

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Friends of Eagle River Nature Center, Inc.****Federal Tax ID: 92-0156981****Project Title:****Project Type: New Construction and Land Acquisition**

Friends of Eagle River Nature Center, Inc. - New Trail Maintenance Garage at the Eagle River Nature Center

State Funding Requested: \$300,000**House District: Anchorage Areawide (11-27)**

One-Time Need

Brief Project Description:

Funding for construction of a new trail maintenance garage to include a heated repair shop and unheated equipment storage space.
--

Funding Plan:

Total Project Cost:	\$650,000
Funding Already Secured:	(\$25,000)
FY2015 State Funding Request:	<u>(\$300,000)</u>
Project Deficit:	\$325,000

*Funding Details:**2014, excavation and foundation work funded by private donors.**2015-16, trail volunteers will provide labor, in part, to build and furnish the structure. Private contributions and State to provide funding.***Detailed Project Description and Justification:**

Chugach State Park outsourced operation and maintenance of the Eagle River Nature Center and 10 miles of trails to Friends of Eagle River Nature Center in 1996. The organization is run by 3 full time staff and 2 seasonal staff, who oversee 40 regularly contributing volunteers and over 200 special project and event volunteers on an annual basis. These volunteers put in over 4000 hours of service each year to construct, repair, and maintain the State Park's trails and grounds in addition to providing visitor services, education and other tasks.

Friends of Eagle River Nature Center is a self-sustaining organization, receiving revenues to operate the facilities through individual and corporate donations, fundraising, parking fees, membership dues, sales, rentals and grants. Its mission has been to provide recreational and educational services to the public - a role which Chugach State Park could no longer afford to do. The organization has provided these public services for over 17 years in a fiscally prudent and effective manner, garnering respect from local residents and visitors from across the nation and abroad.

The construction of this building is a top priority for the organization. The organization needs state funding to make this possible, so that we may better organize and manage our volunteer work force and our assets. Covered, secure storage of trail maintenance equipment, including ATV's, snowmachines, groomers, snow removal equipment, and power tools is needed to protect the investment made to us by donors. Our organization is obligated to be good stewards of this equipment because it has been donated for the purpose of maintaining State trails in good, safe condition for the public. In addition to the general public, thousands of children hike these trails and receive hands-on natural science education

from our professional staff and volunteer interpreters. The condition of the trails could not be possible without our volunteer trail workers and the equipment used to accomplish this never-ending task.

Currently, the above-mentioned equipment is housed in a vinyl temporary structure with no electricity nor heat. High winds and inclement weather are regular threats to its structural integrity. Volunteers labor in freezing temperatures while they repair machinery, for lack of any other space large enough to do so. It is important that we provide them with a safe work environment. A permanent structure is an important capital investment that will benefit our volunteers, our residents, and our visitors.

With sponsorship from the Rasmuson Foundation, Friends of Eagle River Nature Center received a Foraker Group Pre-Development Grant in 2013 to help the organization determine the scale and scope of the building. Included in this submission are the concept drawings and cost estimates provided by the Foraker Group's team of architects, project manager and cost estimators.

Project Timeline:

FY2014 through FY2016

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Friends of Eagle River Nature Center Inc.

Grant Recipient Contact Information:

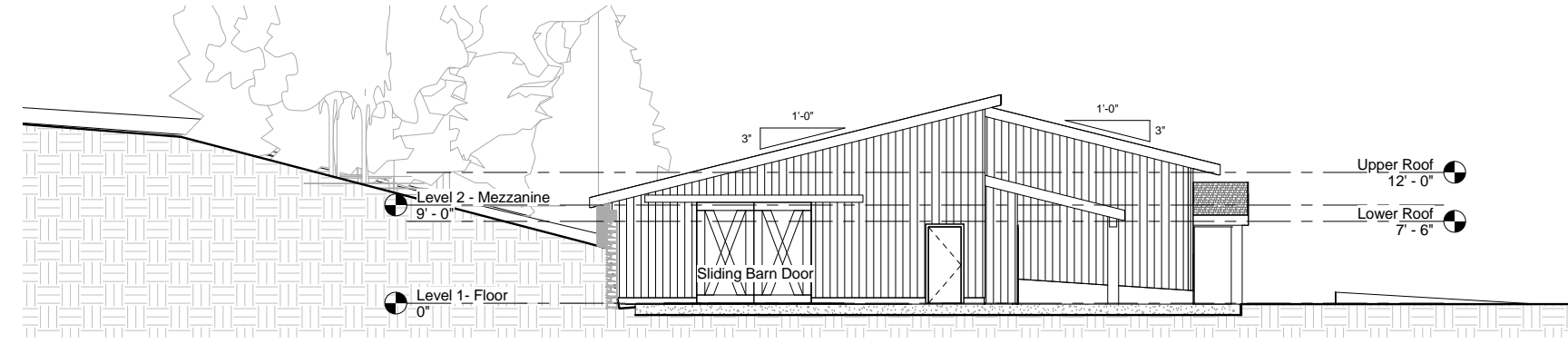
Name: Asta Spurgis
 Title: President
 Address: 32750 Eagle River Road
 Eagle River, Alaska 99577
 Phone Number: (907)694-2108
 Email: info@ernc.org

Has this project been through a public review process at the local level and is it a community priority? Yes No

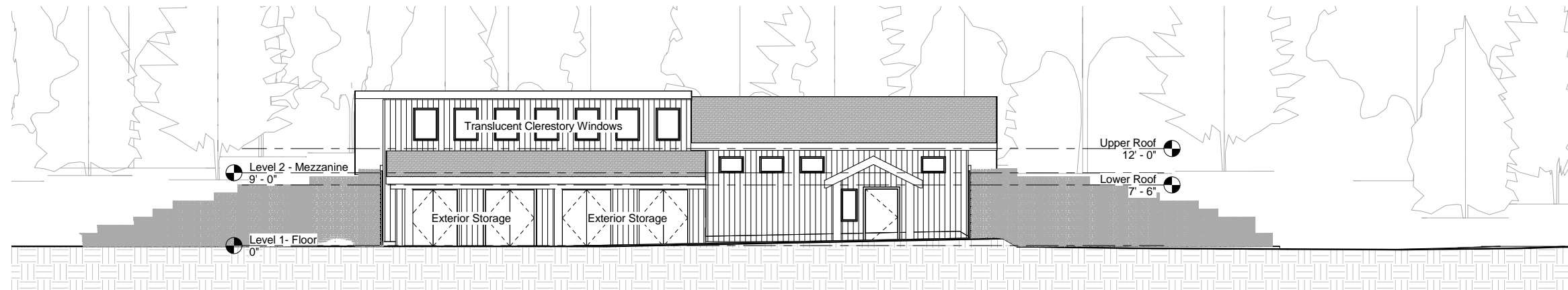
GENERAL EXTERIOR ELEVATION NOTES

- NOTE 1
- NOTE 2

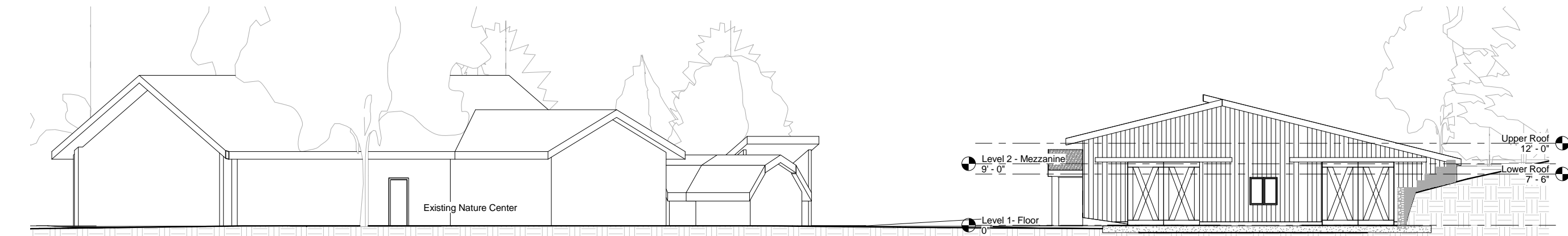
○ SHEET NOTES



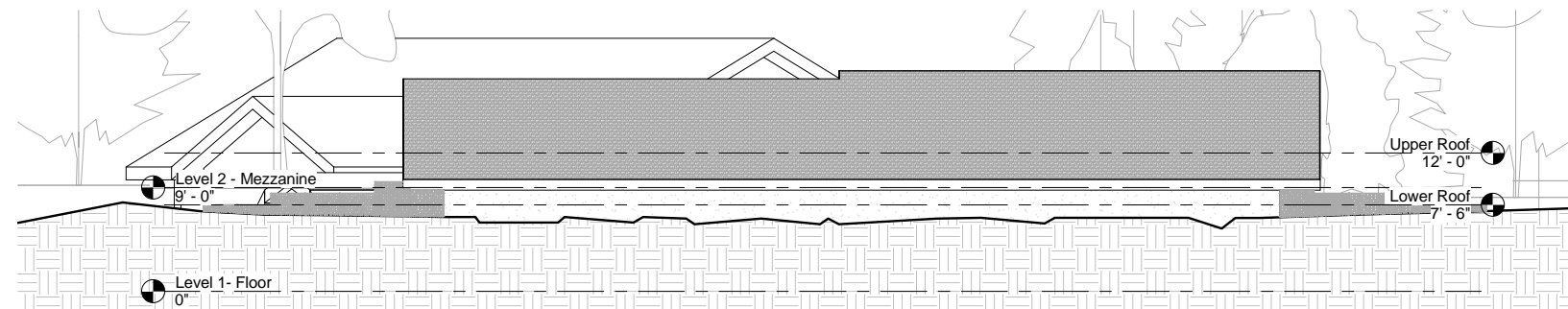
④ North Elevation
Scale: 1/8" = 1'-0"



③ West Elevation
Scale: 1/8" = 1'-0"



② South Elevation
Scale: 1/8" = 1'-0"



① East Elevation
Scale: 1/8" = 1'-0"



KUMIN ASSOCIATES, INC.
ARCHITECTS | PLANNERS | INTERIOR DESIGNERS
808 E Street, Suite 200
Anchorage, Alaska 99501
T 907.272.8833
F 907.272.7733



**New Trail Maintenance
Garage**

32750 Eagle River Road
Friends of Eagle River Nature Center

No.	Description	Date

Drawn By: Author
Checked By: Checker

Date: 1/10/2014
Phase: CONCEPT DESIGN
Job No: 21300.04

SHEET TITLE: Exterior Elevations

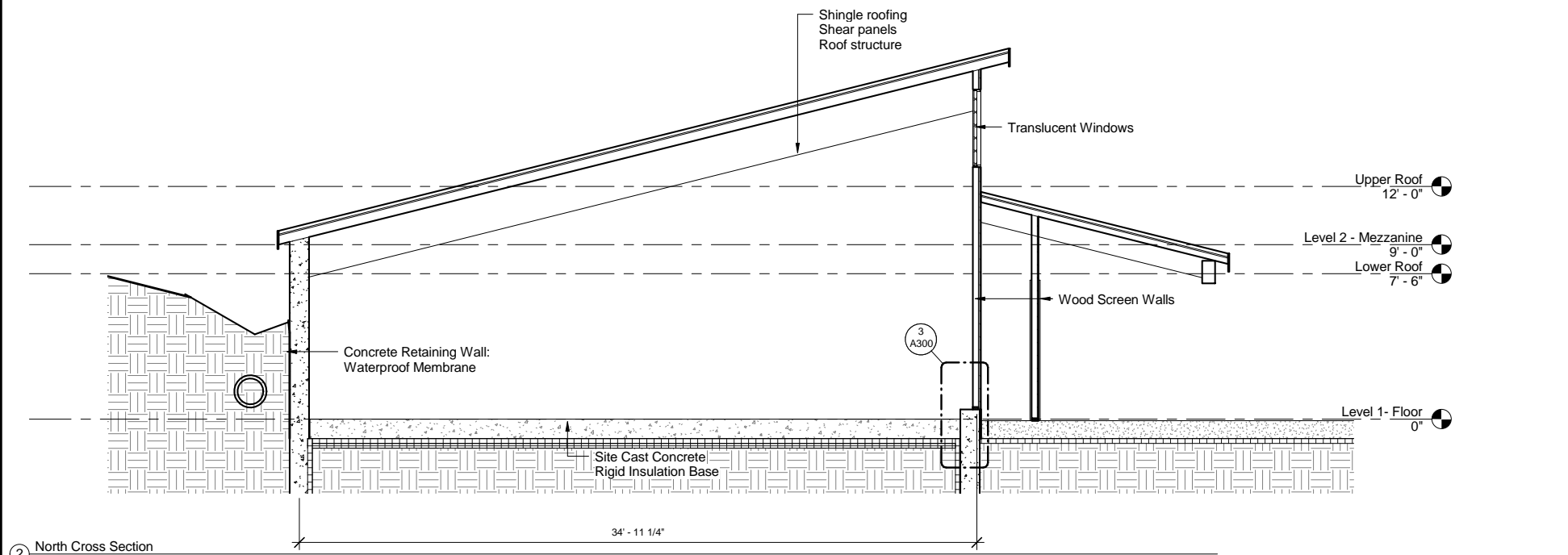
SHEET NO:

A200

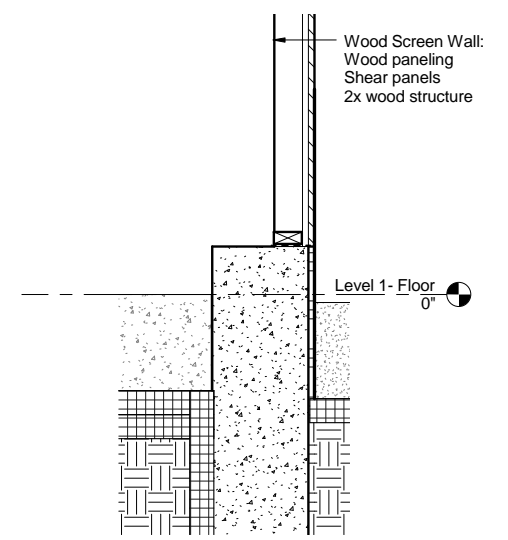
GENERAL BUILDING SECTION NOTES

- NOTE 1
- NOTE 2

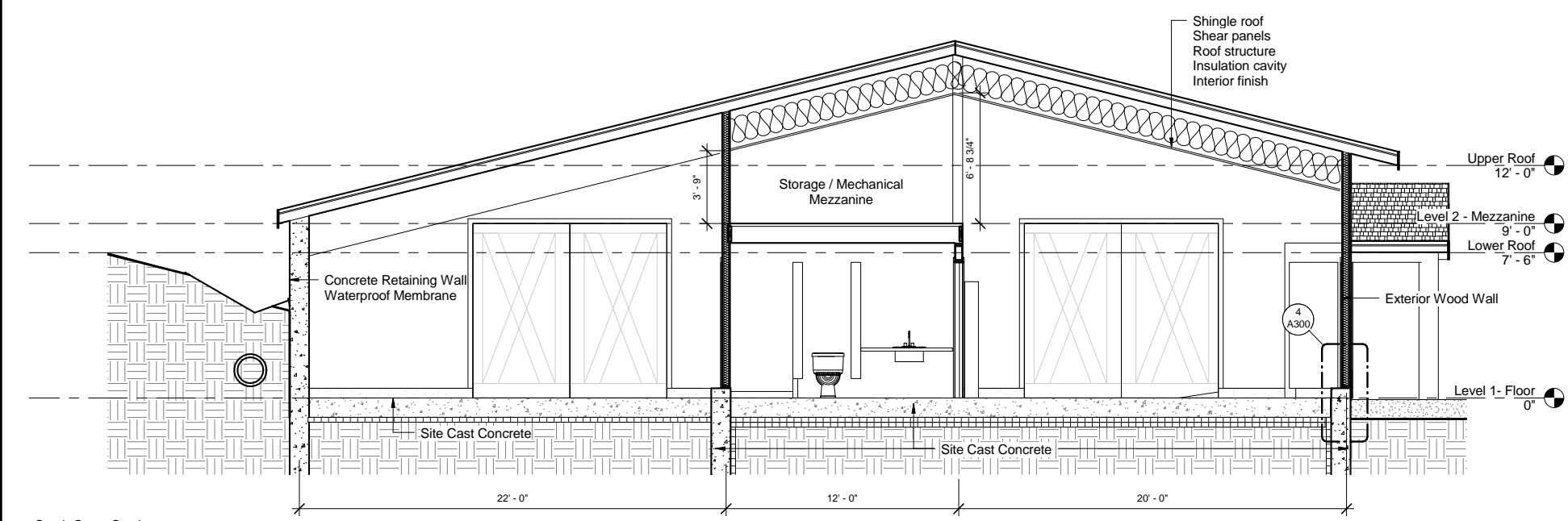
SHEET NOTES



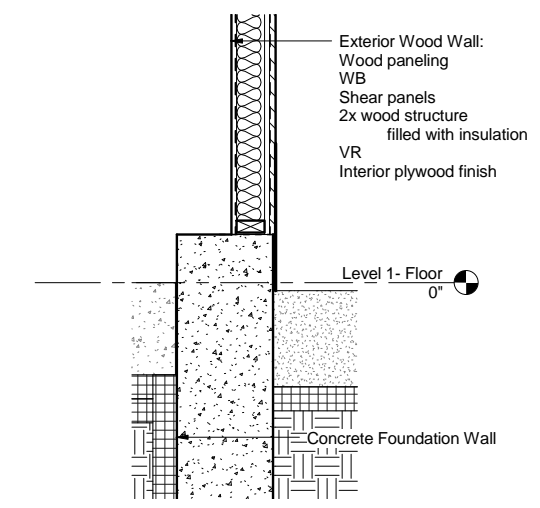
2 North Cross Section
Scale: 1/4" = 1'-0"



3 Cold Wall Section
Scale: 1" = 1'-0"



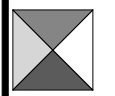
1 South Cross Section
Scale: 1/4" = 1'-0"



4 Warm Wall Section
Scale: 1" = 1'-0"



KUMIN ASSOCIATES, INC.
ARCHITECTS | PLANNERS | INTERIOR DESIGNERS
808 E Street, Suite 200
Anchorage, Alaska 99501
T 907.272.8833
F 907.272.7733



**New Trail Maintenance
Garage**
32750 Eagle River Road
Friends of Eagle River Nature Center

No.	Description	Date

Drawn By: Author
Checked By: Checker
Date: 1/10/2014
Phase: CONCEPT DESIGN
Job No: 21300.04
SHEET TITLE: Building Sections

SHEET NO:
A300

1/10/2014 10:25:11 PM
K:\Projects\21300.04\Final\Drawings\REV\REVIT\CD\Bldg_E.RWG

Construction Cost Estimate New Trail Maintenance Garage

EAGLE RIVER NATURE CENTER

Eagle River, Alaska
January 29, 2014

Cost Consultant

Tonsina
3733 Ben Walters Lane
Suite 4
Homer, Alaska 99603

Phone: (907) 235-9020
Fax: (907) 235-2021

Client: Foraker Group

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Eagle River Nature Center Maintenance Facility							
January, 2014							
Concept Plans							
Wages							
x - carpenter \$76.25							
p- plumber \$86.70							
e- electrician \$86.70							
Division 1							
Project Coordination and Supervision							
Per Unit:	--@.0000	Is		0.00	32.00	0.00	32.00
1000.00	--@.0000	Is		0.00	32,000.00	0.00	32,000.00
Project Bond and Insurances							
Per Unit:	--@.0000	--		22.00	0.00	0.00	22.00
1000.00	--@.0000	--		22,000.00	0.00	0.00	22,000.00
Wage and Hour Permit Fee (State of Alaska)							
Per Unit:	--@.0000	Is		5,000.00	0.00	0.00	5,000.00
1.00	--@.0000	Is		5,000.00	0.00	0.00	5,000.00
Tools, Mob, and Other							
Per Unit:	--@.0000	Is		15.00	0.00	0.00	15.00
1000.00	--@.0000	Is		15,000.00	0.00	0.00	15,000.00
**Subtotal: 01 General Requirements							
				0.0	42,000.00	32,000.00	0.00
							74,000.00

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Division 2 Existing Conditions							
Site Survey and Controls							
Per Unit:	--@.0000		ls	6,000.00	0.00	0.00	6,000.00
1.00	--@.0000		ls	6,000.00	0.00	0.00	6,000.00
SWPP Provisions							
Per Unit:	x@20.00		ls	8,000.00	1,525.00	0.00	9,525.00
1.00	x@20.00		ls	8,000.00	1,525.00	0.00	9,525.00
Excavation and backfill of building site							
Per Unit:	x@.2000		CY	15.00	15.25	4.00	34.25
68.00	x@13.60		CY	1,020.00	1,037.00	272.00	2,329.00
Classified fill for foundation							
Per Unit:	x@.0000		CY	16.00	0.00	38.00	54.00
22.00	x@.0000		CY	352.00	0.00	836.00	1,188.00
Storm Water and Ground Water Diversion - Rear of Building							
Per Unit:	x@.4000		LF	8.70	30.50	10.00	49.20
150.00	x@60.00		LF	1,305.00	4,575.00	1,500.00	7,380.00
Utility Connection - Water							
Per Unit:	y@12.00		LS	4,650.00	1,040.00	0.00	5,690.00
1.00	y@12.00		LS	4,650.00	1,040.00	0.00	5,690.00
Utility Connection - Sewer							
Per Unit:	x@8.000		LS	2,250.00	610.00	425.00	3,285.00
1.00	x@8.000		LS	2,250.00	610.00	425.00	3,285.00
Utility Connection - Gas							
Per Unit:	x@10.50		ls	1,880.00	800.60	0.00	2,680.60
1.00	x@10.50		ls	1,880.00	800.60	0.00	2,680.60

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Gabion Retaining Wall 3'x3'x8'							
Per Unit:	x@.1200		LF	22.80	9.15	0.00	31.95
410.00	x@49.20		LF	9,348.00	3,751.50	0.00	13,099.50
Misc. Gravel for Parking area and Road							
Per Unit:	x@.0900		CY	16.60	6.86	0.00	23.46
112.00	x@10.08		CY	1,859.20	768.32	0.00	2,627.52
New Asphalt - Estimated 3,000 SF							
Per Unit:	--@.0000		SF	4.10	0.00	0.00	4.10
3000.00	--@.0000		SF	12,300.00	0.00	0.00	12,300.00
Landscaping Allownce							
Per Unit:	x@24.00		LS	2,000.00	1,830.00	0.00	3,830.00
1.00	x@24.00		LS	2,000.00	1,830.00	0.00	3,830.00
**Subtotal: 02 Existing Conditions							
	207.4		50,964.20	15,937.42	3,033.00	69,934.62	
Division 3 Concrete							
Footers 270 x 12" x24"							
Per Unit:	--@.0000		CY	655.00	0.00	0.00	655.00
20.00	--@.0000		CY	13,100.00	0.00	0.00	13,100.00
Stem Walls 12" x 48" x 72							
Per Unit:	--@.0000		CY	655.00	0.00	0.00	655.00
11.00	--@.0000		CY	7,205.00	0.00	0.00	7,205.00
Stem Walls 8" x 48" x 200							
Per Unit:	--@.0000		CY	655.00	0.00	0.00	655.00
20.00	--@.0000		CY	13,100.00	0.00	0.00	13,100.00

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Walls 12" x 9' x 72							
Per Unit:	--@.0000		CY	655.00	0.00	0.00	655.00
24.00	--@.0000		CY	15,720.00	0.00	0.00	15,720.00
Slab on Grade 950 x4"							
Per Unit:	--@.0000		CY	610.00	0.00	0.00	610.00
12.00	--@.0000		CY	7,320.00	0.00	0.00	7,320.00
Concrete support Piers 24" x 6'							
Per Unit:	x@.0000		Ea	390.00	0.00	0.00	390.00
4.00	x@.0000		Ea	1,560.00	0.00	0.00	1,560.00
Retaining Wall stiffbacks 6 @ 12"x 36" x 13'							
Per Unit:	x@.0000		ls	655.00	0.00	0.00	655.00
9.00	x@.0000		ls	5,895.00	0.00	0.00	5,895.00
**Subtotal: 03 Concrete							
		0.0		63,900.00	0.00	0.00	63,900.00
Division 5 Metals							
Anchor bolts at exterior walls 4' oc							
Per Unit:	x@.1570		Ea	5.79	11.97	0.00	17.76
75.00	x@11.77		Ea	434.13	897.75	0.00	1,331.88
Allowance for Hold downs, Clips, fastners							
Per Unit:	x@.0000		ls	2,500.00	0.00	0.00	2,500.00
1.00	x@.0000		ls	2,500.00	0.00	0.00	2,500.00
**Subtotal: 05 Metals							
		11.8		2,934.13	897.75	0.00	3,831.88

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Division 6 Wood and Plastics							
Sill Plate 2x6 Treated							
Per Unit:	x@.0400		LF	1.68	3.05	0.00	4.73
270.00	x@10.80		LF	453.60	823.50	0.00	1,277.10
Frame cold Walls 2x6 16 oc							
Per Unit:	x@.0310		SF	1.28	2.36	0.00	3.64
2000.00	x@62.00		SF	2,560.00	4,720.00	0.00	7,280.00
Frame warm Walls 2x6							
Per Unit:	x@.0310		SF	1.28	2.36	0.00	3.64
1800.00	x@55.80		SF	2,304.00	4,248.00	0.00	6,552.00
Exterior wall Sheathing plywood 1/2 cdx							
Per Unit:	x@.0170		SF	0.90	1.30	0.00	2.20
3800.00	x@64.60		SF	3,420.00	4,940.00	0.00	8,360.00
Frame Interior Walls 2x4 16 oc							
Per Unit:	x@.0250		SF	0.85	1.91	0.00	2.76
1000.00	x@25.00		SF	850.00	1,910.00	0.00	2,760.00
Sheath Interior Walls 3/4 AC at shop							
Per Unit:	x@.0170		SF	1.65	1.30	0.00	2.95
1900.00	x@32.30		SF	3,135.00	2,470.00	0.00	5,605.00
Sheath Interior Walls 1/2 AC at shop/garage interface							
Per Unit:	x@.0170		SF	1.50	1.30	0.00	2.80
700.00	x@11.90		SF	1,050.00	910.00	0.00	1,960.00
Frame Openings Windows							
Per Unit:	x@1.800		Ea	45.00	137.30	0.00	182.30
13.00	x@23.40		Ea	585.00	1,784.90	0.00	2,369.90

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Frame Openings Doors							
Per Unit:	x@1.500		Ea	45.00	114.40	0.00	159.40
9.00	x@13.50		Ea	405.00	1,029.60	0.00	1,434.60
Frame Barn Doors Openings							
Per Unit:	x@3.500		Ea	225.00	266.90	0.00	491.90
3.00	x@10.50		Ea	675.00	800.70	0.00	1,475.70
Roof Truss joists, TJI type 18"							
Per Unit:	x@.0180		SF	5.10	1.37	0.32	6.79
3875.00	x@69.75		SF	19,762.50	5,308.75	1,240.00	26,311.25
Roof Decking 5/8 Ply							
Per Unit:	x@.0170		SF	0.88	1.30	0.00	2.18
4420.00	x@75.14		SF	3,889.60	5,746.00	0.00	9,635.60
Storage doors 3x8							
Per Unit:	x@2.000		Ea	225.00	152.50	0.00	377.50
8.00	x@16.00		Ea	1,800.00	1,220.00	0.00	3,020.00
Barn Doors							
Per Unit:	x@2.500		Ea	225.00	190.60	0.00	415.60
6.00	x@15.00		Ea	1,350.00	1,143.60	0.00	2,493.60
Barn Door Tracks							
Per Unit:	x@1.000		Ea	350.00	76.25	0.00	426.25
6.00	x@6.000		Ea	2,100.00	457.50	0.00	2,557.50
Posts & hardware for columns							
Per Unit:	x@4.000		Ea	350.00	305.00	0.00	655.00
4.00	x@16.00		Ea	1,400.00	1,220.00	0.00	2,620.00

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Per Unit:	x@.1500		LF	36.00	11.44	0.00	47.44
70.00	x@10.50		LF	2,520.00	800.80	0.00	3,320.80
Frame Mezzanine & Bath, Laundry 12" tji							
Per Unit:	x@.0200		SF	2.90	1.53	0.00	4.43
400.00	x@8.000		SF	1,160.00	612.00	0.00	1,772.00
3/4 Plywood Floor Mezzanine							
Per Unit:	x@.0180		SF	1.65	1.37	0.00	3.02
380.00	x@6.840		SF	627.00	520.60	0.00	1,147.60
1/2 Plywood AC Ceilings at shop							
Per Unit:	x@.0170		SF	1.53	1.30	0.00	2.83
1.40	x@.0240		SF	2.14	1.82	0.00	3.96
Stairs to Mezzanine							
Per Unit:	x@.4100		--	117.00	31.26	0.00	148.26
15.00	x@6.150		--	1,755.00	468.90	0.00	2,223.90
Railing for stairs							
Per Unit:	x@.3700		LF	24.00	28.21	0.00	52.21
15.00	x@5.550		LF	360.00	423.15	0.00	783.15
Trim out windows							
Per Unit:	x@.7500		Ea	70.00	57.19	0.00	127.19
13.00	x@9.750		Ea	910.00	743.47	0.00	1,653.47
**Subtotal: 06 Wood and Plastics							
	554.5			53,073.84	42,303.29	1,240.00	96,617.13

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Division 7 Thermal, Moisture Protection							
Perimeter rigid insulation 4" x4' x300'							
	Per Unit:	x@.0300	SF	2.44	2.29	0.00	4.73
1200.00	x@36.00		SF	2,928.00	2,748.00	0.00	5,676.00
Back Wall rigid insulation 4" 9x72							
	Per Unit:	x@.0300	SF	2.44	2.29	0.00	4.73
650.00	x@19.50		SF	1,586.00	1,488.50	0.00	3,074.50
Shop Slab rigid insulation 4"							
	Per Unit:	x@.0300	SF	2.44	2.29	0.00	4.73
950.00	x@28.50		SF	2,318.00	2,175.50	0.00	4,493.50
Protection Board for perimeter							
	Per Unit:	x@.0450	SF	1.25	3.43	0.00	4.68
1200.00	x@54.00		SF	1,500.00	4,116.00	0.00	5,616.00
Perimeter Flashing							
	Per Unit:	x@.0400	LF	3.25	3.05	0.00	6.30
250.00	x@10.00		LF	812.50	762.50	0.00	1,575.00
Exterior Wall Infiltration Barrier							
	Per Unit:	x@.0050	SF	0.65	0.38	0.00	1.03
2600.00	x@13.00		SF	1,690.00	988.00	0.00	2,678.00
Wall Vapor Barrier 10 mil reinforced							
	Per Unit:	x@.0040	SF	0.28	0.31	0.00	0.59
2500.00	x@10.00		SF	700.00	775.00	0.00	1,475.00
Exterior Wall Insulation 6" at maint shop							
	Per Unit:	x@.0060	SF	0.68	0.46	0.00	1.14
2500.00	x@15.00		SF	1,700.00	1,150.00	0.00	2,850.00

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Interior Wall Sound Insulation all walls							
Per Unit:	x@.0050		SF	0.59	0.38	0.00	0.97
1000.00	x@5.000		SF	591.60	380.00	0.00	971.60
Insulation at TJI Rafters r38 heated area							
Per Unit:	x@.0090		SF	1.46	0.69	0.00	2.15
1100.00	x@9.900		SF	1,606.00	759.00	0.00	2,365.00
Wood Siding Exterior cedar							
Per Unit:	x@.0400		SF	5.60	3.05	0.00	8.65
3325.00	x@133.0		SF	18,620.00	10,141.25	0.00	28,761.25
Flashing for exterior doors and Windows							
Per Unit:	x@.3300		Ea	13.50	25.16	0.00	38.66
15.00	x@4.950		Ea	202.50	377.40	0.00	579.90
Flashing for Barn Doors							
Per Unit:	x@.3300		Ea	65.00	25.16	0.00	90.16
15.00	x@4.950		Ea	975.00	377.40	0.00	1,352.40
Roof Flashing							
Per Unit:	x@.0800		LF	7.80	6.10	0.00	13.90
300.00	x@24.00		LF	2,340.00	1,830.00	0.00	4,170.00
Roofing Asphalt Shingle							
Per Unit:	x@.0200		SF	2.50	1.53	0.00	4.03
3875.00	x@77.50		SF	9,687.50	5,928.75	0.00	15,616.25
Roofing Vapor Barrier 10 mil reinforced							
Per Unit:	x@.0040		SF	0.28	0.31	0.00	0.59
3875.00	x@15.50		SF	1,085.00	1,201.25	0.00	2,286.25

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Roof Ice and Water Shield							
Per Unit:	x@.0070		SF	0.80	0.53	0.00	1.33
3875.00	x@27.12		SF	3,100.00	2,053.75	0.00	5,153.75
Back Wall waterproofing - MiriDry with Mira Drain							
Per Unit:	x@.0750		SF	2.15	5.72	0.00	7.87
940.00	x@70.50		SF	2,021.00	5,376.80	0.00	7,397.80
Allowance for Calks							
Per Unit:	x@.0000		ls	1,200.00	0.00	0.00	1,200.00
0.00	x@.0000		ls	0.00	0.00	0.00	0.00
**Subtotal: 07 Thermal, Moisture Protect							
	558.4			53,463.10	42,629.10	0.00	96,092.20
Division 8 Openings							
Doors with hardware insulated steel							
Per Unit:	x@3.000		Ea	1,800.00	228.80	0.00	2,028.80
3.00	x@9.000		Ea	5,400.00	686.40	0.00	6,086.40
Exterior Windows double pane low e vinyl 3x4							
Per Unit:	x@1.000		Ea	575.00	76.25	0.00	651.25
7.00	x@7.000		Ea	4,025.00	533.75	0.00	4,558.75
Exterior Windows double pane low e vinyl 3x2							
Per Unit:	x@1.000		Ea	405.00	76.25	0.00	481.25
4.00	x@4.000		Ea	1,620.00	305.00	0.00	1,925.00
Exterior Windows double pane low e vinyl 2x4							
Per Unit:	x@1.000		Ea	425.00	76.25	0.00	501.25
1.00	x@1.000		Ea	425.00	76.25	0.00	501.25

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Exterior Windows double pane low e vinyl 4x4							
Per Unit:	x@1.000		Ea	625.00	76.25	0.00	701.25
1.00	x@1.000		Ea	625.00	76.25	0.00	701.25
Garage Door at shop							
Per Unit:	x@8.000		Ea	1,900.00	610.00	0.00	2,510.00
1.00	x@8.000		Ea	1,900.00	610.00	0.00	2,510.00
**Subtotal: 08 Openings							
	30.0			13,995.00	2,287.65	0.00	16,282.65
Division 9 Finishes							
No interior garage wall or ceiling finishes except at garage/shop interface							
Finish window trim							
Per Unit:	x@.6500		Ea	5.00	49.56	0.00	54.56
13.00	x@8.450		Ea	65.00	644.28	0.00	709.28
GWB interior partitions 5/8"							
Per Unit:	x@.0080		SF	0.48	0.61	0.00	1.09
500.00	x@4.000		SF	240.00	305.00	0.00	545.00
GWB Ceilings 5/8"							
Per Unit:	x@.0100		SF	0.48	0.76	0.00	1.24
240.00	x@2.400		SF	115.20	182.40	0.00	297.60
GWB Finish Walls							
Per Unit:	x@.0120		SF	0.15	0.92	0.00	1.07
750.00	x@9.000		SF	112.50	690.00	0.00	802.50
GWB Finish 3 Ceilings							
Per Unit:	x@.0150		SF	0.05	1.14	0.00	1.19
350.00	x@5.250		SF	16.24	399.00	0.00	415.24

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Paint Ceilings 3 coats							
Per Unit:	x@.0150		SF	0.21	1.14	0.00	1.35
500.00	x@7.500		SF	105.00	570.00	0.00	675.00
Paint Roof Structure Interior heated area							
Per Unit:	x@.0300		SF	0.45	2.29	0.00	2.74
930.00	x@27.90		SF	418.50	2,129.70	0.00	2,548.20
Paint Walls 3 coats 3/4 Ply heated area							
Per Unit:	x@.0150		SF	0.28	1.14	0.00	1.42
1900.00	x@28.50		SF	532.00	2,166.00	0.00	2,698.00
Floor Finish - Sealed Concrete							
Per Unit:	x@.0090		SF	0.18	0.69	0.00	0.87
930.00	x@8.370		SF	167.40	641.70	0.00	809.10
Floor Finish -Painted Plywood mezzanine							
Per Unit:	x@.0130		SF	0.25	0.99	0.00	1.24
380.00	x@4.940		SF	95.00	376.20	0.00	471.20
Floor Finish -Vinyl							
Per Unit:	x@.0170		SF	5.20	1.30	0.00	6.50
350.00	x@5.950		SF	1,820.00	455.00	0.00	2,275.00
Base Rubber/wood							
Per Unit:	x@.0270		LF	0.85	2.06	0.00	2.91
90.00	x@2.430		LF	76.50	185.40	0.00	261.90
FRP Wainscot at showers & laundry							
Per Unit:	x@.0320		SF	2.25	2.44	0.00	4.69
720.00	x@23.04		SF	1,620.00	1,756.80	0.00	3,376.80
**Subtotal: 09 Finishes							
	137.7			5,383.34	10,501.48	0.00	15,884.82

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Division 10 Specialties							
Toilet Accessories per Lavatory/stall							
Per Unit:	x@5.000		Ea	580.00	381.30	0.00	961.30
1.00	x@5.000		Ea	580.00	381.30	0.00	961.30
Fire Extenguishers and Cabinets							
Per Unit:	x@.3500		Ea	163.00	26.69	0.00	189.69
4.00	x@1.400		Ea	652.00	106.76	0.00	758.76
Toilet Partitions Solid plastic (polymer)							
Per Unit:	f@4.000		Ea	946.56	260.00	0.00	1,206.56
4.00	f@16.00		Ea	3,786.24	1,040.00	0.00	4,826.24
Eye Wash Station							
Per Unit:	x@8.000		Ea	900.00	610.00	0.00	1,510.00
1.00	x@8.000		Ea	900.00	610.00	0.00	1,510.00
**Subtotal: 10 Specialties							
	30.4			5,918.24	2,138.06	0.00	8,056.30
Division 12 Furnishings							
Lower cabinets							
Per Unit:	x@.7660		LF	165.00	58.41	0.00	223.41
10.00	x@7.660		LF	1,650.00	584.10	0.00	2,234.10
Countertops Laminated							
Per Unit:	x@.1810		LF	28.00	13.80	0.00	41.80
10.00	x@1.810		LF	280.00	138.00	0.00	418.00
Hazardous Material Cabinet							
Per Unit:	x@1.750		Ea	1,400.00	133.40	0.00	1,533.40
1.00	x@1.750		Ea	1,400.00	133.40	0.00	1,533.40

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
**Subtotal: 12 Furnishings							
		11.2		3,330.00	855.50	0.00	4,185.50
Division 15 Mechanical							
Toilets, urinals							
Per Unit:	p@12.00		Ea	1,625.00	1,040.00	0.00	2,665.00
1.00	p@12.00		Ea	1,625.00	1,040.00	0.00	2,665.00
Lavatories & Sinks							
Per Unit:	p@12.00		Ea	2,025.00	1,040.00	0.00	3,065.00
2.00	p@24.00		Ea	4,050.00	2,080.00	0.00	6,130.00
Showers							
Per Unit:	p@9.000		Ea	1,600.00	780.30	0.00	2,380.30
1.00	p@9.000		Ea	1,600.00	780.30	0.00	2,380.30
Washer Trim and valves rough in							
Per Unit:	p@3.000		Ea	275.00	260.10	0.00	535.10
1.00	p@3.000		Ea	275.00	260.10	0.00	535.10
3" Vent cast iron							
Per Unit:	p@.1600		LF	11.10	13.87	0.00	24.97
30.00	p@4.800		LF	333.00	416.10	0.00	749.10
4" Vent relief							
Per Unit:	p@2.500		Ea	290.00	216.80	0.00	506.80
1.00	p@2.500		Ea	290.00	216.80	0.00	506.80
Waste Lines 4"							
Per Unit:	p@.1900		LF	13.20	16.47	0.00	29.67
60.00	p@11.40		LF	792.00	988.20	0.00	1,780.20

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Waste Lines 2"							
	Per Unit:	p@.1300	LF	10.20	11.27	0.00	21.47
30.00		p@3.900	LF	306.00	338.10	0.00	644.10
Clean outs 4"							
	Per Unit:	p@.3500	Ea	113.00	30.35	0.00	143.35
2.00		p@.7000	Ea	226.00	60.70	0.00	286.70
Water Heater Gas							
	Per Unit:	p@1.500	Ea	1,100.00	130.10	0.00	1,230.10
1.00		p@1.500	Ea	1,100.00	130.10	0.00	1,230.10
Gas supply line & connections							
	Per Unit:	p@.1400	LF	2.50	12.14	0.00	14.64
10.00		p@1.400	LF	25.00	121.40	0.00	146.40
Water Heater connections							
	Per Unit:	p@2.750	Ea	550.00	238.40	0.00	788.40
1.00		p@2.750	Ea	550.00	238.40	0.00	788.40
Domestic Hot Water 3/4"							
	Per Unit:	p@.1400	LF	3.75	12.14	0.00	15.89
70.00		p@9.800	LF	262.50	849.80	0.00	1,112.30
Domestic Cold Water 3/4"							
	Per Unit:	p@.1400	LF	3.75	12.14	0.00	15.89
70.00		p@9.800	LF	262.50	849.80	0.00	1,112.30
Pipe Insulation 1" &>" 1 1/2" thick							
	Per Unit:	p@.0420	LF	6.22	3.64	0.00	9.86
150.00		p@6.300	LF	933.00	546.00	0.00	1,479.00

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Domestic Water Pressure Tank							
Per Unit:	p@2.000		Ea	380.00	173.40	0.00	553.40
1.00	p@2.000		Ea	380.00	173.40	0.00	553.40
Water Pressure tank connections							
Per Unit:	p@4.000		Ea	385.00	346.80	0.00	731.80
1.00	p@4.000		Ea	385.00	346.80	0.00	731.80
Domestic Water Supply line							
Per Unit:	p@.1400		LF	10.50	12.14	0.00	22.64
45.00	p@6.300		LF	472.50	546.30	0.00	1,018.80
Garage Oil water separator							
Per Unit:	p@3.500		Ea	2,800.00	303.50	0.00	3,103.50
1.00	p@3.500		Ea	2,800.00	303.50	0.00	3,103.50
Exterior Hose Bib allowance							
Per Unit:	p@16.00		Ea	775.00	1,387.00	0.00	2,162.00
1.00	p@16.00		Ea	775.00	1,387.00	0.00	2,162.00
Gas Fired Unit Heaters 100mbh							
Per Unit:	p@2.500		Ea	1,690.00	216.80	0.00	1,906.80
4.00	p@10.00		Ea	6,760.00	867.20	0.00	7,627.20
Gas supply line & connections to unit heaters 1" Black							
Per Unit:	p@.1400		LF	2.50	12.14	0.00	14.64
100.00	p@14.00		LF	250.00	1,214.00	0.00	1,464.00
Fuel Connections to gas fired units							
Per Unit:	p@1.600		Ea	95.00	138.70	0.00	233.70
4.00	p@6.400		Ea	380.00	554.80	0.00	934.80

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
Flue and Vent for all Gas fired units & water heater							
Per Unit:	p@3.500		Ea	185.00	303.50	0.00	488.50
5.00	p@17.50		Ea	925.00	1,517.50	0.00	2,442.50
Fans for all room laundry & Bath							
Per Unit:	p@1.750		Ea	475.00	151.70	0.00	626.70
2.00	p@3.500		Ea	950.00	303.40	0.00	1,253.40
Ductwork for Fans at 20' 6"							
Per Unit:	p@3.000		LF	180.00	260.10	0.00	440.10
1.00	p@3.000		LF	180.00	260.10	0.00	440.10
Seismic Support (not shown)							
Per Unit:	p@.5000		Ea	7.80	43.35	0.00	51.15
10.00	p@5.000		Ea	78.00	433.50	0.00	511.50
**Mechanical OH&P @ 22%							
Per Unit:	--@.0000		--	0.22	0.00	0.00	0.22
43788.00	--@.0000		--	9,633.36	0.00	0.00	9,633.36
**Subtotal: 15 Mechanical							
	194.1			36,598.86	16,823.30	0.00	53,422.16
Division 16 Electrical							
**Domestic Water Electrical Connection							
Per Unit:	y@.0800		LF	18.80	6.94	0.00	25.74
150.00	y@12.00		LF	2,820.00	1,041.00	0.00	3,861.00
**New Power by MEA							
Per Unit:	e@.0000		LF	0.00	0.00	0.00	0.00
0.00	e@.0000		LF	0.00	0.00	0.00	0.00

TONSINA, LLC
Elements of Construction

Job: Trail Maintenance Garage

Qty	Craft	Hours	Unit	Material	Labor	Equipment	Total
**Garage Electrical							
Per Unit:	--@.0000		SF	10.25	0.00	0.00	10.25
1960.00	--@.0000		SF	20,090.00	0.00	0.00	20,090.00
**Shop Electrical							
Per Unit:	--@.0000		SF	12.80	0.00	0.00	12.80
930.00	--@.0000		SF	11,904.00	0.00	0.00	11,904.00
**Subtotal: 16 Electrical							
		12.0		34,814.00	1,041.00	0.00	35,855.00
<hr/>							
Totals:	Manhours			Material	Labor	Equipment	
	1747.5			366,374.71	167,414.55	4,273.00	538,062.26
					10.00% contingency:		53,806.23
					10.00% Profit:		59,186.85
					Estimate Total:		\$651,055.34