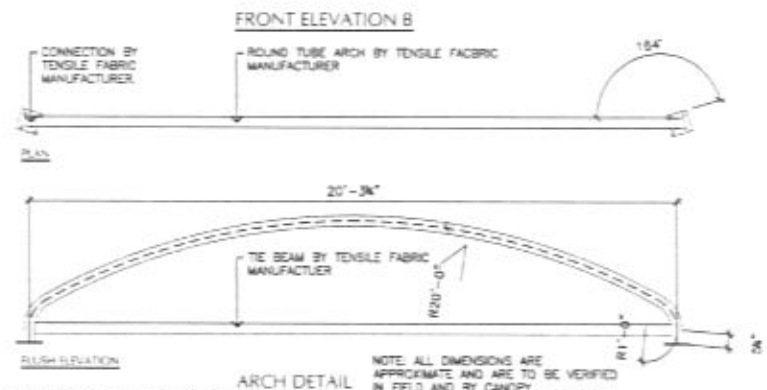
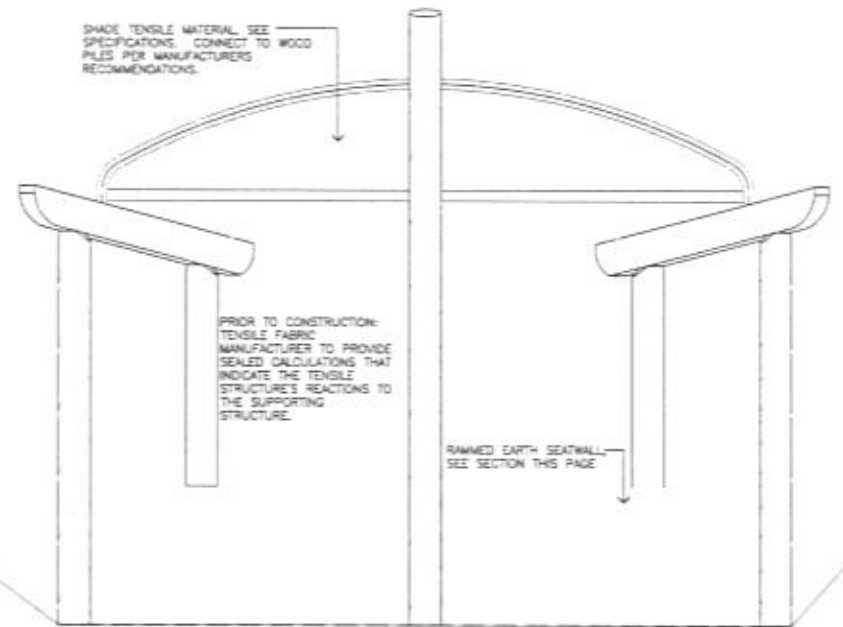
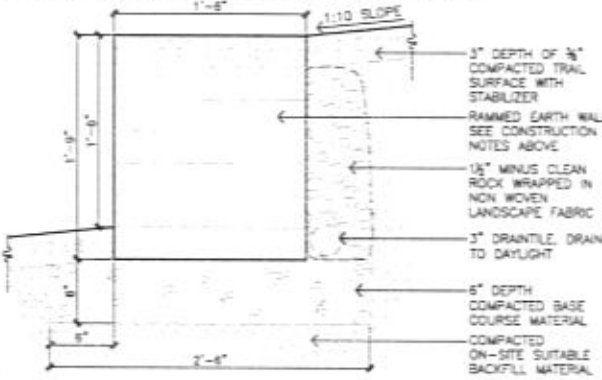


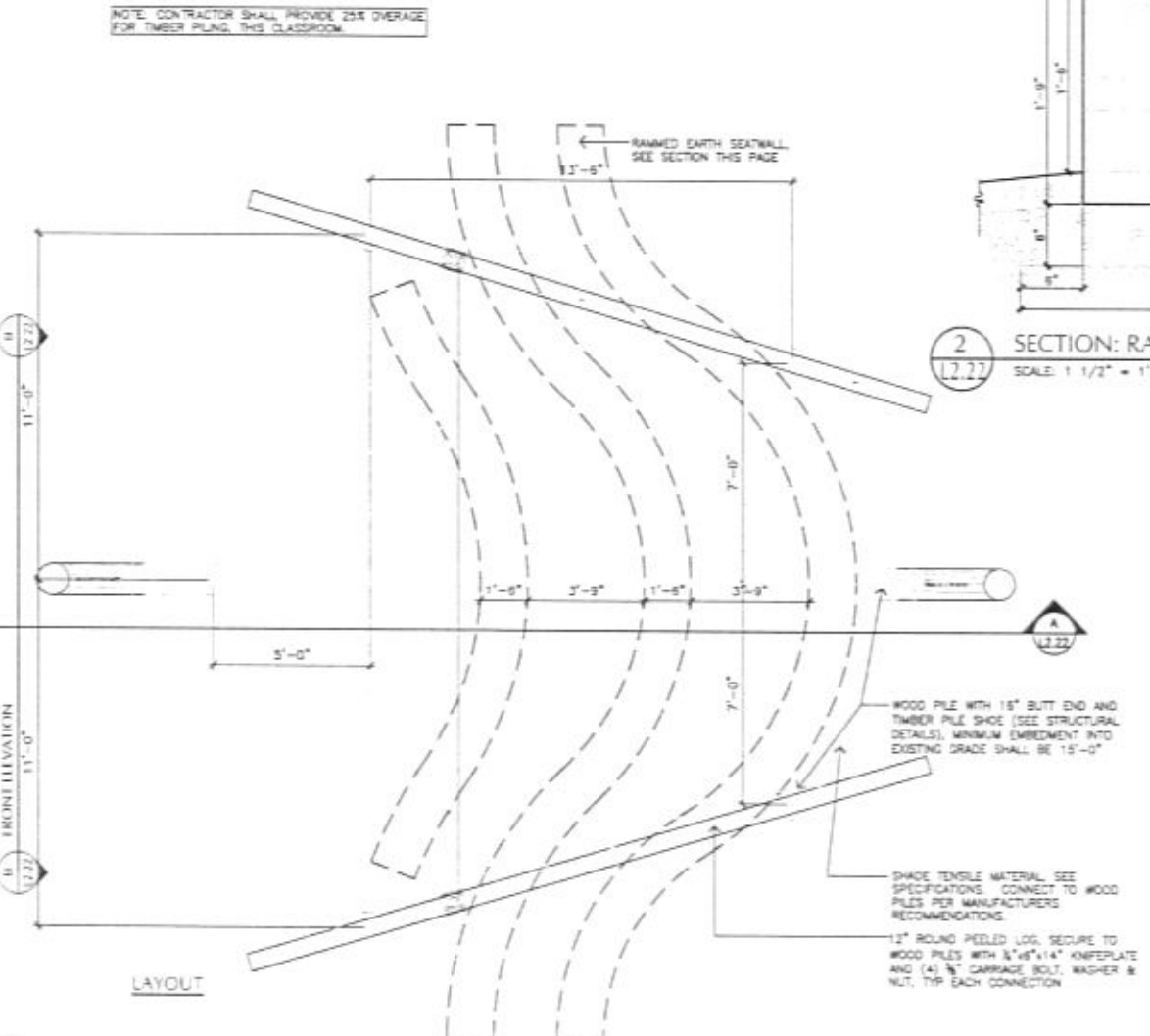
**END CUT RAMMED EARTH SEATWALL CONSTRUCTION:**

1. MOST SOIL GENERALLY COMPOSED OF 30% CLAY (NON BENTONIC), 50% LOAM & 20% AGGREGATE MATERIAL, COMPACTED TO 300 PSI. LIFTS SHALL BE PLACED IN 6" LIFTS COMPACTED TO 3" HEIGHT, MANUALLY OR MECHANICALLY COMPACTED.
2. FORMED WITH TRADITIONAL FORMING TECHNIQUES.
3. CONSTRUCT WALL DURING A WEATHER WINDOW OF 10 DAYS WITH NO MOISTURE FORECASTED.
4. TOP 6" LIFT SHALL BE MIXED WITH 50% PORTLAND SAND CEMENT.

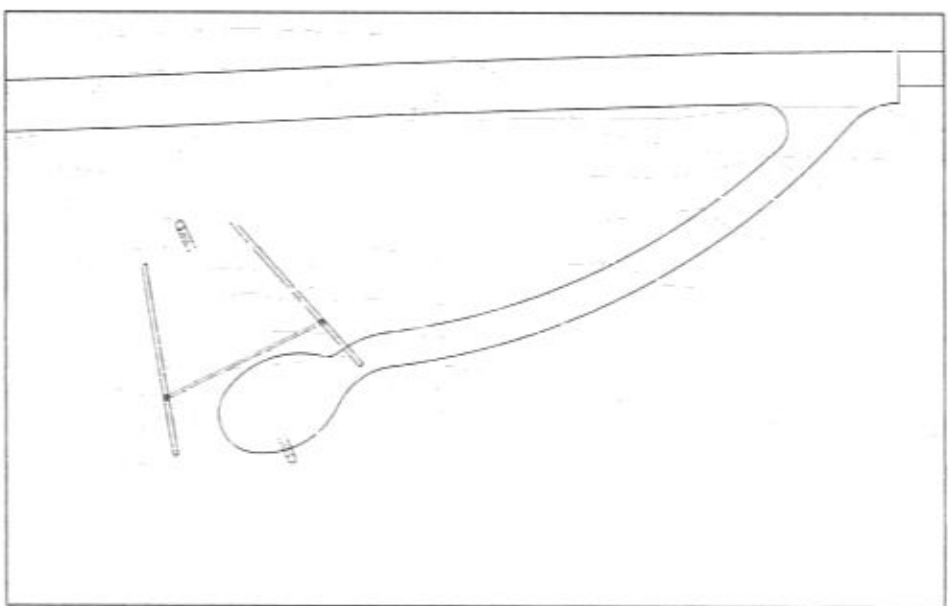


**NOTES: REGARDING TENSILE FABRIC:**

- 1.) FABRIC AND CONNECTORS, SEE SPECIFICATION SECTION 13 IN PROJECT MANUAL FOR FURTHER COORDINATION.
- 2.) LOG COLUMN/PILE DIAMETERS AND LENGTHS SHOWN ARE BASED ON PRELIMINARY TENSILE STRUCTURE REACTIONS TO SUPPORTING COLLAR. CONTRACTOR SHALL INCLUDE A 25% INCREASE IN DRIVEN PILE LENGTH SHOWN TO ACCOUNT FOR POSSIBLE INCREASES IN EITHER EMBEDMENT LENGTH AND/OR PILE DIAMETER BASED ON ACTUAL TENSILE STRUCTURE REACTIONS.
- 3.) PILES SHALL NOT BE DRIVEN FOR TENSILE STRUCTURES UNTIL TENSILE STRUCTURE REACTION LOADS HAVE BEEN PROVIDED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL.



**1** DETAIL: OUTDOOR CLASSROOM No. 620 - PRAIRIE AMPHITHEATER  
SCALE: 3/8" = 1'-0"



**2** SITEPLAN: OUTDOOR CLASSROOM No. 620 - PRAIRIE AMPHITHEATER  
SCALE: 1" = 10'

ARCHITECT:  
**ARC HITECTURE INTERNATIONAL**  
1800 MIDCAMP LANE #202  
RAPID CITY, SOUTH DAKOTA 57702  
PHONE: 605.343.9628  
FAX: 605.343.9628  
WWW.ARCARCHITECTURE.COM

CIVIL ENGINEER:  
**Ferbr Engineering Company, Inc.**  
2001 UNIVERSITY AVENUE  
RAPID CITY, SOUTH DAKOTA 57702  
PHONE: 605.343.9628  
FAX: 605.343.9628  
WWW.FERBR.COM

STRUCTURAL ENGINEER:  
**Albertson Engineering Inc.**  
3202 West Main  
Suite C  
Rapid City, South Dakota 57702  
PHONE: 605.343.9628  
FAX: 605.343.9628  
WWW.ALBERTSONENGINEERING.COM

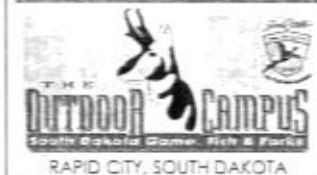
MECHANICAL/ELECTRICAL ENGINEER:  
**WPE WEST PLAINS ENGINEERING INC.**  
1730 RAND ROAD  
RAPID CITY, SD 57702  
PHONE: 605.348.7488  
FAX: 605.348.9449  
WWW.WPEENGINEERING.COM

LANDSCAPE ARCHITECT:  
**Wyss Associates, Inc.**  
1200 10TH AVENUE  
RAPID CITY, SOUTH DAKOTA 57702  
PHONE: 605.343.9628  
FAX: 605.343.9628  
WWW.WYSSASSOCIATES.COM

DATE: NOVEMBER 12, 2009

PROJECT MANAGER: MATTHEW D. FRIDEL

PROJECT NUMBER: 2005-017



OUTDOOR CLASSROOM No. 620  
ALTERNATE BID ITEM

**L2.22**

ARCHITECT:  
**ARC** HITECTURE INTERNATIONAL  
 808 WHEATLAND ROAD  
 RAPID CITY, SOUTH DAKOTA 57702 TEL: 605.343.2544 FAX: 605.343.1467  
 WWW.ARCINTERNATIONAL.COM  
 BRINGING ARCHITECTURE TO YOUR WORLD

CIVIL ENGINEER:  
**FEC** Ferber Engineering Company, Inc.  
 204 NEPHEW LANE  
 RAPID CITY, SOUTH DAKOTA 57702  
 605.343.9608  
 CONTACT: DAVE MUCK

STRUCTURAL ENGINEER:  
 3202 West Main  
 Suite C  
 Rapid City, South Dakota 57702  
 605.343.9608  
**Albertson Engineering Inc.**  
 CONTACT: DAVID LEPPER

MECHANICAL/ELECTRICAL ENGINEER:  
**WPE** WEST PLAINS ENGINEERING, INC.  
 1738 RAND ROAD • RAPID CITY, SD 57702  
 PHONE: 605.348.7488 • FAX: 605.348.9425  
 WWW.WESTPLAINSENGINEERING.COM  
 CONTACT: DOUG FERRELL  
 DAVID BERG

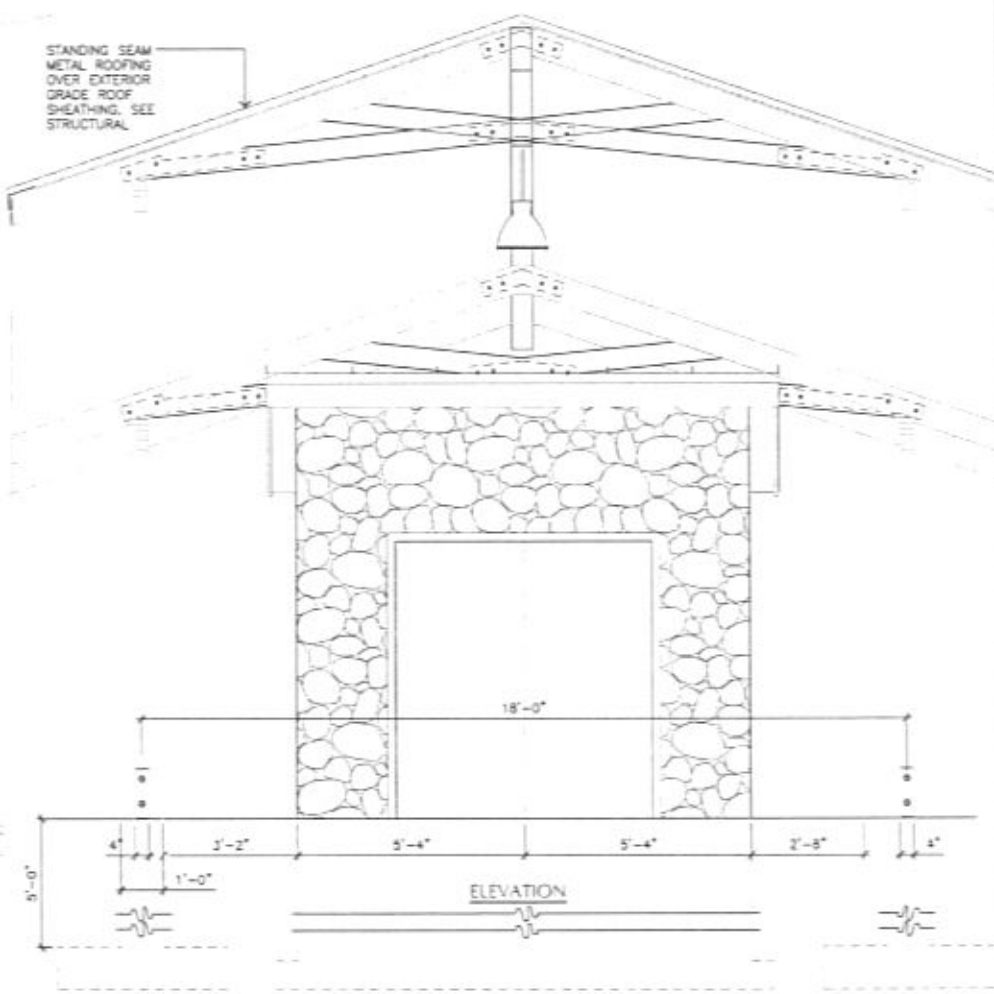
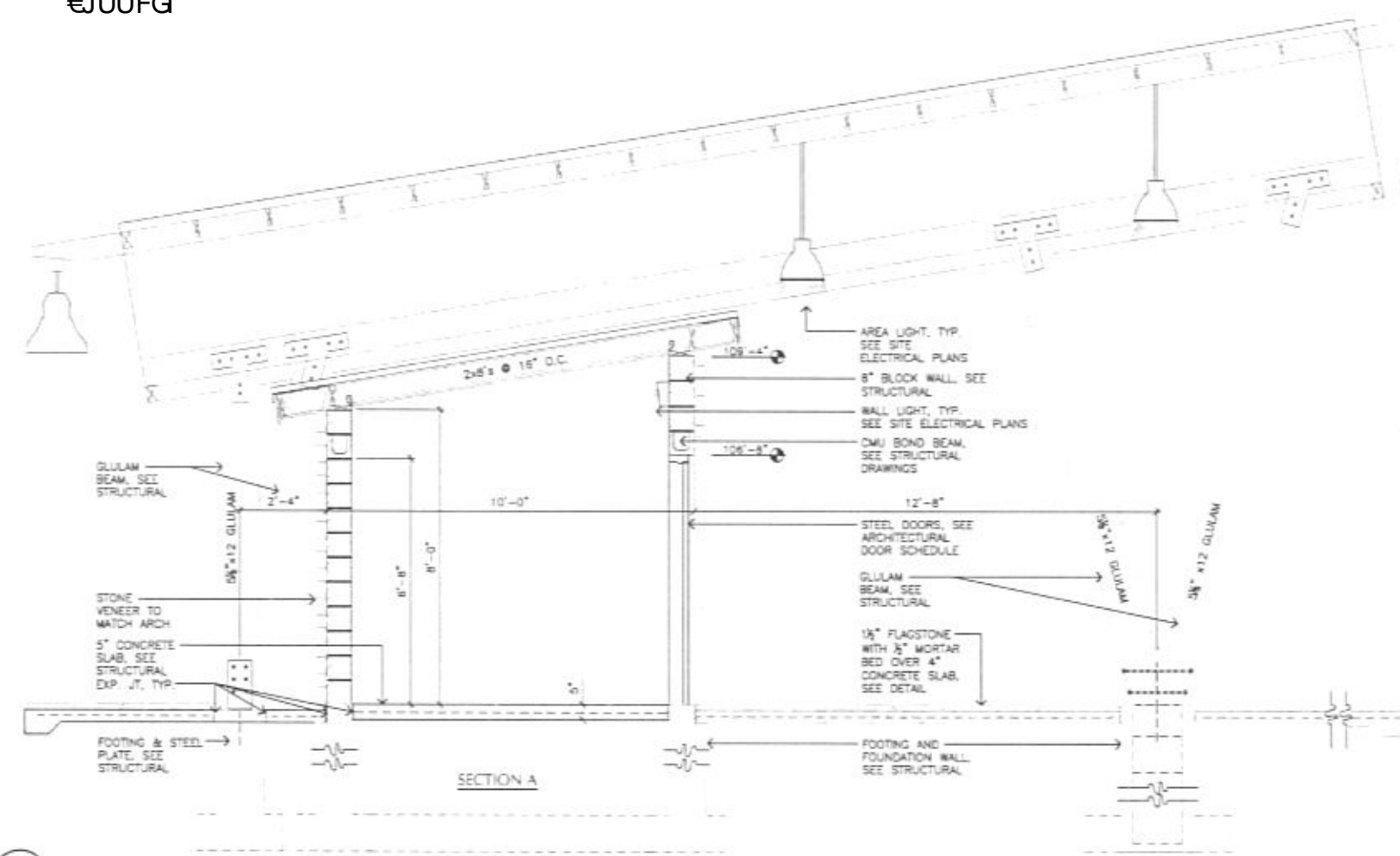
LANDSCAPE ARCHITECT:  
**Wyss Associates, Inc.**  
 1000 S. WYSS AVENUE • SUITE 100 • RAPID CITY, SD 57702  
 PHONE: 605.348.7488 • FAX: 605.348.9425  
 WWW.WYSSASSOCIATES.COM  
 CONTACT: MATT FRIDELL

DATE: NOVEMBER 12, 2009  
 PROJECT MANAGER: MATTHEW D. FRIDELL  
 PROJECT NUMBER: 2005-017

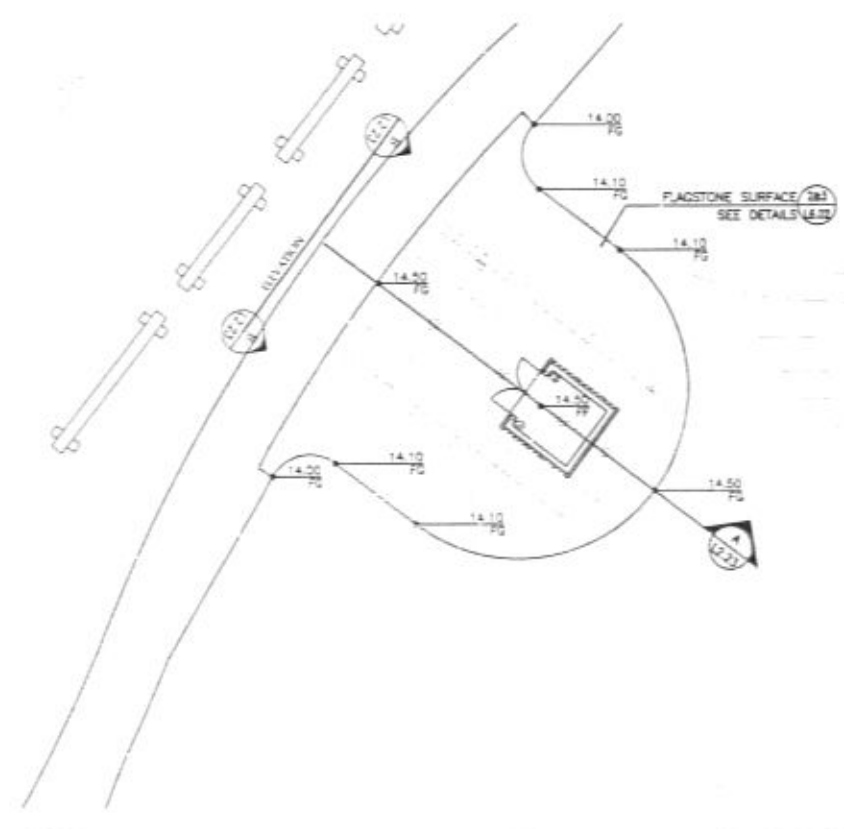


OUTDOOR CLASSROOM No. 630  
 ALTERNATE BID ITEM

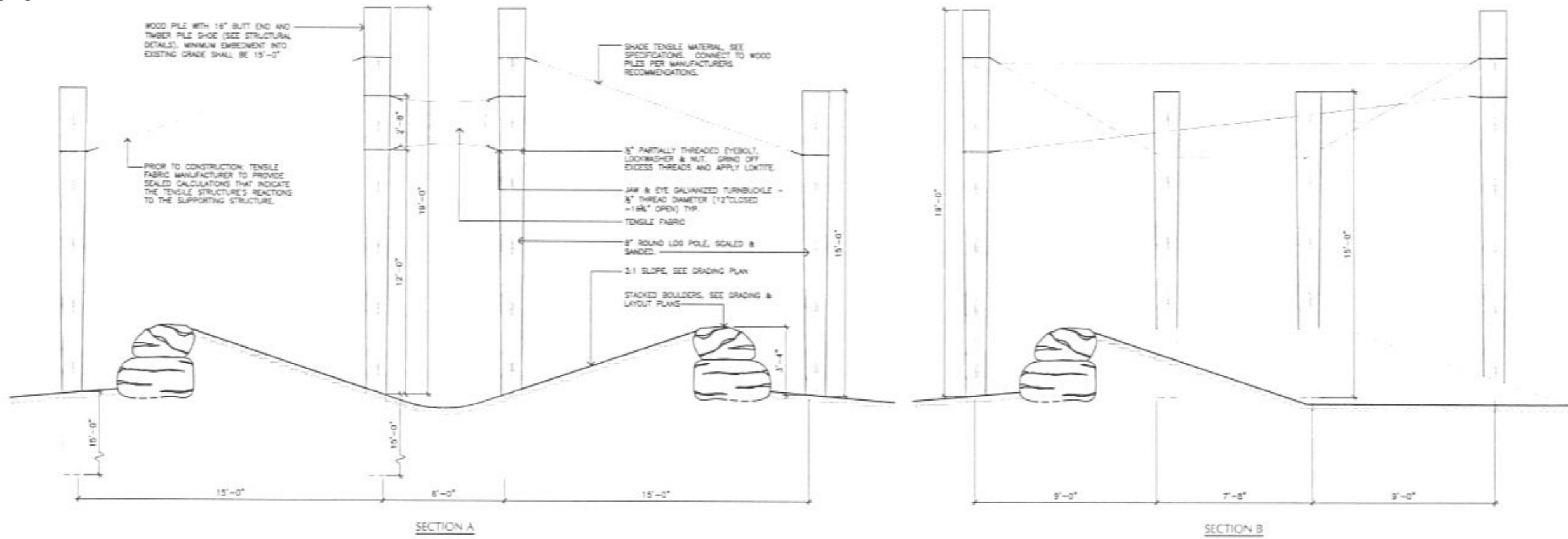
L2.23



1 DETAIL: OUTDOOR CLASSROOM No. 630 - HUNTING CENTER  
 SCALE: 1/2" = 1'-0"



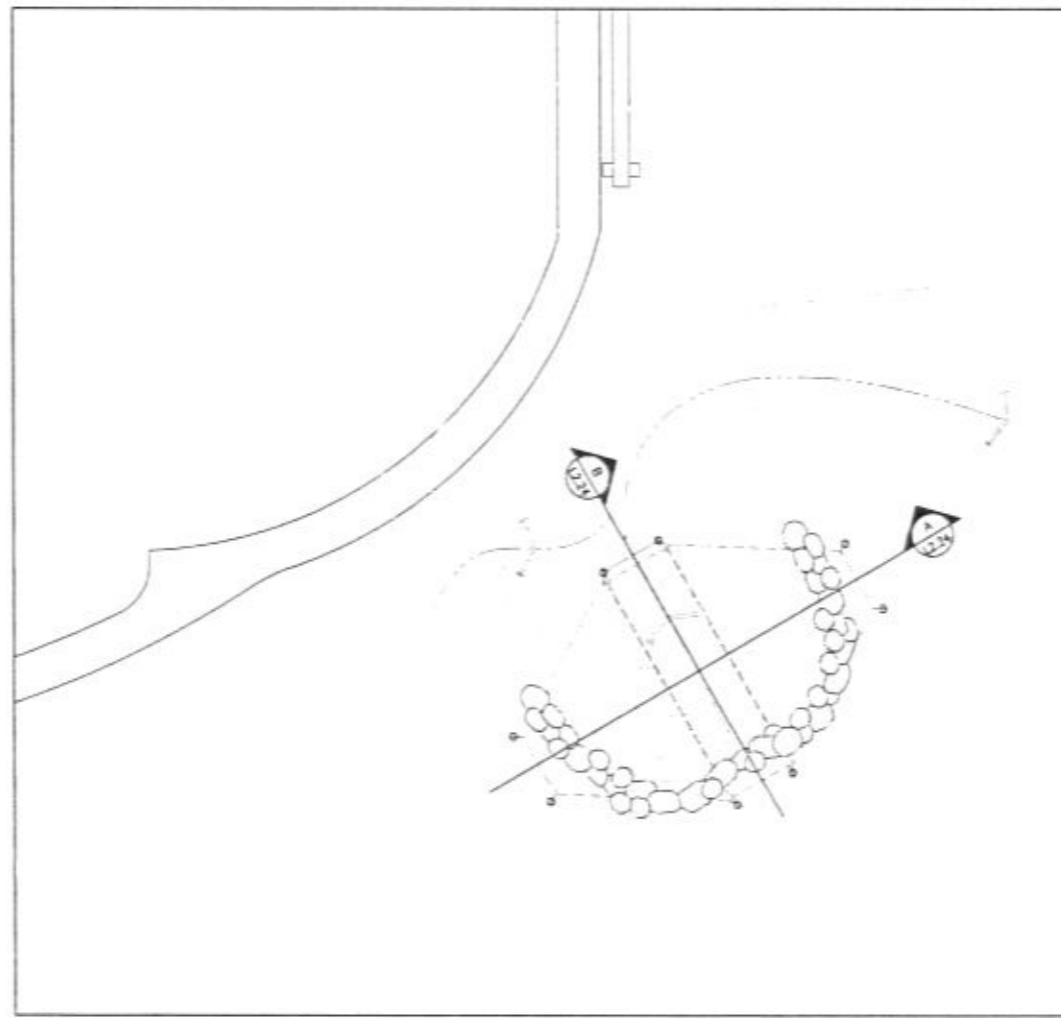
2 ENLARGED PLAN: OUTDOOR CLASSROOM No. 630 - HUNTING CENTER  
 SCALE: 1" = 10'



1 SECTION: OUTDOOR CLASSROOM No. 640 - OUTDOOR LEARNING CENTER  
 SCALE: 3/8" = 1'-0"

NOTE: CONTRACTOR SHALL PROVIDE 25% OVERAGE FOR TIMBER PILING, THIS CLASSROOM.

- NOTES: REGARDING TENSILE FABRIC:
- 1.) FABRIC AND CONNECTORS, SEE SPECIFICATION SECTION 13 IN PROJECT MANUAL FOR FURTHER COORDINATION.
  - 2.) LOG COLUMN/PILE DIAMETERS AND LENGTHS SHOWN ARE BASED ON PRELIMINARY TENSILE STRUCTURE REACTIONS TO SUPPORTING COLUMNS. CONTRACTOR SHALL INCLUDE A 25% INCREASE IN DRIVEN PILE LENGTH SHOWN TO ACCOUNT FOR POSSIBLE INCREASES IN EITHER EMBEDMENT LENGTH AND/OR PILE DIAMETER BASED ON ACTUAL TENSILE STRUCTURE REACTIONS.
  - 3.) PILES SHALL NOT BE DRIVEN FOR TENSILE STRUCTURES UNTIL TENSILE STRUCTURE REACTION LOADS HAVE BEEN PROVIDED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL.



ARCHITECT:  
**ARC** HITECTURE INTERNATIONAL  
 8820 WEST WYOMING AVE. SUITE 100, DENVER, CO 80231  
 303.733.1111

CIVIL ENGINEER:  
**Ferfer Engineering Company, Inc.**  
 2002 West Main, Suite C, Rapid City, South Dakota 57702  
 605.343.9508  
 CONTACT: DAVE MUCK

STRUCTURAL ENGINEER:  
**Albertson Engineering Inc.**  
 3002 West Main, Suite C, Rapid City, South Dakota 57702  
 605.343.9508  
 CONTACT: DAVID LEPPERT

MECHANICAL/ELECTRICAL ENGINEER:  
**WPE WEST PLAINS ENGINEERING, INC.**  
 1700 RAND ROAD, RAPID CITY, SD 57702  
 PHONE: 605.348-1455 • FAX: 605.348-3445  
 www.westplainsengineering.com  
 CONTACT: DOUG FEREL, DAVID BERG

LANDSCAPE ARCHITECT:  
**Wyss Associates, Inc.**  
 1200 West 10th Ave., Suite 200, Rapid City, SD 57702  
 605.343.9508  
 www.wyssassociates.com  
 CONTACT: MATT FRIEDEL

DATE: NOVEMBER 12, 2009  
 PROJECT MANAGER: MATTHEW D. FRIEDEL  
 PROJECT NUMBER: 2005-017

REGISTERED LANDSCAPE ARCHITECT  
 MATT FRIEDEL  
 8823  
 11/19/2009

OUTDOOR CAMPUS  
 South Dakota Game, Fish & Parks  
 RAPID CITY, SOUTH DAKOTA

OUTDOOR CLASSROOM No. 640  
 ALTERNATE BID ITEM

L2.24