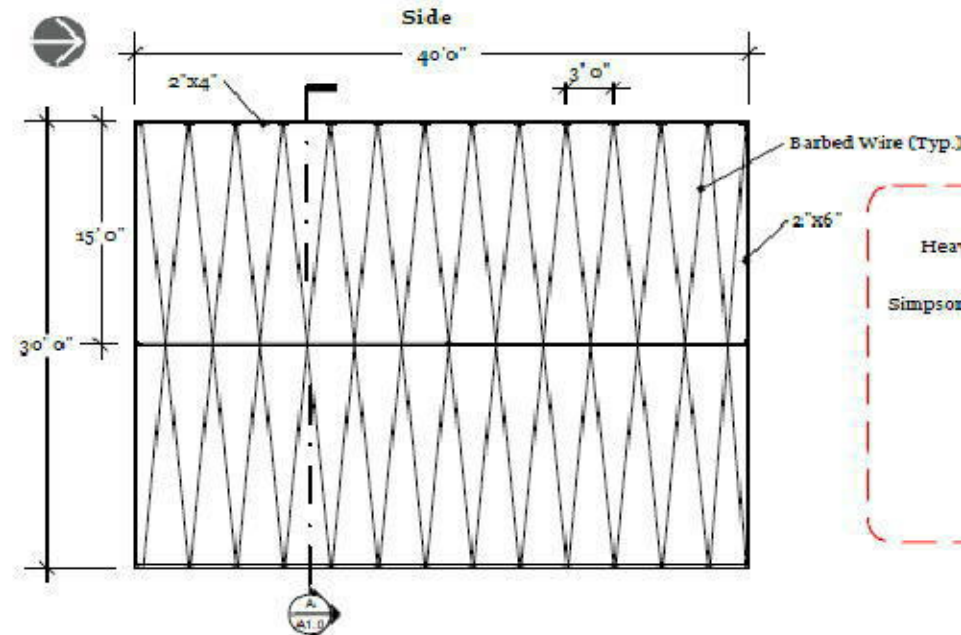
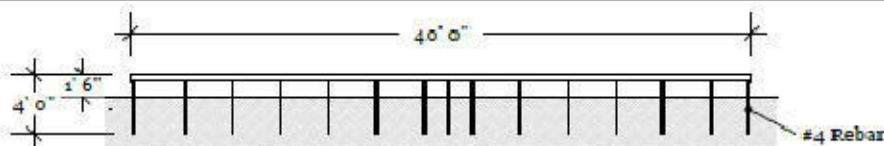
OBSTACLE TYPE: Mental Grit

EXCAVATION REQUIRED: 30'x50'x6"

Water Needed: 1,000 US gal

Kiss of Mud

DESCRIPTION: This obstacle consists of barbed wire strung 16" from the ground covering a section of mud. The wire is secured using rebar stakes and wooden frames for support. Participants crawl belly down under the wire through the mud.



Construction Notes:

- 1) Final structure shall be clean of protruding nails, screws, or sharp edges of any kind.
- 2) Use deck screws at all lumber to lumber connections
- 3) Use heavy duty staples at barbed wire to lumber connections



TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

Kiss of Mud
1 of 1

REVISIONS		
NO.	DATE	REMARKS
1	11/05/12	INITIAL
2	02/14/13	ADDED WIRE DETAIL, CHANGED FRAME SIZE AND HEIGHT
3		
4		
5		

A 1.0

ARCTIC ENEMA



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Mental Grit

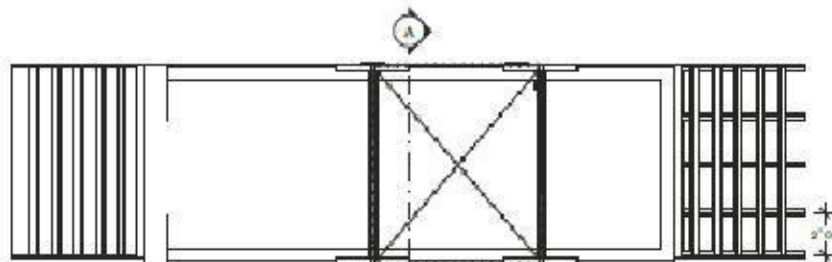
EXCAVATION REQUIRED: No

Water Needed: 4,000 US gal per dumpster

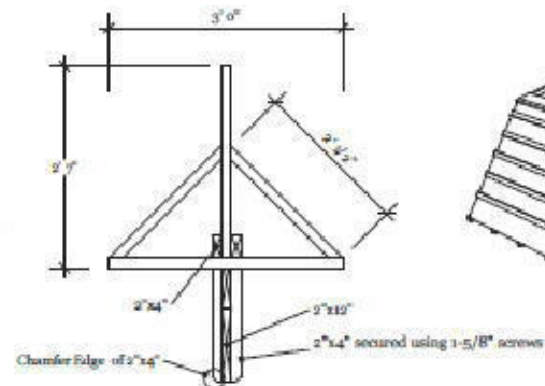
GPS:

Arctic Enema

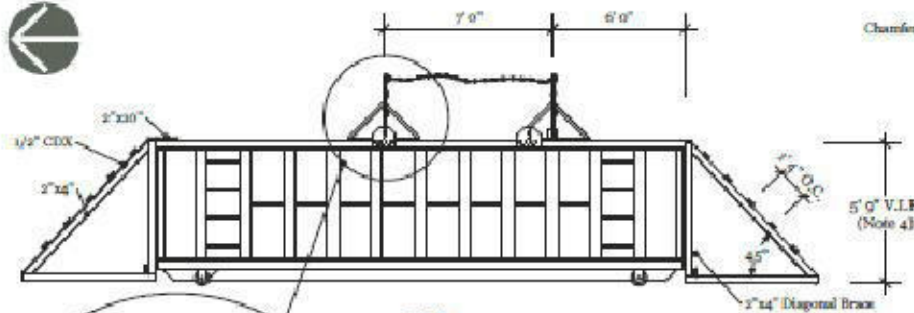
DESCRIPTION: A jump into a dumpster of dyed ice water. Each Dumpster is lined with a rubber sheet and filled with a mixture of water and Ice. The Middle of each dumpster is divided by a baffle, designed to force participants to submerge their entire body.



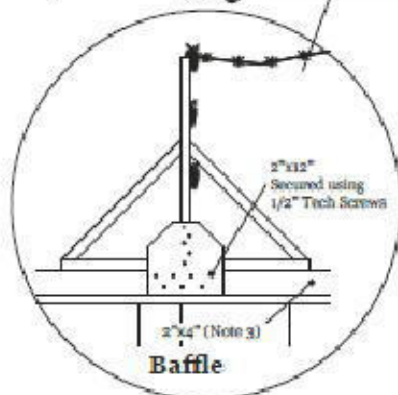
Top



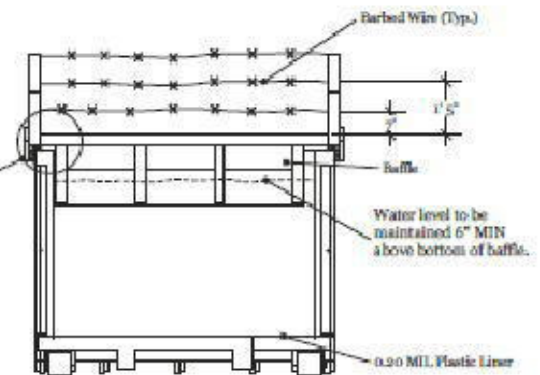
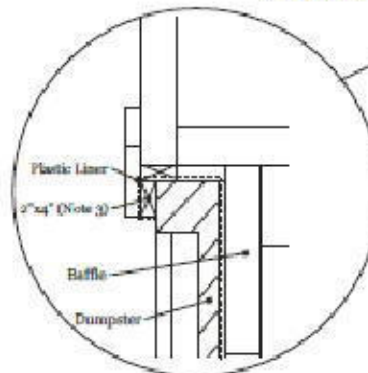
Baffle Detail



Side



Baffle



Section A

Construction Notes:

- 1) The number of lines shall be determined by Tough Mudder Construction Manager.
- 2) Water level shall be filled such that the bottom of the baffle is submerged 6" minimum.
- 3) Wrap 2"x4" in plastic liner 2 times and secure.
- 4) Height of Entrance and Exit ramp should be equal to the top of the Dumpster, as verified in field.
- 5) Dumpster must be free of sharp edges or penetrations.

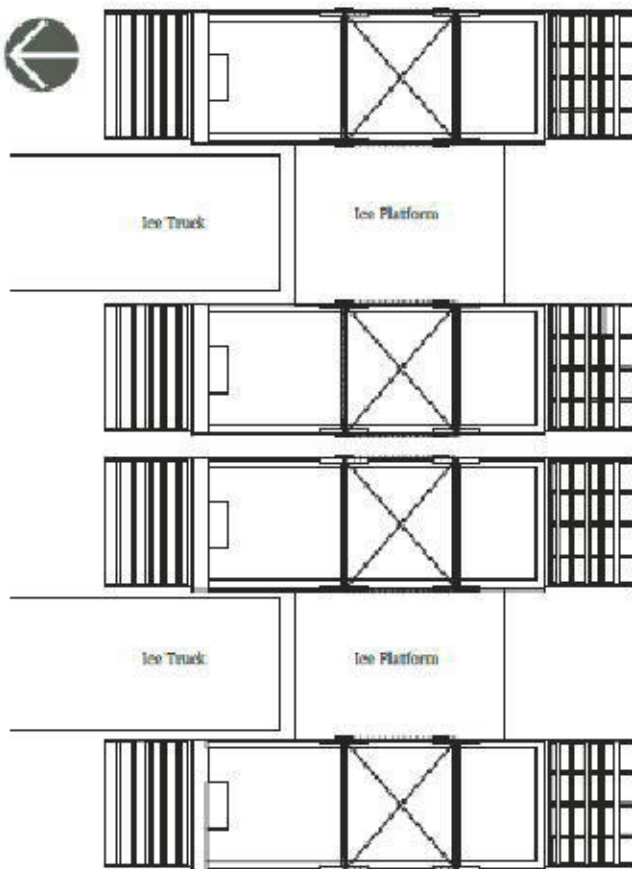


TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

Arctic Enema 2.0
1 of 2

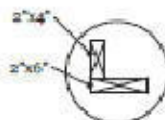
REVISIONS	
NO.	DESCRIPTION
1	INITIAL
2	REVISION
3	REVISION
4	REVISION
5	REVISION

A 1.0



Site Layout

For Reference Only, Final Number of Units to be Coordinated with Tough Mudder Construction Representative.



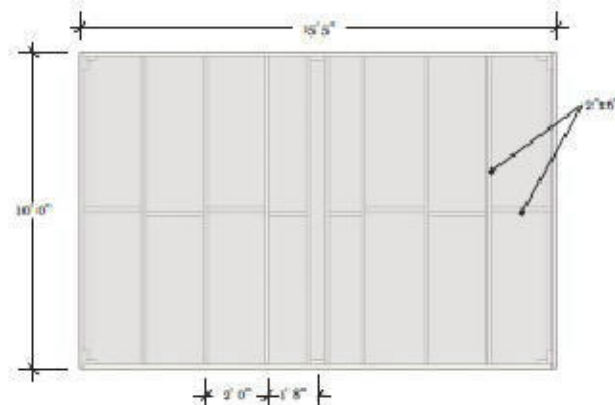
Section B



Ice Platform (Front)



Ice Platform (Side)



Ice Platform (Top)

Construction Notes:

- 1) The number of lanes shall be determined by Tough Mudder Construction Manager.
- 2) Water level shall be filled such that the bottom of the baffle is submerged 6" minimum.
- 3) Wrap 2"x4" in plastic liner 2 times and secure.
- 4) Height of Entrance and Exit ramp should be equal to the top of the Dumpster, as verified in field.
- 5) Dumpster must be free of sharp edges or penetrations.



TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

Arctic Enema 2.0

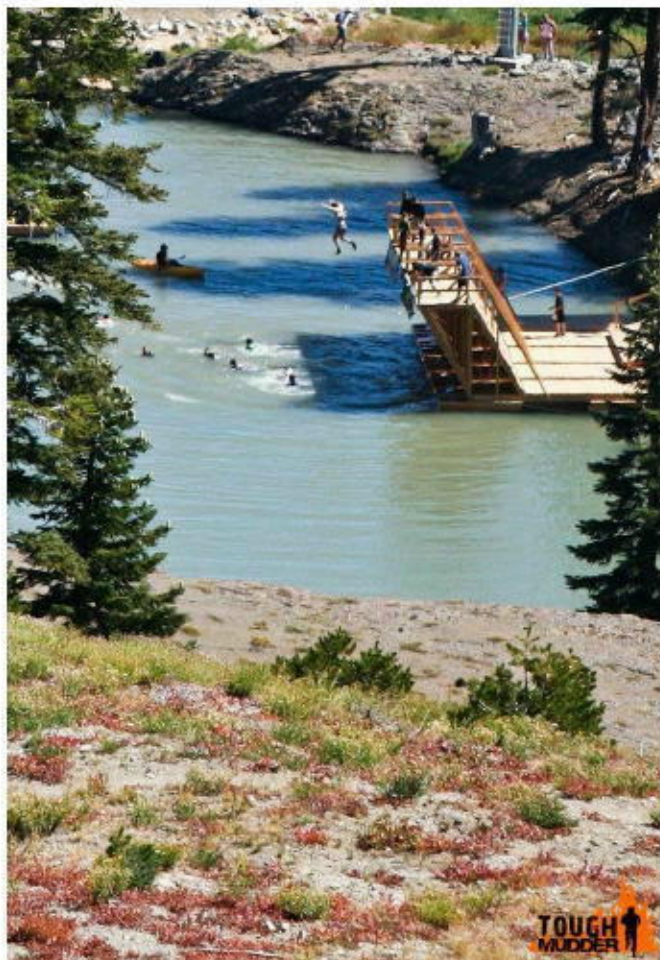
2 of 2

REVISIONS

NO.	DATE/REV	DESCRIPTION
1	11/06/18	INITIAL
2	01/03/19	UPDATED TO INCLUDE TWO BAY PLATFORM
3	01/03/19	
4	01/03/19	
5	01/03/19	

1.1
A

WALK THE PLANK



This document is for the confidential use of
the recipients only





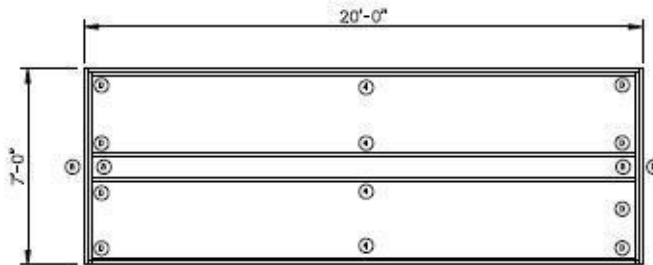
OBSTACLE TYPE: Mental Grit

EXCAVATION REQUIRED: 30'x40'x15'

Water Needed: 134,000 US gal

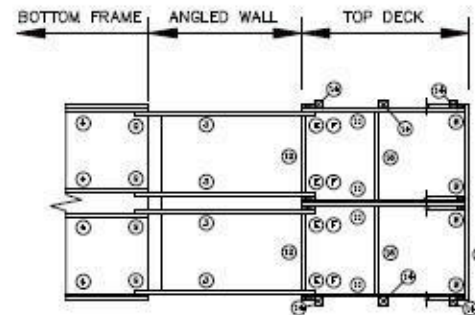
Walk the Plank

DESCRIPTION: This obstacle consists of a series of 12' high wooden platforms overhanging a 12'-15' deep lake of manufactured pit. Participants must climb the wooden structure, jump into the water, and then swim to the exit.



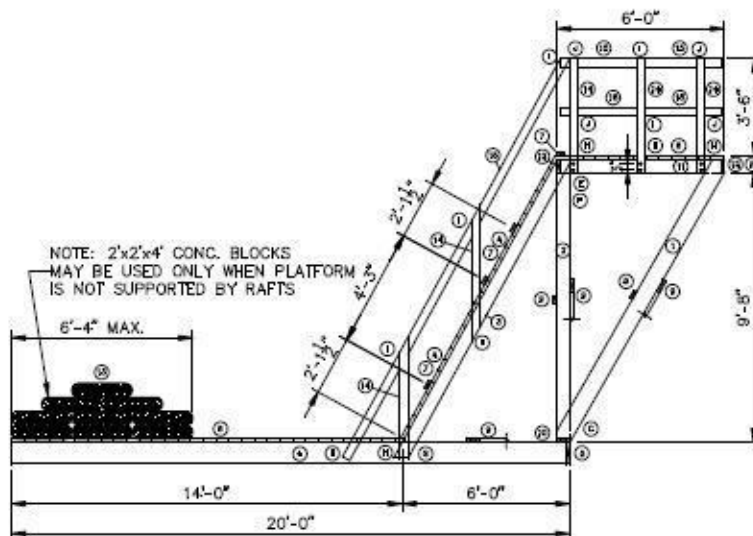
PLATFORM BOTTOM FRAME TOP VIEW

SCALE: 1/4" = 1'-0"



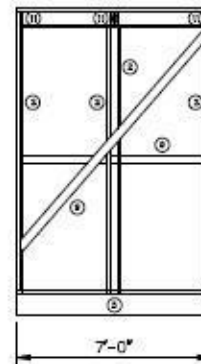
PLATFORM TOP VIEW

SCALE: 1/4" = 1'-0"



PLATFORM SIDE VIEW

SCALE: 1/4" = 1'-0"



PLATFORM FRONT VIEW

VERTICAL WALL SHOWN, ANGLED FRONT WALL SIMILAR
SCALE: 1/4" = 1'-0"

LOCK RIDGE ENGINEERING, LLC

160 MAINT STREET
EMMAUS, PA 18049
610-704-6676
lockridge1@gmail.com

**WALK THE PLANK
TOUGH MUDDER**

45 WASHINGTON STREET #221
BROOKLYN, NY 11201

SCALE: AS NOTED

DATE: 11/28/12

BY: CSB

DRAWING:

S3.01

SHEET: 1 of 6

LEGEND: PLATFORM	
MARK	ITEM
①	2x8 FRONT BRACE
②	2x6 VERTICAL POST
③	2x6 ANGLED WALL FRAMING
④	2x10 BOTTOM FRAME
⑤	2x10 BOTTOM FRAME CROSS MEMBER
⑥	2x6 DECKING
⑦	2x4 CLEATS
⑧	NOT SHOWN
⑨	2x4 BRACING (DIAGONAL & HORIZONTAL)
⑩	2x6 PLATES
⑪	2x6 TOP DECK JOISTS
⑫	2x6 TOP DECK CROSS FRAMING
⑬	870-LBS. COUNTERWEIGHT (20± 14"x26" SANDBAGS)
⑭	4x4 #2 SO. PINE RAILING POST (@ OUT-SIDE EDGE OF GANGED PLATE, ONLY)
⑮	2x4 RAILING (@ OUTSIDE EDGE OF GANGED PLATFORMS ONLY)
⑯	2x6 BLOCKING
A	(2) 10d SINKER (0.120"x2.875") NAILS INTO ANGLED FRAMING MEMBERS
B	(4) 10d SINKER (0.120"x2.875") NAILS FROM DECK JOISTS TO FRONT BRACE
C	(4) 10d SINKER (0.120"x2.875") NAILS FRONT BRACE TO VERTICAL POST
D	(3) 10d SINKER (0.120"x2.875") NAILS BOTTOM FRAME TO CROSS MEMBER
E	(4) 10d SINKER (0.120"x2.875") NAILS FROM VERTICAL POST TO DECK JOIST
F	(5) 10d SINKER (0.120"x2.875") NAILS FROM ANGLED FRAMING TO VERT. POST
G	(5) 10d SINKER (0.120"x2.875") NAILS FROM ANGLED FRAMING TO BOTT. FRAME
H	(2) 1/2" Ø BOLTS THRU ALL PILES
I	(5) 10d SINKER (0.120"x2.875") NAILS FROM RAIL TO POST
J	(3) 10d SINKER (0.120"x2.875") NAILS FROM RAIL TO POST

LEGEND: PLATFORM RAFTS	
MARK	ITEM
①	2x10 FRAMING - SMALL RAFT
②	2x8 DECKING - SMALL RAFT
③	2x10 FRAMING - LARGE RAFT
④	2x8 DECKING- LARGE RAFT
⑤	55-GALLON DRUMS
⑥	STEEL CLIP ANGLE (4 TO EA. RAFT)
A	(4) #8x3" SCREWS FROM DECKING INTO FRAMING FOR EACH BARREL
B	(2) 10d SINKER (0.120"x2.875") NAILS FROM CLIP ANGLE TO EACH 2x

LEGEND: RESCUE RAFT	
MARK	ITEM
①	1 3/4"x11 1/8" LVL FRAMING
②	2x12 FRAMING
③	2x10 DECKING
④	2x6 DIAGONAL BRACING
⑤	NOT USED
⑥	55-GALLON DRUMS
A	(2) #8x3" SCREWS FROM DECKING INTO EACH CROSSING MEMBER
B	(6) 10d SINKER (0.120"x2.875") JOE NAILS FROM 2x12 TO 2x12 OR LVL

NOTES

1. MAXIMUM 8 PEOPLE ON TOP DECK AND 1 PERSON ON ANGLED WALL/BOTTOM FRAME.
2. ALL LUMBER SHALL BE #1/2 SPRUCE-PINE-FIR OR BETTER, UNLESS NOTED OTHERWISE.
3. ANALYSIS AND DESIGN OF RAILING NEGLECTED.
4. STANDARD 22.5" DIAM. x 33.5" DRUM DIMENSIONS ASSUMED. OTHER DRUM SIZES MAY REQUIRE ADJUSTMENTS TO RAFT DIMENSIONS.
5. MAXIMUM 15 PEOPLE + 20-LBS OF GEAR EACH PERSON ON RESCUE RAFT.

WALK THE PLANK TOUGH MUDDER

45 WASHINGTON STREET #221
BROOKLYN, NY 11201

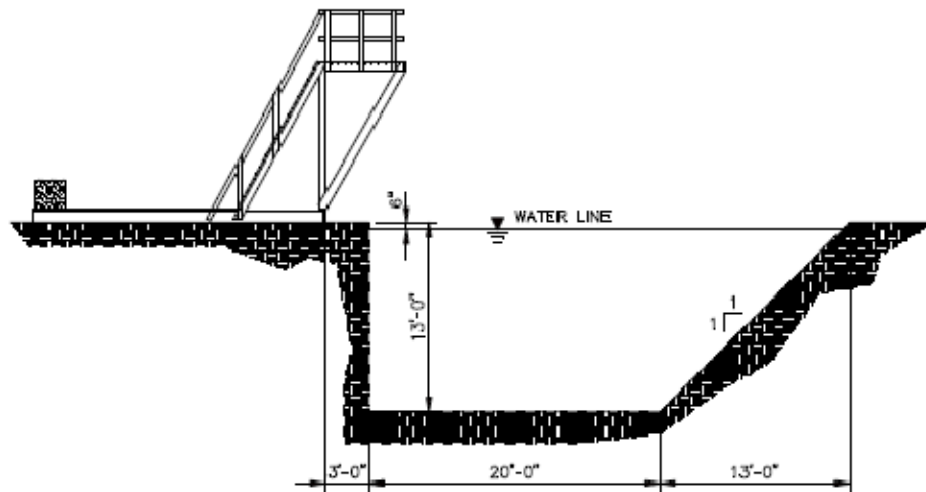
SCALE: AS NOTED
DATE: 11/28/12
BY: CSB
DRAWING:

S3.02

SHEET: 2 of 6

LOCK RIDGE ENGINEERING, LLC

160 MAIN STREET
ETHANES, PA 18049
610-704-6676
lockridge1@gmail.com



SECTION 1
 SCALE: $\frac{1}{8}" = 1'-0"$ (S3.06)

LOCK RIDGE ENGINEERING, LLC

160 MAIN STREET
 EPHRAUS, PA 18049
 610-704-6676
 lockridge1@gmail.com

TOUGH MUDDER
 45 WASHINGTON STREET #221
 BROOKLYN, NY 11201

SCALE: AS NOTED

DATE: 11/28/12

BY: GSB

DRAWING:

S3.06

SHEET: 6 of 6



OBSTACLE TYPE: Lower Body

EXCAVATION REQUIRED: No

Water Needed: No

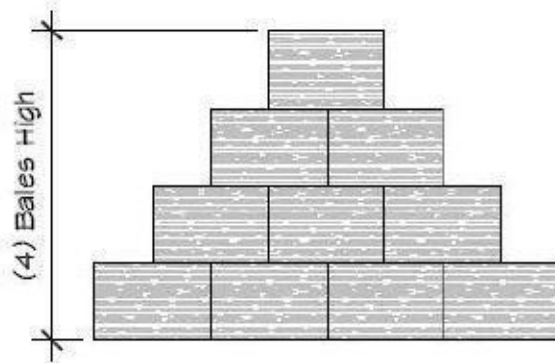
GPS:

King of the Mountain

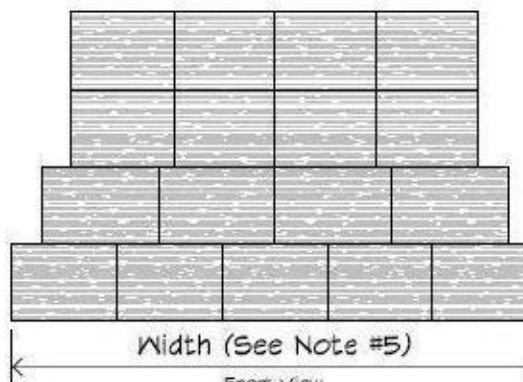
DESCRIPTION: This obstacle consists of a stack of large hay bales roughly 30' high. The bales are stacked in the shape of a ziggurat. Participants use the steps on the ziggurat to climb to the top.

NOTES:

1. Use Round Hay Bales to build obstacle.
2. Hay Bales must be between 8-8 feet in height, min. 48" in width
3. Hay Bales must be arranged as close together as possible.
4. Hay Bales should be wrapped in cloth netting
5. Width as stated per Exhibit B: Obstacle List



End View



Front View

Hay Bales

SCALE: 1/2"=1'-0"

REVISIONS		
No.	Date	Description
1	11.12	For Review



WATER LOGGED



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Endurance

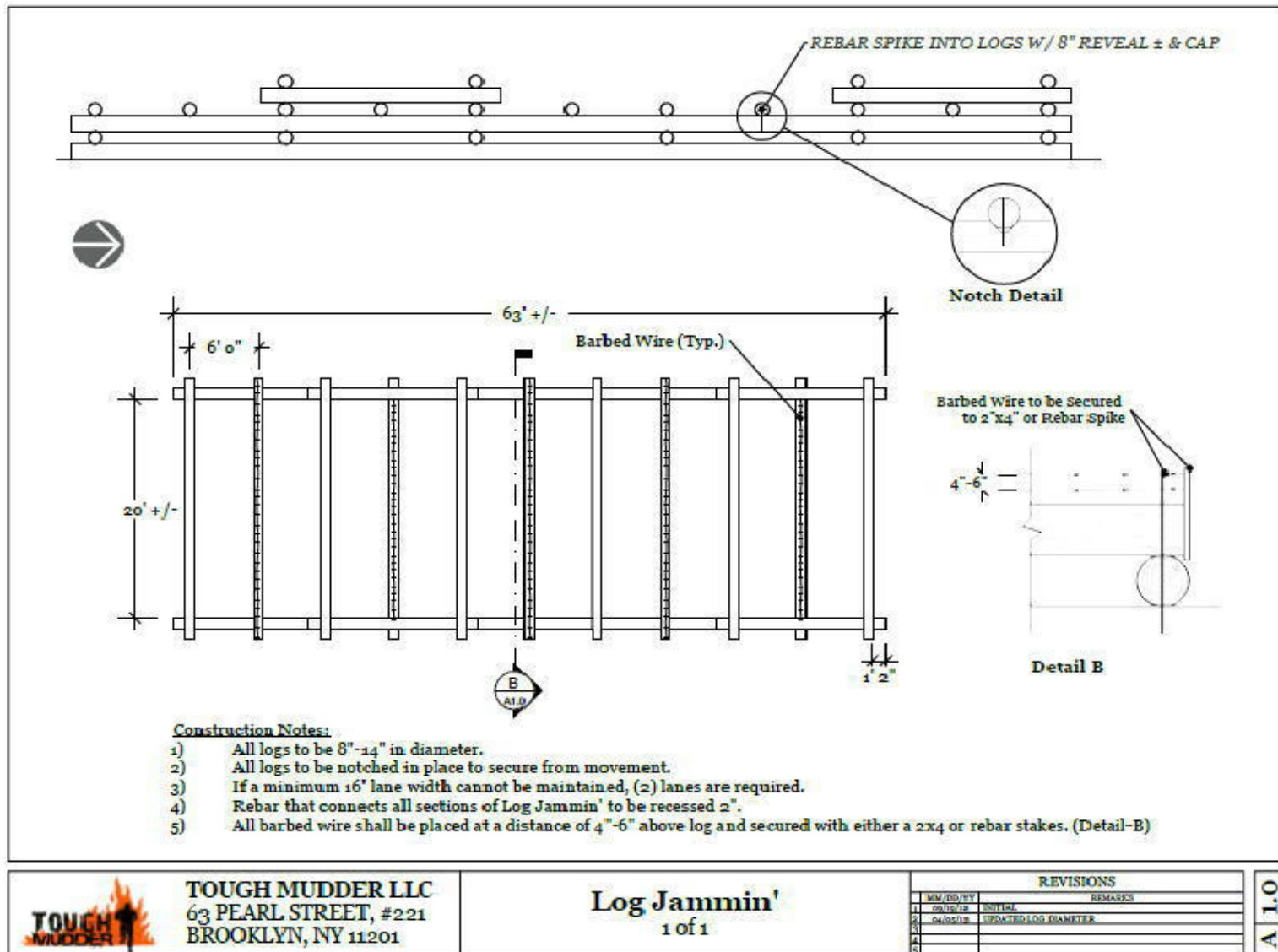
EXCAVATION REQUIRED: No

Water Needed: Yes

GPS:

Water Logged

DESCRIPTION: This obstacle is built by stacking rough cut logs in a wood frame 30' wide by 50' long. Inside the frame, logs are placed with spaces between so that participants can crawl under and over. Water is then sprayed at participants as they pass through.



Note: Water Logged uses the same structure as Log Jammin'.

WARRIOR CARRY



for the confidential use of
the recipients only





OBSTACLE TYPE: Teamwork /
Endurance

EXCAVATION REQUIRED: No

Water Needed: No

Warrior Carry

DESCRIPTION: This obstacle requires one participant to carry another participant 50 yards. Once they reach the halfway/switch point the participant that was being carried will then carry the other participant another 50 yards.

8/26/2013

Course Department

HOLD YOUR WOOD



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Endurance /
Teamwork

EXCAVATION REQUIRED: No

Water Needed: No

Hold Your Wood

DESCRIPTION: This obstacle consists of 300-400 pieces of wood cut to weigh 25lbs for individual logs and about 100lbs for team logs. Participants carry the wood in a ¼ mile loop.

8/26/2013

Course Department

Construction Notes:

- HYW-001 25% of the logs should weigh over 100 lbs (5'-12' long)
- HYW-002 75% of the logs should weigh 20-40 lbs
- HYW-003 At event, Logs should be piled into two piles, one for short logs and one for long logs.
- HYW-004 Location of Piles will be indicated by TMHQ Course Manager
- HYW-005 Log piles should not obstruct the course path.
- HYW-006 Wood should not be rotten or deteriorated



Hold Your Wood



10/18/12

ML

Rev: 1

Page: 1 of 1

TRENCH WARFARE



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Mental Grit

EXCAVATION REQUIRED: 30'x3'x3' per

Water Needed: No

Trench Warfare

DESCRIPTION: This obstacle consist of a series of 6-12 underground tunnels. Typically dug with a kink at the midpoint to prevent light from being seen the whole way through. Participants are to crawl from end to end.

MUD MILE



This document is for the confidential use of
the recipients only





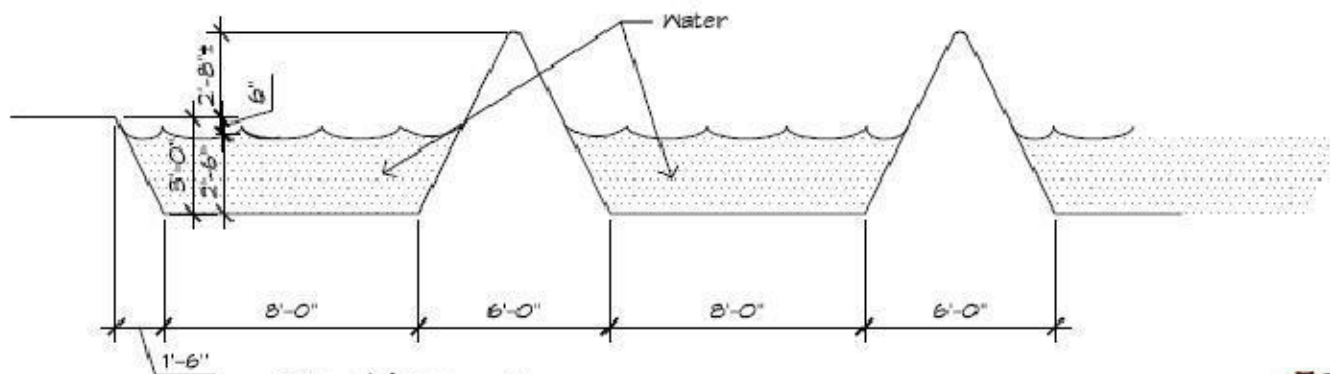
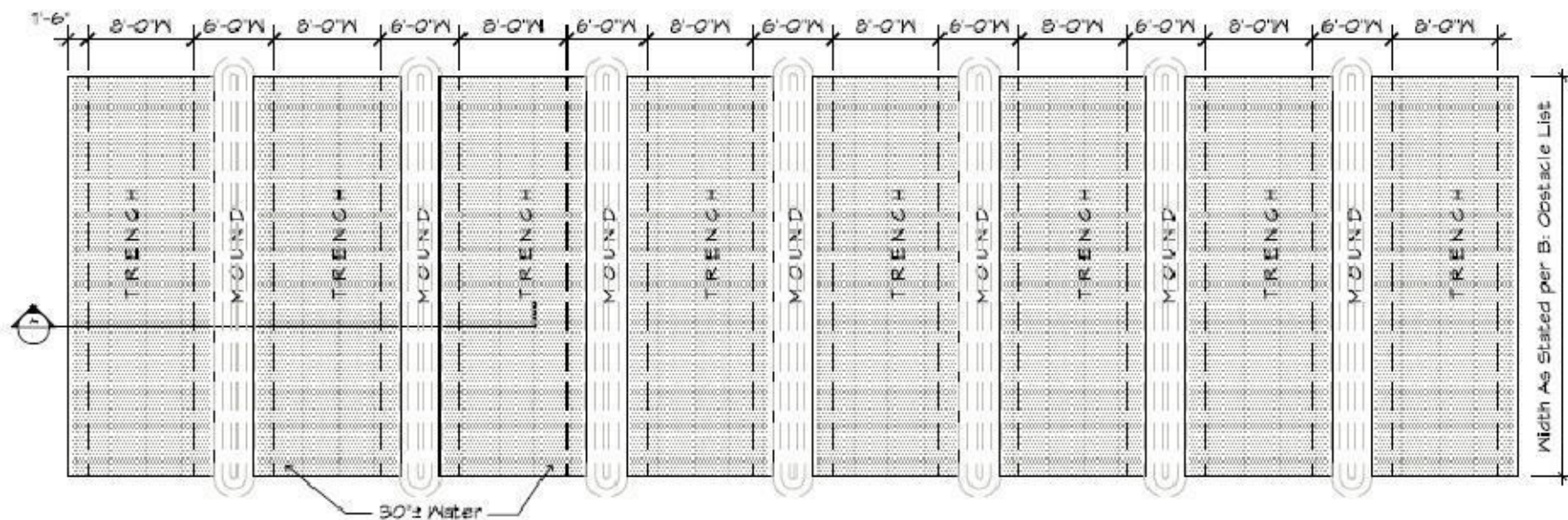
OBSTACLE TYPE: Endurance

EXCAVATION REQUIRED: 30'x5'x3' per pit

Water Needed: 3,300 US gal per pit

Mud Mile

DESCRIPTION: This obstacle is created by digging out a long section of mud roughly 30' wide x 200' long. Mounds are placed in the middle to add to the difficulty. Each section of mud is roughly 3'-4' deep.



Section - A

Mud Mile

SCALE: 3/16" = 1'-0"

REVISIONS		
No.	Date	Description
11.13.13		For Review



This document is for the confidential use of
the recipients only

BERLIN WALLS



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Upper Body

EXCAVATION REQUIRED: No

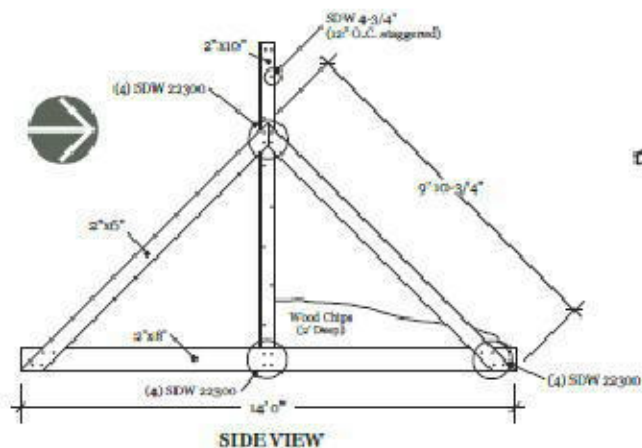
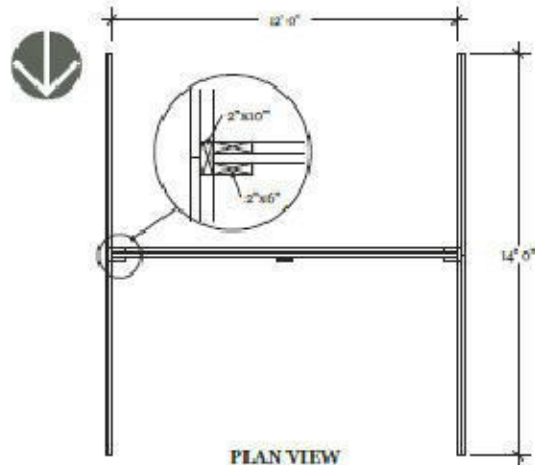
Water Needed: No

Berlin Walls

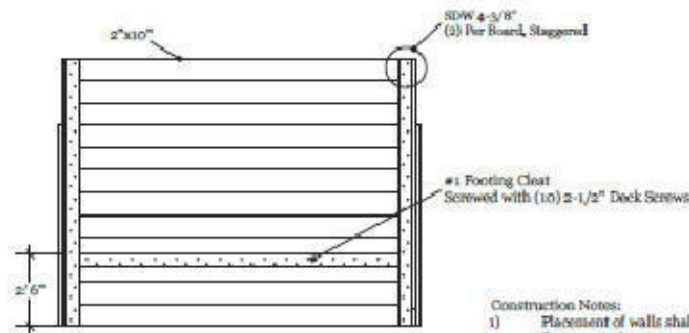
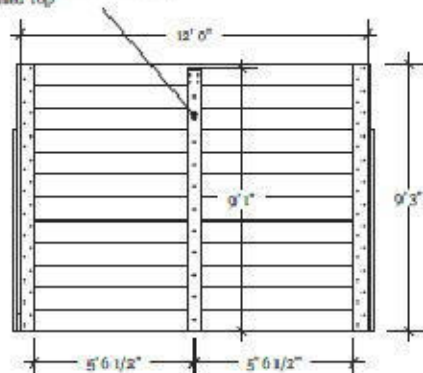
DESCRIPTION: Two sets of (4) walls 12' wide and 7'-8' tall. Participants climb up and over the walls.

8/26/2013

Course Department



2"x6" (Screwed with 2-1/2" Deck Screws)
Flat with Beveled Top



Construction Notes:

- 1) Placement of walls shall be verified by Tough Mudder Course Representative
- 2) Walls to be assembled using SDW 22300 fasteners unless otherwise specified
- 3) Final structure shall be clean of protruding nails, screws, or sharp edges of any kind.

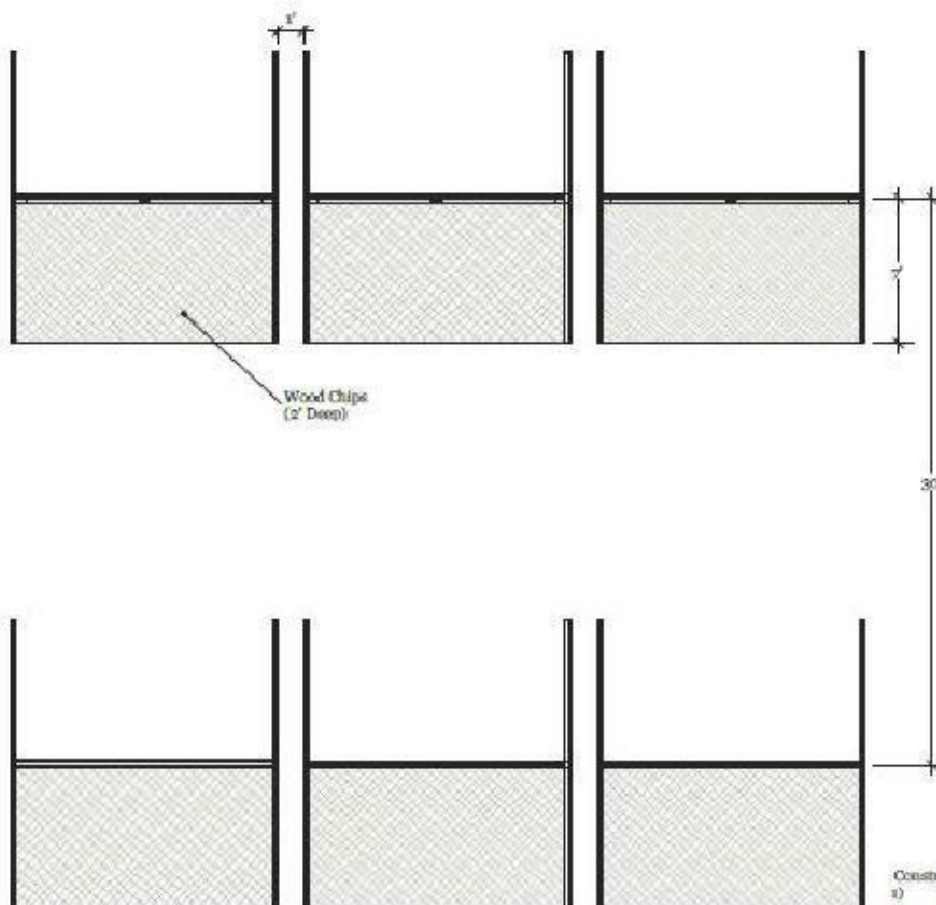


TOUGH MUDDER LLC
43 PEARL STREET, #221
BROOKLYN, NY 11201

BERLIN WALLS
1 of 2

REVISIONS	
NO.	DESCRIPTION
1	INITIAL REVISION
2	ADMINISTRATIVE CHANGES, CHANGED FLIGHT HEIGHT, ADDED SIDE VIEW
3	
4	
5	

A 1.0



Construction Notes:

- 1) Placement of walls shall be verified by Tough Mudder Course Representative
- 2) Walls to be assembled using SDW 22300 fasteners unless otherwise specified
- 3) Final structure shall be clean of protruding nails, screws, or sharp edges of any kind.



TOUGH MUDDER LLC

63 PEARL STREET, #221
BROOKLYN, NY 11201

BERLIN WALLS

2 of 2

REVISIONS	
NO.	DESCRIPTION
1	INITIAL RELEASE
2	ADMINISTRATIVE CHANGES, CHANGED CLAY WEIGHT, & DOWD 800000
3	
4	
5	

1.1

BOA CONSTRICTOR



This document is for the confidential use of
the recipients only





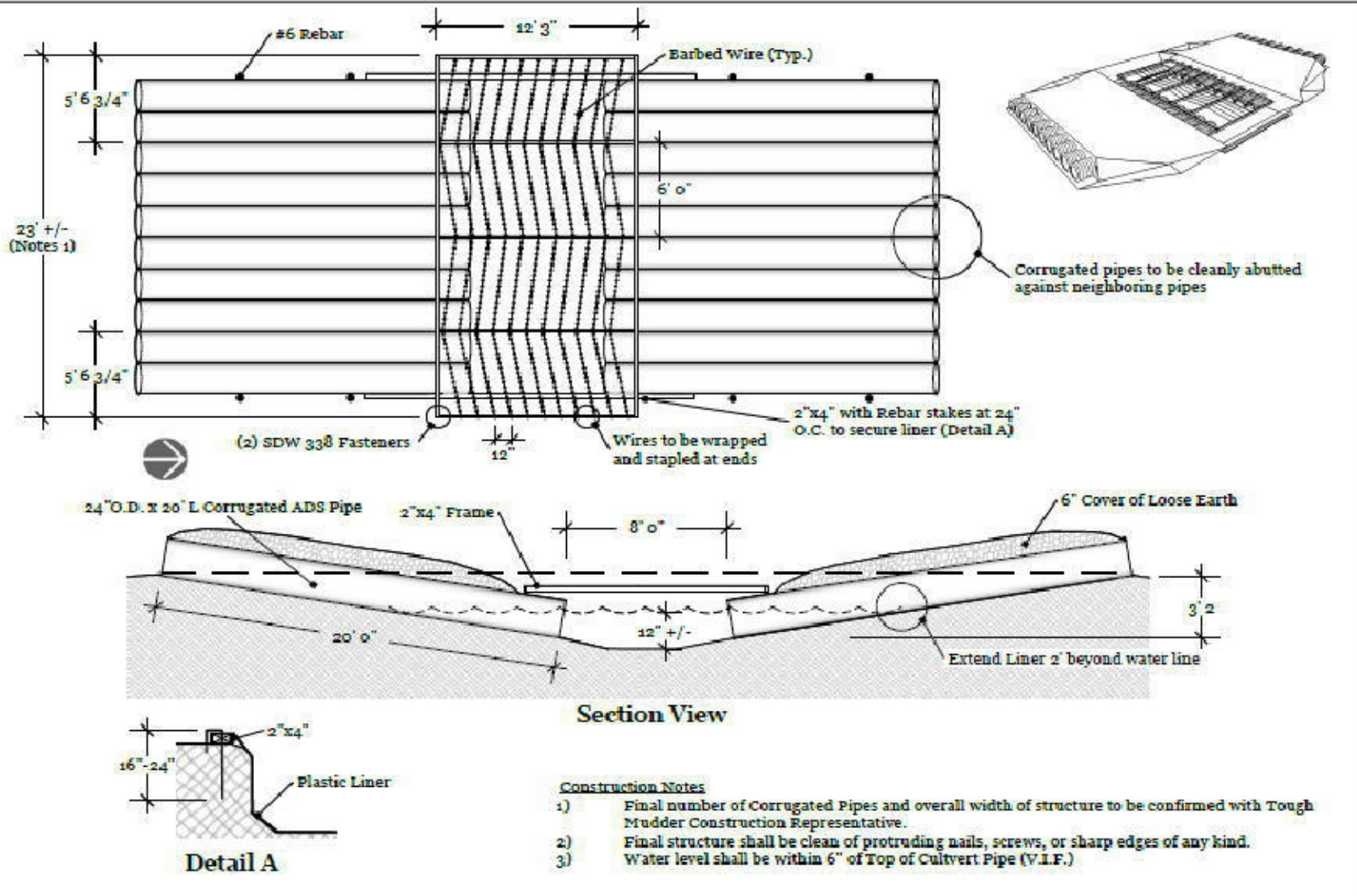
OBSTACLE TYPE: Mental Grit?

EXCAVATION REQUIRED: 10'x25'x1'

Water Needed: 1,800 US gal

Boa Constrictor

DESCRIPTION: Consists of a crawl through plastic culverts, 2'-2.5' diameter with a mud pit dug out between the sets. Barbed wire is used to cover the gap to keep participants from standing in the middle.



TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

Boa Constrictor
1 of 1

REVISIONS

NO.	DATE	REVISION
1	11/20/12	INITIAL
2	04/05/13	MINOR ADMINISTRATIVE & FOUNDATION CHANGES
3		
4		
5		

A 1.0

ELECTRIC EEL



This document is for the confidential use of
the recipients only





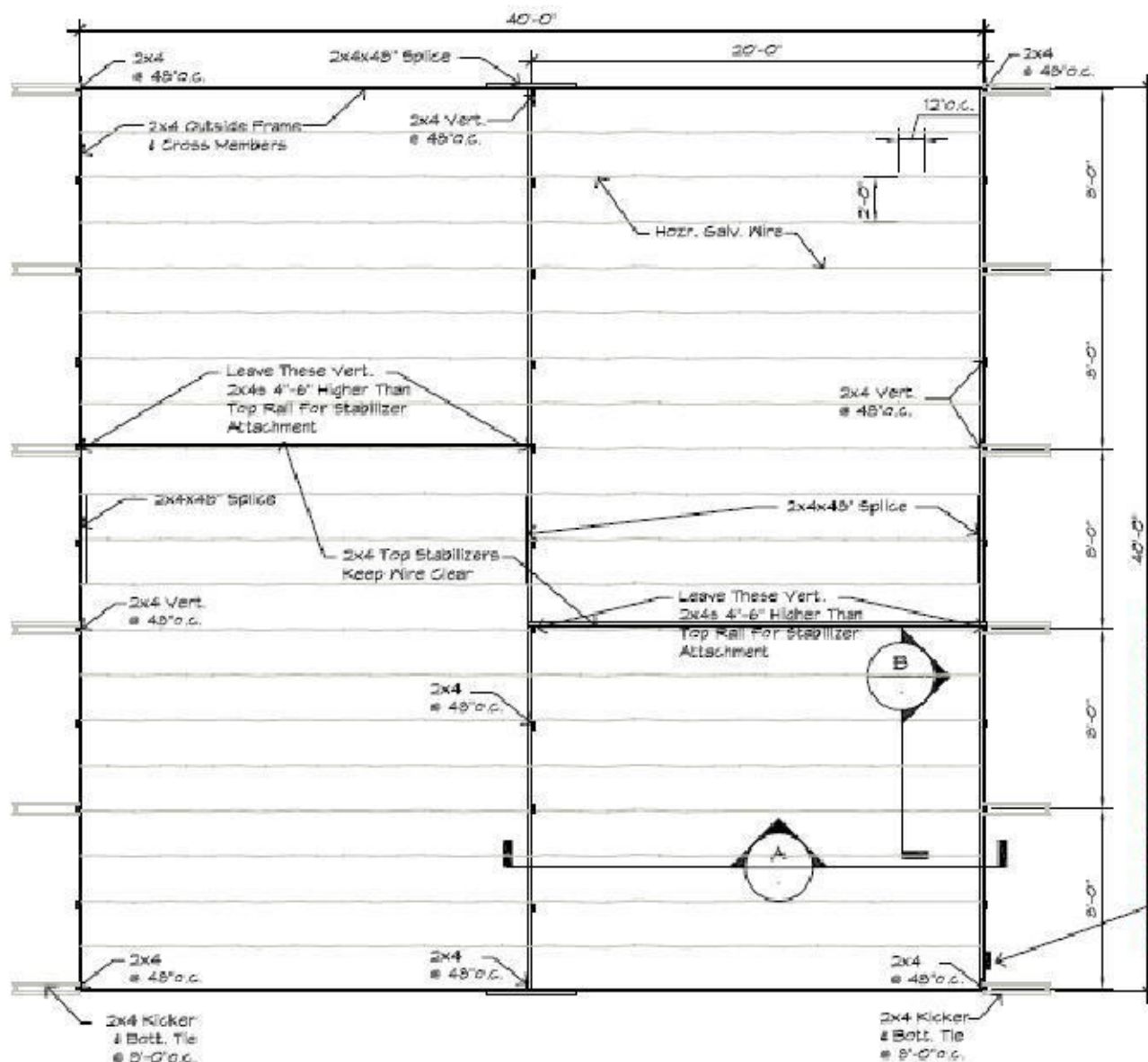
OBSTACLE TYPE: Mental Grit

EXCAVATION REQUIRED: No

Water Needed: 1,000 US gal

Electric Eel

DESCRIPTION: A belly down crawl over a water covered plastic liner. Over the top of the liner are 60-100. 6" electrified wires strung 8" off the liner. Participants must slide along the liner to avoid being shocked.

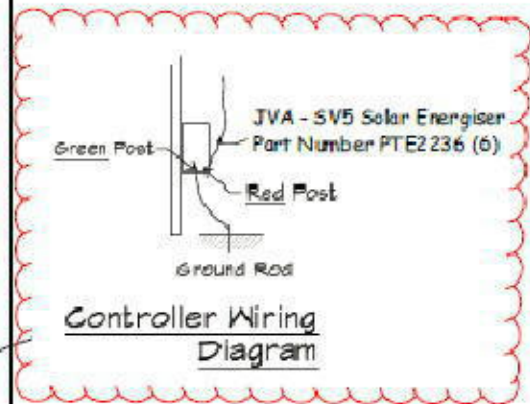


Plan View

This document is for the confidential use of
the recipients only

Notes:

1. Insulators shall be placed on all wooden framing for wiring.
2. All ground rods to be copper.
3. Cut Polywire danglers 2" above water level to prevent grounding.
4. Excavate existing grade to a minimum depth of 6".
5. Install 2x4 kickers w/ stakes @ minimum 8'-0" o.c.
6. Solar Energiser (PTE2236) shall be secured to the structure such that it is not obstructed from sunlight by shadows or spectators at any time during the event.



Electric Eel

SCALE: N.T.S.
page 1 of 2

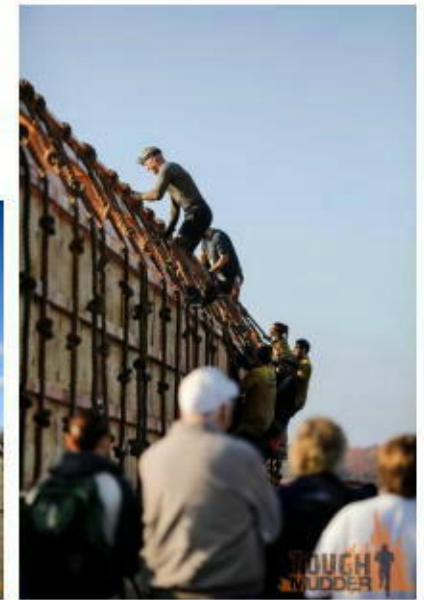


REVISIONS		
No.	Date	Description
1	07/10	FOR REVIEW
2	05/25/18	Added Wiring Diagram

BALLS TO THE WALLS



This document is for the confidential use of
the recipients only



OBSTACLE TYPE: Upper Body

EXCAVATION REQUIRED: No

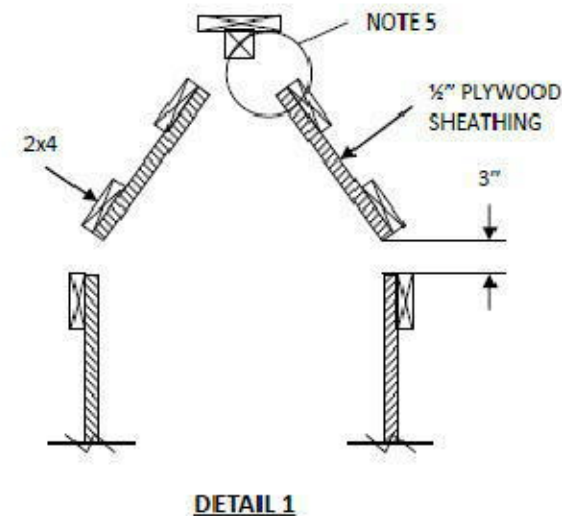
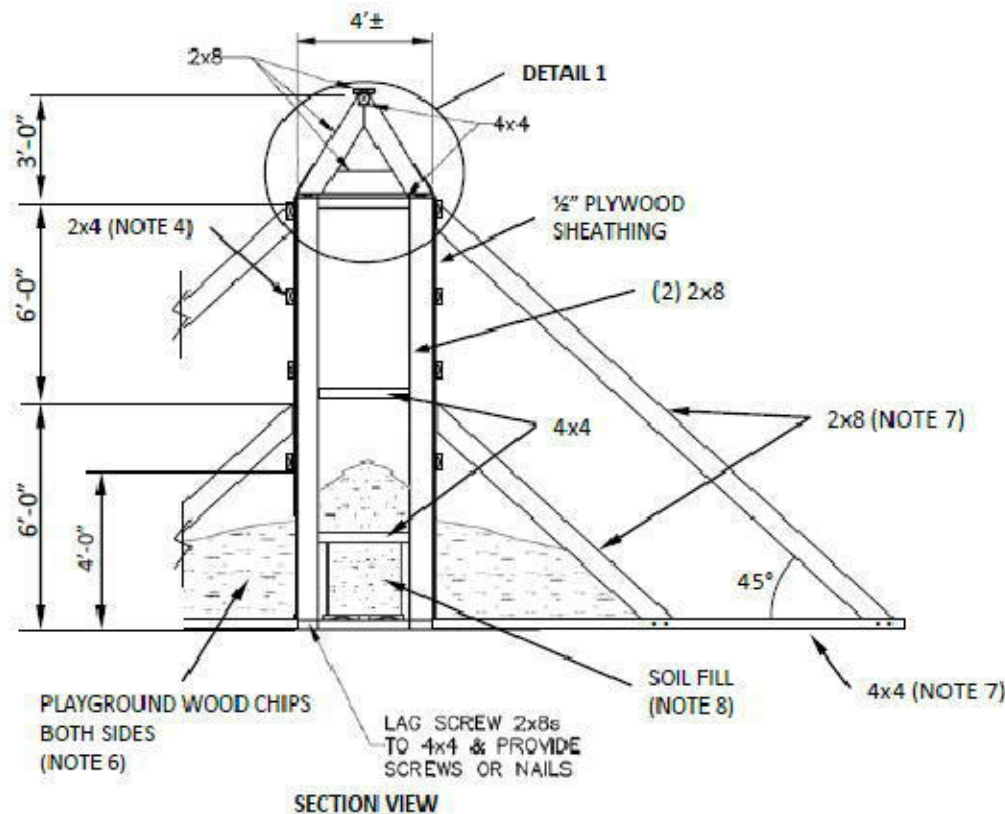
Water Needed: No

Balls to the Wall

DESCRIPTION: This obstacle consists of a wooden structure that is about 15' tall and has ropes that hang down each side. There are also boards that run horizontal on the wall to assist the climb. Participant climb the ropes up the wall and the lower themselves on the other side. Hay/Mulch is added to either side to reduce impact of fall.

8/26/2013

Course Department



CONSTRUCTION NOTES

- NOTE 1: FRAMES SPACED AT 48" O.C.
- NOTE 2: THE FINAL SIZE OF THE OBSTACLE AND THE NUMBER OF ROPE LANES USED SHALL BE DETERMINED BY TM CONSTRUCTION REPRESENTATIVES.
- NOTE 3: ALL LUMBER SHALL BE #1/#2 SPRUCE-PINE-FIR OR BETTER, UNLESS OTHERWISE NOTED.
- NOTE 4: CLEATING SHALL BE FLUSH AGAINST PLYWOOD SHEATHING AND SPACED 2.5' APART
- NOTE 5: GAP SHALL BE LARGE ENOUGH TO FIT ROPE LOOPED THROUGH
- NOTE 6: A MINIMUM OF 3' OF PLAYGROUND WOOD CHIPS BE FILLED ON BOTH SIDES. EACH SIDE SHALL SPAN 6' FROM THE BASE OF THE OBSTACLE.
- NOTE 7: KICKER SUPPORTS SHALL BE PLACED EVERY TEN (10) FRAMES, STARTING ON THE FIRST FRAME.
- NOTE 8: FILL WITH SOIL AS REQUIRED FOR STABILITY

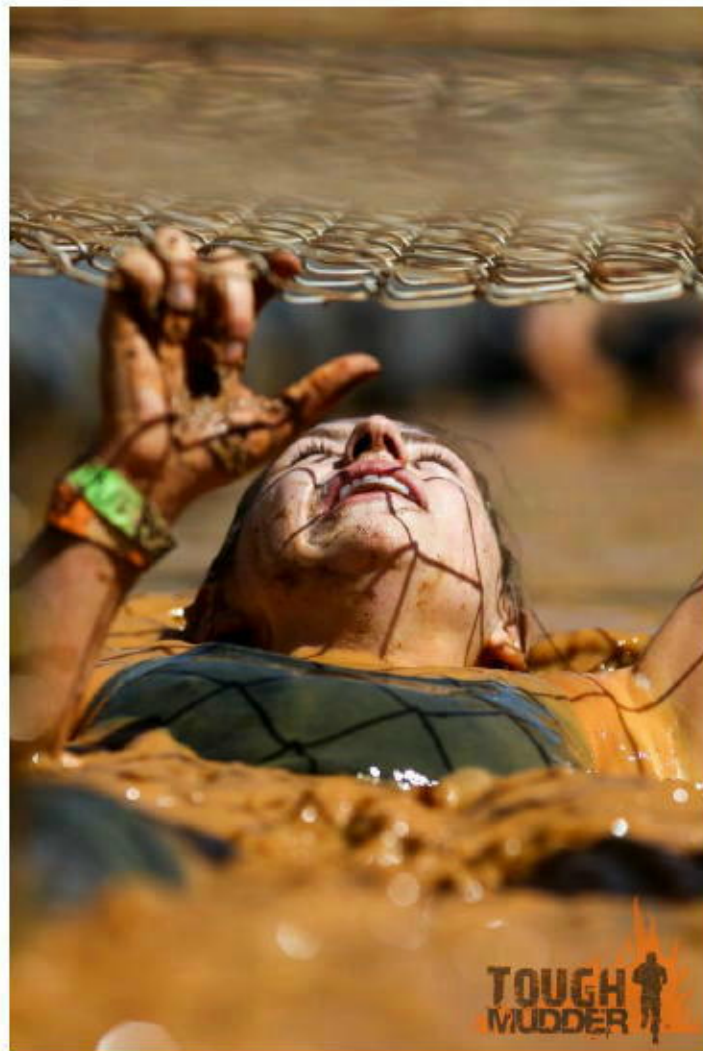
Balls to the Wall			
SK-B2W Pg 1 of 1		Date:	Drawn By:
		12/17/12	
Not to Scale	For Reference Purposes Only		

CAGE CRAWL



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Mental Grit

EXCAVATION REQUIRED: 40'x4'x3'

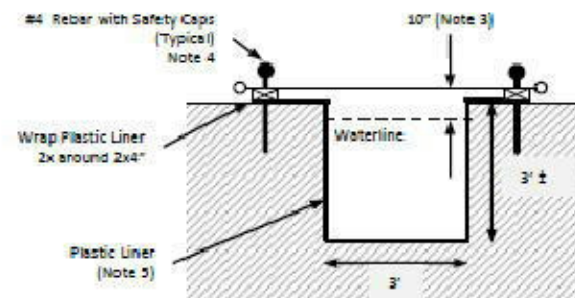
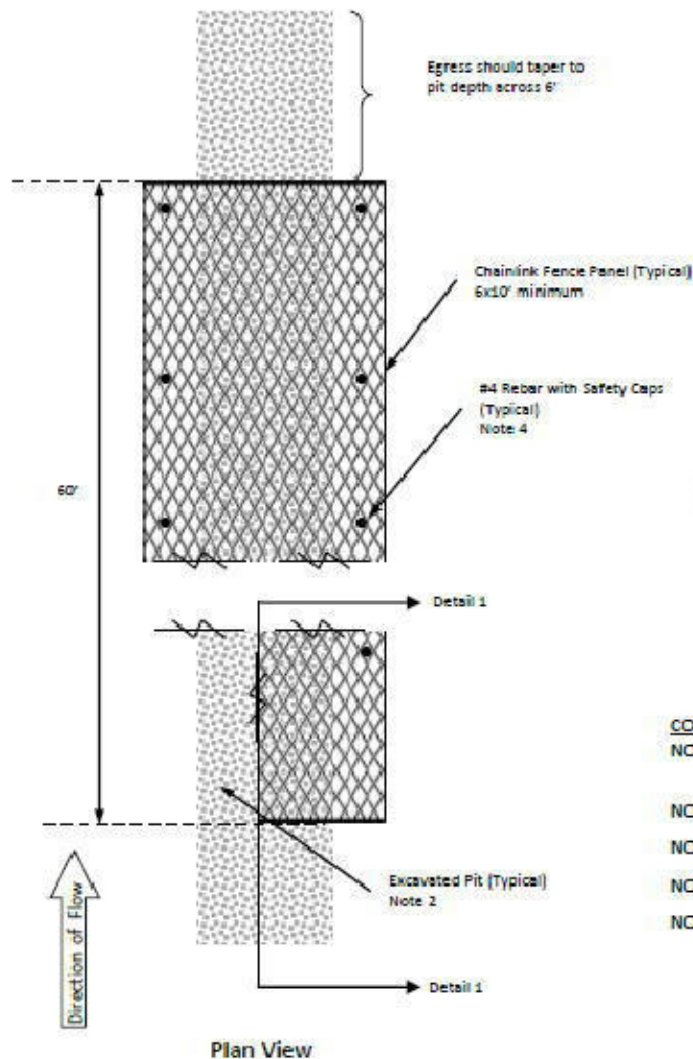
Water Needed: 3,500 US gal per pit

Cage Crawl

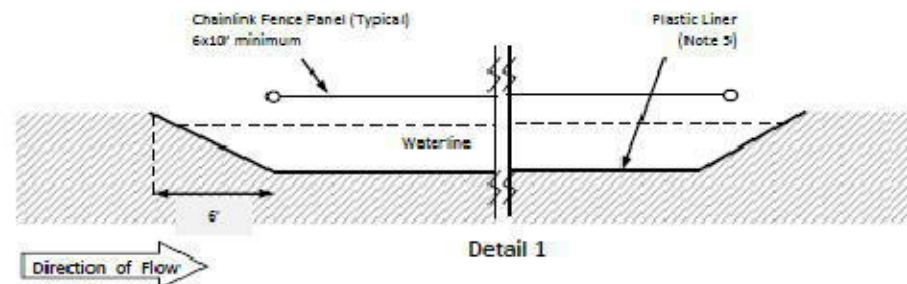
DESCRIPTION: This obstacle consists of a trench with a pond liner filled with water and sections of fencing placed over the water only to allow a few inches of space between. Participants will go under the fence belly as they pull themselves along the fence to the other side of the trench thru the water.

8/26/2013

Course Department



Section View



CONSTRUCTION NOTES

- NOTE 1: The number of lanes shall be defined by Tough Mudder Construction Representatives. Each lane (excavated pit) shall be spaced by 4 feet.
- NOTE 2: Excavated pit, as drawn, shall be level throughout unless otherwise noted.
- NOTE 3: Water level shall be maintained such that it is 10 inches from the Chainlink Fence.
- NOTE 4: Rebar shall be 1' minimum from the edge of the excavated pit. All rebar shall be topped with Safety Caps.
- NOTE 5: Plastic Liner shall be placed throughout each excavated pit.

Pg 1 of 1	Cage Crawl	
	Date:	Drawn By:
	1/9/13	ML
Not to Scale	1.9.13 Cage Crawl (CD)	

FUNKY MONKEY





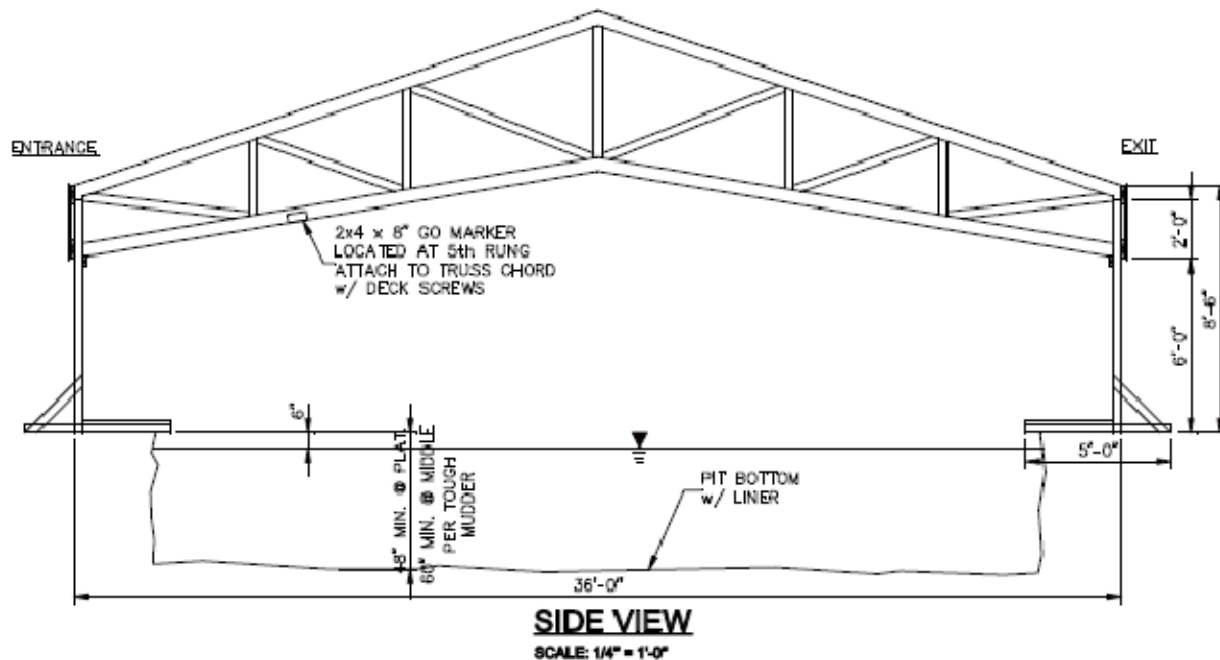
OBSTACLE TYPE: Upper Body

EXCAVATION REQUIRED: 40'x50'x(4'-5')

Water Needed: 74,800 US gal

Funky Monkey

DESCRIPTION: This obstacle is placed over a pit of water at a depth of 5'-6'. The structure is built out of housing trusses with metal pipes placed between as the monkey bars. Participants must swing hand over hand to cross the water pit.



LEGEND	
MARK	ITEM
①	2x8 TRUSS END BLOCKING
②	4x4 SOUTHERN PINE POST
③	NOT SHOWN
④	PRE-ENGINEERED TRUSSES
⑤	2x4 TRUSS BEARING LEDGER
⑥	2x4 LADDER SIDES
⑦	1" LADDER RUNGS
⑧	1/2" PLYWOOD SHEATHING
⑨	2x DECKING
⑩	2x4 BRACE
⑪	2x4 DECK SUPPORT
⑫	2x4 DIAGONAL TRUSS BRACING SEE ALSO TRUSS MANUF. REQUIREMENTS
(A)	(2) 10d SINKER (0.120"x2.875") NAILS @ 16" O.C. FROM LADDER SIDE TO TRUSS
(B)	(4) 10d SINKER (0.120"x2.875") NAILS FROM 2x4 LEDGER TO 4x4 POST
(C)	(3) 10d SINKER (0.120"x2.875") NAILS FROM 2x8 END BLOCKING TO TRUSS
(D)	10d SINKER (0.120"x2.875") NAILS AT 12" O.C.

NOTES

1. MAXIMUM OF (3) PEOPLE IN EACH LANE.
2. EACH TRUSS SHALL BE DESIGNED FOR (3) SIMULTANEOUS 180-LB POINTS OCCURRING AT ANY LOCATION.
3. ALL LUMBER SHALL BE #1/2 SPRUCE-PINE-FIR OR BETTER, UNLESS NOTED OTHERWISE.
4. LATERALLY BRACE ALL TRUSSES AT MID-POINT AND AT A MAXIMUM SPACING OF 10', UNLESS OTHERWISE SPECIFIED BY TRUSS MANUFACTURER.

FUNKY MONKEY TOUGH MUDDER

45 WASHINGTON STREET #221
BROOKLYN, NY 11201

SCALE: AS NOTED

DATE: 11/30/12

BY: C58

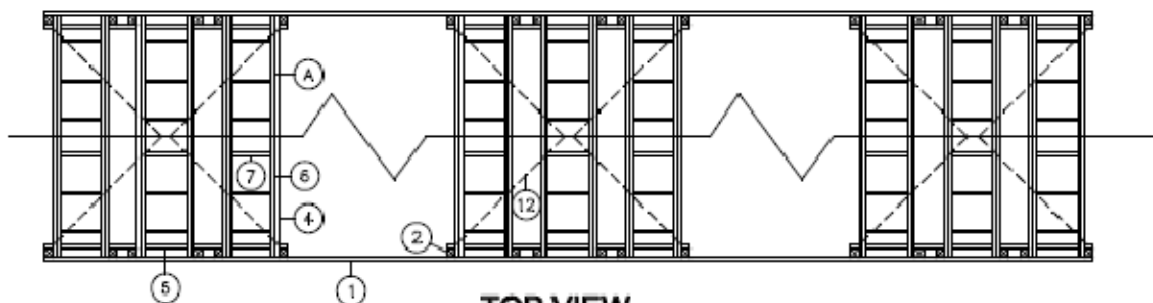
DRAWING:

S4.01

SHEET: 1 of 3

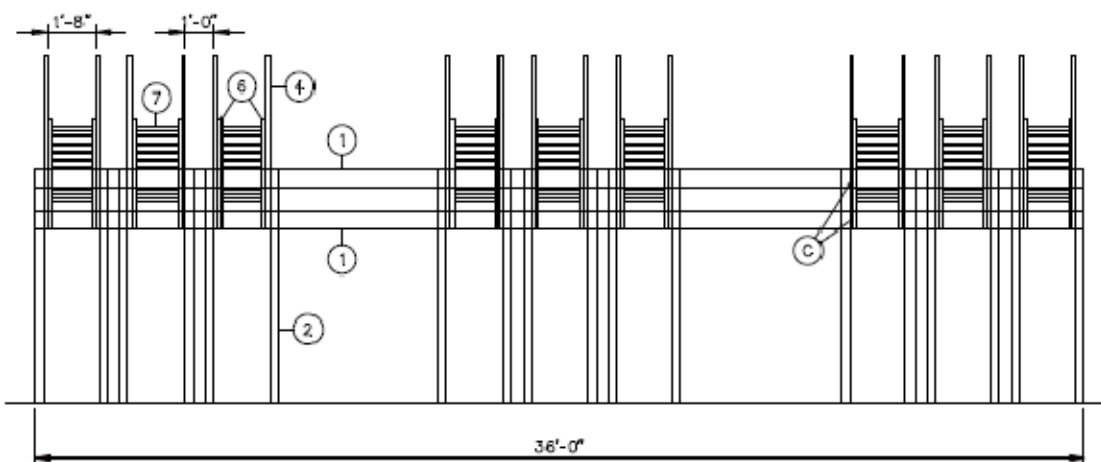
LOCK RIDGE ENGINEERING, LLC

160 MAIN STREET
BETHLEHEM, PA 18046
610-704-6676
lockridge1@gmail.com



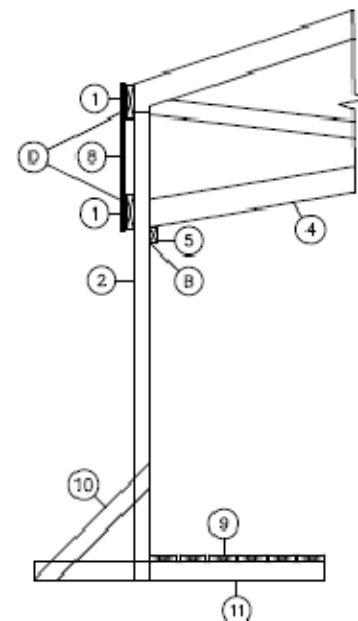
TOP VIEW

SCALE: 1/4" = 1'-0"



END VIEW

SCALE: 1/4" = 1'-0"



ENLARGED SIDE VIEW

SCALE: 1/2" = 1'-0"

LOCK RIDGE ENGINEERING, LLC

160 MAIN STREET
BRIDGES, PA 18049
610-704-6676
lockridge1@gmail.com

**FUNKY MONKEY
TOUGH MUDDER**

45 WASHINGTON STREET #221
BROOKLYN, NY 11201

SCALE: AS NOTED

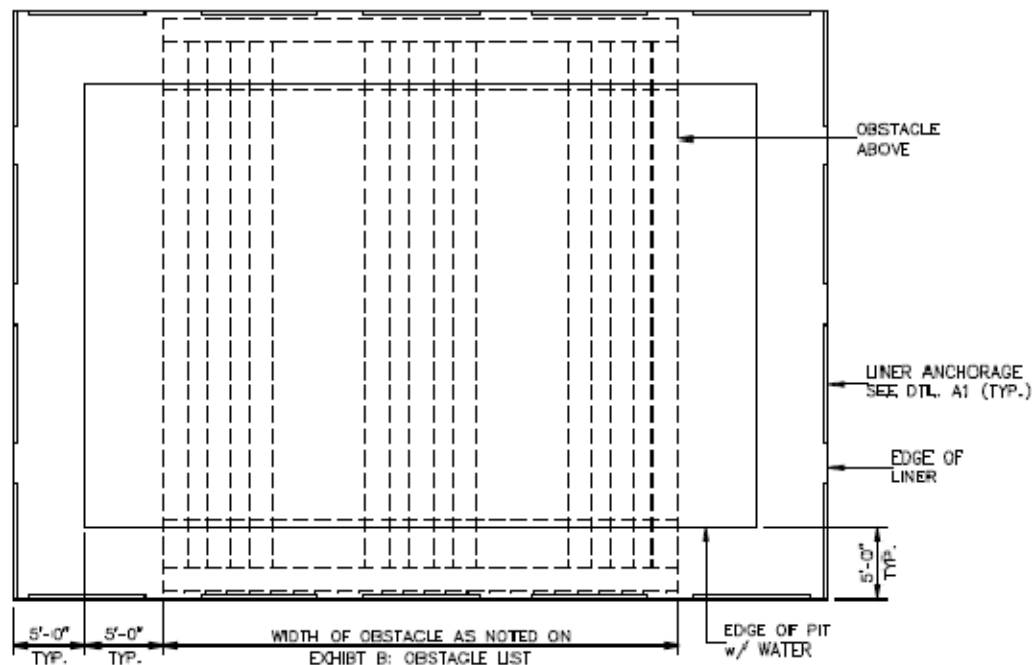
DATE: 11/30/12

BY: GSB

DRAWING:

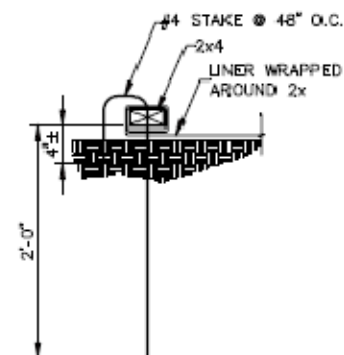
S4.02

SHEET: 2 of 3



OBSTACLE SITE PLAN

SCALE: 1/8" = 1'-0"



DETAIL A1

SCALE: 1" = 1'-0"

LOCK RIDGE ENGINEERING, LLC

160 MAIN STREET
ENHART, PA 18049
610-704-6676
lockridge1@gmail.com

**FUNKY MONKEY
TOUGH MUDDER**

45 WASHINGTON STREET #221
BROOKLYN, NY 11201

SCALE: AS NOTED

DATE: 11/30/12

BY: CSB

DRAWING:

S4.03

SHEET: 3 of 3

EVEREST



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Upper Body /
Team Work

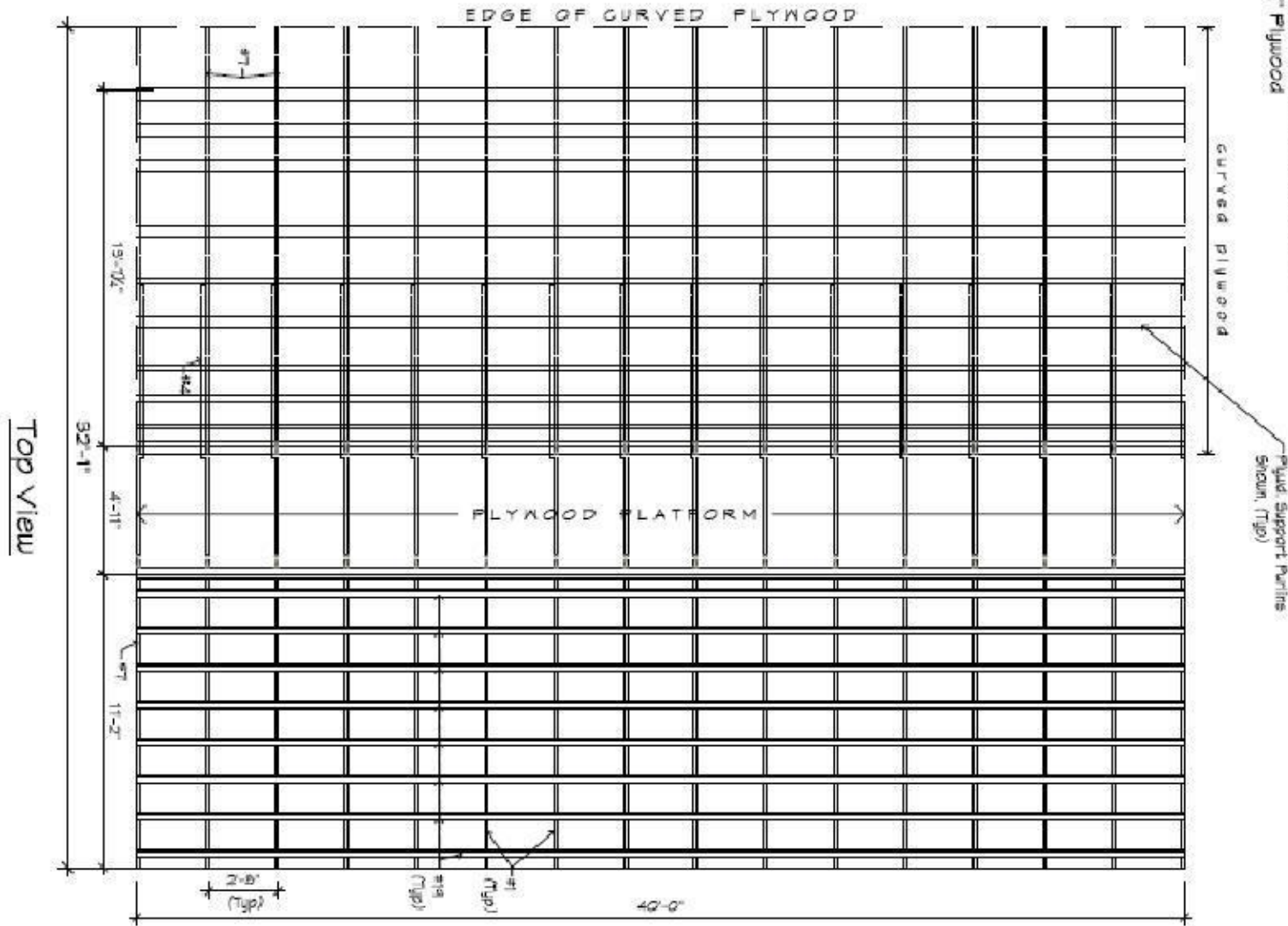
EXCAVATION REQUIRED: No

Water Needed: No

Everest

DESCRIPTION: Consists of a ¼" pipe formed from wood frame set at 12' high. The ramp is faced with a fiber reinforced plastic and sometimes covered in oil or water to make it slick. Participants must run and jump in order to reach the top.

Notes:
 Truss Spacing 32" O.C.
 Total Width 40"
 Railings to be installed on top
 platform and along both slopes
 Curved deck to be (1) layer of
 1/2" Plywood



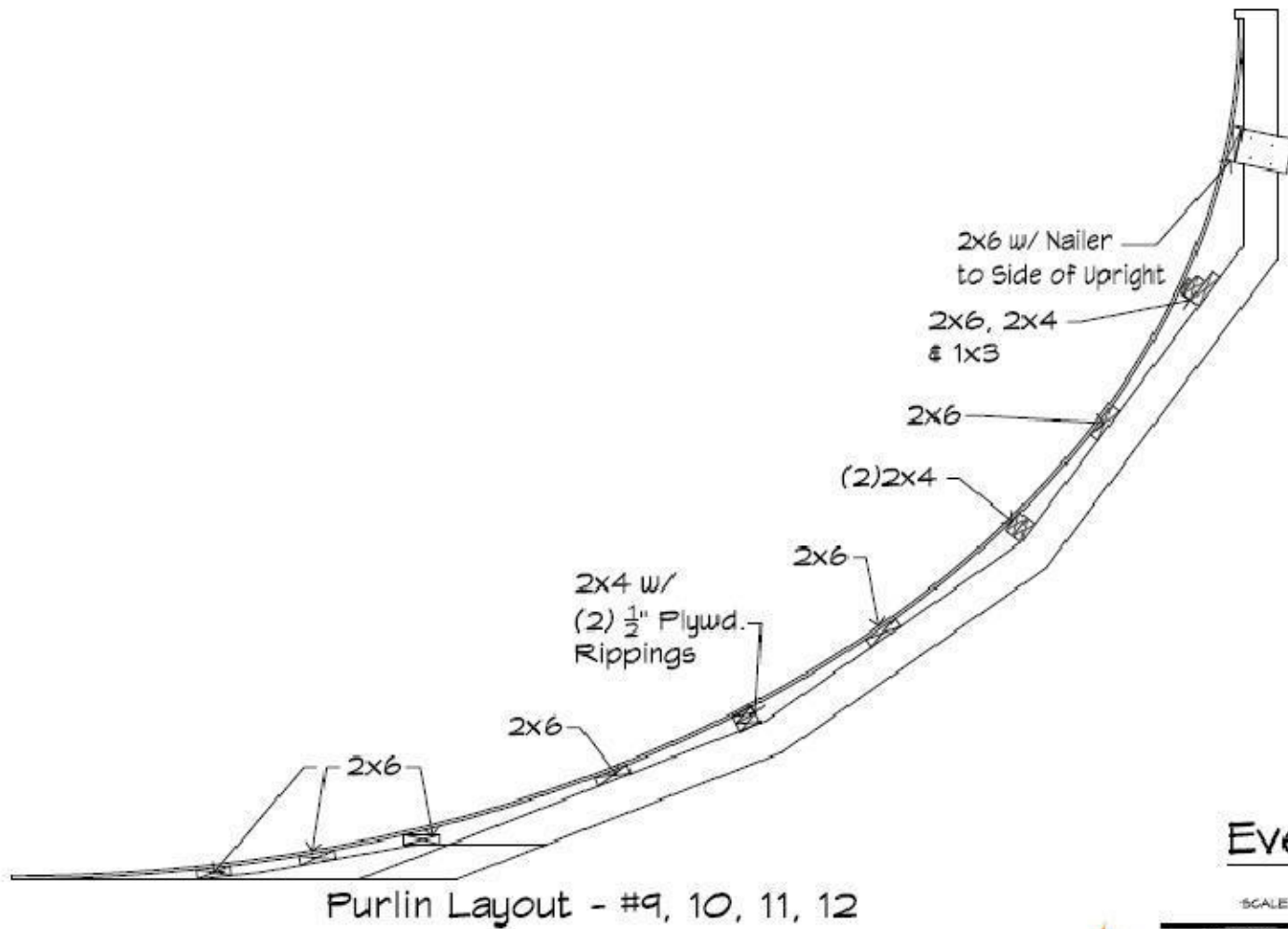
Everest

page 1 of 3
 SCALE 3/16" = 1'-0"



Revisions		
No.	Date	Description
1	11/24/19	Updated

This document is for the confidential use of
 the recipients only



Everest

page 2 of 3

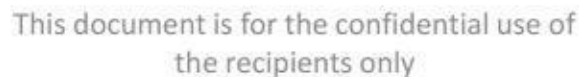
SCALE: 1/4" = 1'-0"

REVISIONS		
No.	Date	Description
1	11/29/12	Updated

This document is for the confidential use of the recipients only



Curved deck to be (1) layer of $\frac{1}{2}$ " Plywood



Revisions		
No	Date	Description
1	11/29/12	Updated



ELECTROSHOCK THERAPY



This document is for the confidential use of
the recipients only





OBSTACLE TYPE: Mental Grit

EXCAVATION REQUIRED: 35'x20'x6"

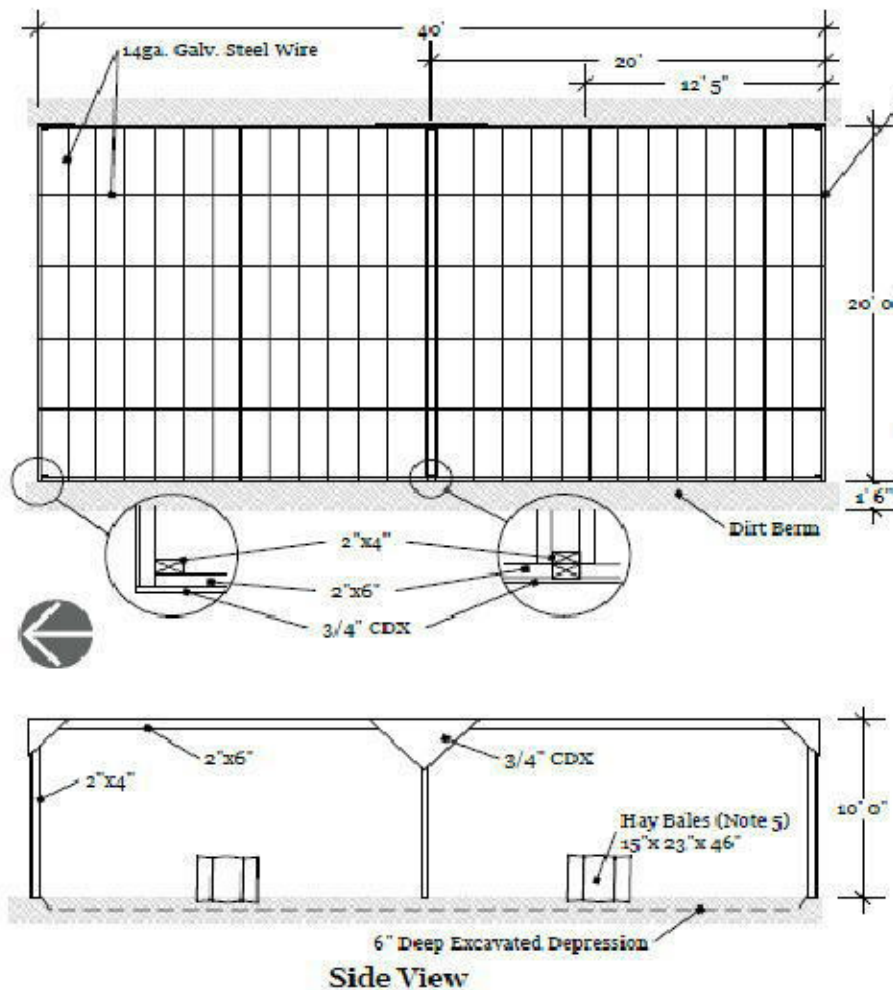
Water Needed: 1000 US gal

Electroshock Therapy

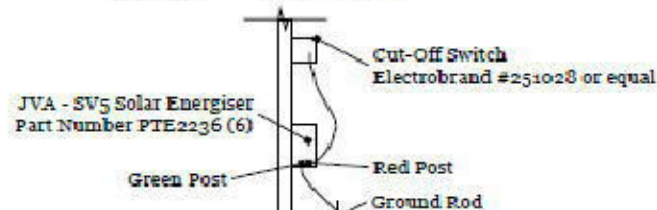
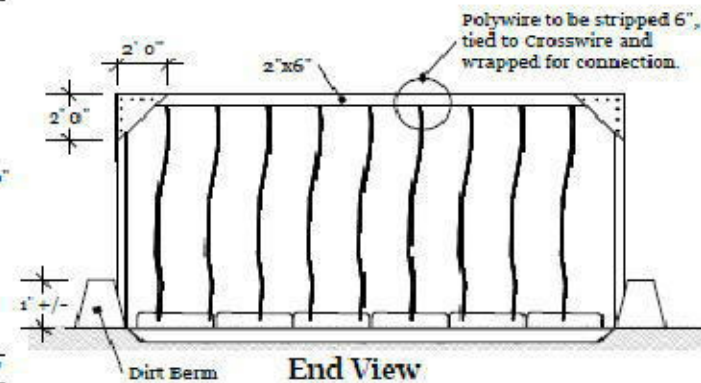
DESCRIPTION: Is the Tough Mudder finishing obstacle and consists of 300-400 electrified wires 10' long strung up in a wood frame structure 12' high x 20' wide x 35' long. This obstacle is typically placed in a mud pit or water hole to increase conductivity. Participants attempt to run through the field of wires without being shocked.

8/26/2013

Course Department



Where wire intersects with 2"x6" beam, attach to Zareba Ring Insulator (Model #IWSIRB-Z) or equal



Controller Wiring Diagram

Construction Notes:

- 1) Final structure shall be clean of protruding nails, screws, or sharp edges of any kind.
- 2) Wires to be at 16" O.C. across the structure with (4) support wires at equal spacing
- 3) All framing connections to be min (2) SDW 300 fasteners
- 4) Rake and remove all loose rocks & stones from the base of the excavation
- 5) Alternate sizes for Hay Bales must be approved by Tough Mudder Construction Manager.



TOUGH MUDDER LLC
63 PEARL STREET, #221
BROOKLYN, NY 11201

Electroshock Therapy
1 of 1

REVISIONS	
REV	REMARKS
1	INITIAL
2	CHANGED CONTROLLER WIRING TO SOLAR ENERGIZER
3	
4	
5	

A 1.0