

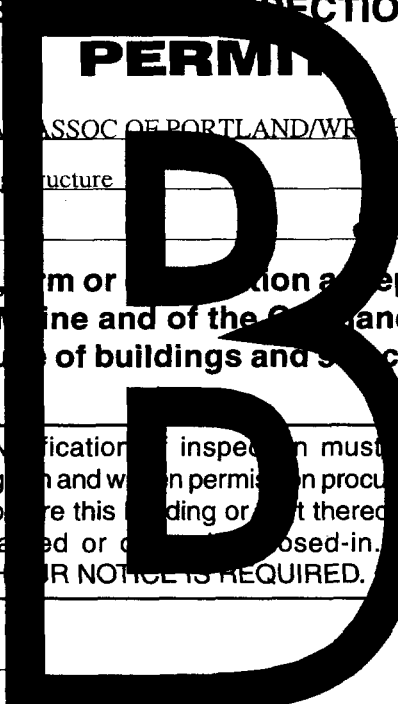
Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

# CITY OF PORTLAND

## BUILDING INSPECTION

### PERMIT



PERMIT ISSUED

Permit Number: 060743

MAY 26 2006

CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

This is to certify that YOUNG MENS CHRISTIAN ASSOC OF PORTLAND/WREIGHT

has permission to Roof replacement on existing structure

AT 70 FOREST AVE

036 G020001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and when permission is procured before this building or part thereof is altered or closed-in. FOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

#### OTHER REQUIRED APPROVALS

Fire Dept. \_\_\_\_\_

Health Dept. \_\_\_\_\_

Appeal Board \_\_\_\_\_

Other \_\_\_\_\_

Department Name

*[Signature]*  
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207)874-8703, Fax: (207)874-8716

Permit No: 06-0743	Issue Date: <b>PERMIT ISSUED</b>	BL: 036 G020001
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Location of Construction: 70 FOREST AVE	Owner Name: YOUNG MENS CHRISTIAN ASS	Owner Address: 70 FOREST AVE	Phone: MAY 26 2006
Business Name:	Contractor Name: WRIGHT RYAN CONSTRUCTIO	Contractor Address: 10 DANFORTH STREET CITY OF PORTLAND	Phone: 733025
Applicant/Buyer's Name	Phone:	Permit Type: Alterations - Commercial	Zone: C32

Actual Use: Commercial	Proposed Use: Commercial roof replacement on existing structure	Permit Fee: \$3,621.00	Cost of Work: \$400,000.00	CEO District: 1
Proposed Project Description: Roof replacement on existing structure		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <i>See conditions</i>	INSPECTION: Use Group <i>A3/A4</i> Type <i>213</i> <i>5/24/06</i>	
		Signature: <i>Cass</i>	Signature: <i>[Signature]</i>	
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)				
Action <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied				
Signature: _____ Date: _____				

Permit Taken By: dmartin	Date Applied For: 05/16/2006	<b>Zoning Approval</b>		
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<p>1.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..</p>	<p><b>Special Zone or Reviews</b></p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetland</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Sits Plan</p> <p>Major <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/></p> <p><i>OK - South</i> Date: <i>5/19/06</i></p>	<p><b>Zoning Appeal</b></p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p><i>in writing</i> Date: _____</p>	<p><b>Historic Preservation</b></p> <p><input checked="" type="checkbox"/> Not in District or Landmark</p> <p><input type="checkbox"/> Does Not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p><i>g</i> Date: _____</p>
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**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

	<b>Date Applied For:</b> 05/16/2006	<b>CBL:</b> 036 G020001
--	--	----------------------------

<b>Location of Construction:</b> 70 FOREST AVE	<b>Owner Name:</b> YOUNG MENS CHRISTIAN ASS	<b>Owner Address:</b> 70 FOREST AVE	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> WRIGHT RYAN CONSTRUCT10	<b>Contractor Address:</b> 10 DANFORTH STREET Portland	<b>Phone</b> (207) 773-3625
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Alterations - Commercial	

<b>Proposed Use:</b> Commercial roof replacement on existing structure	<b>Proposed Project Description:</b> Roof replacement on existing structure
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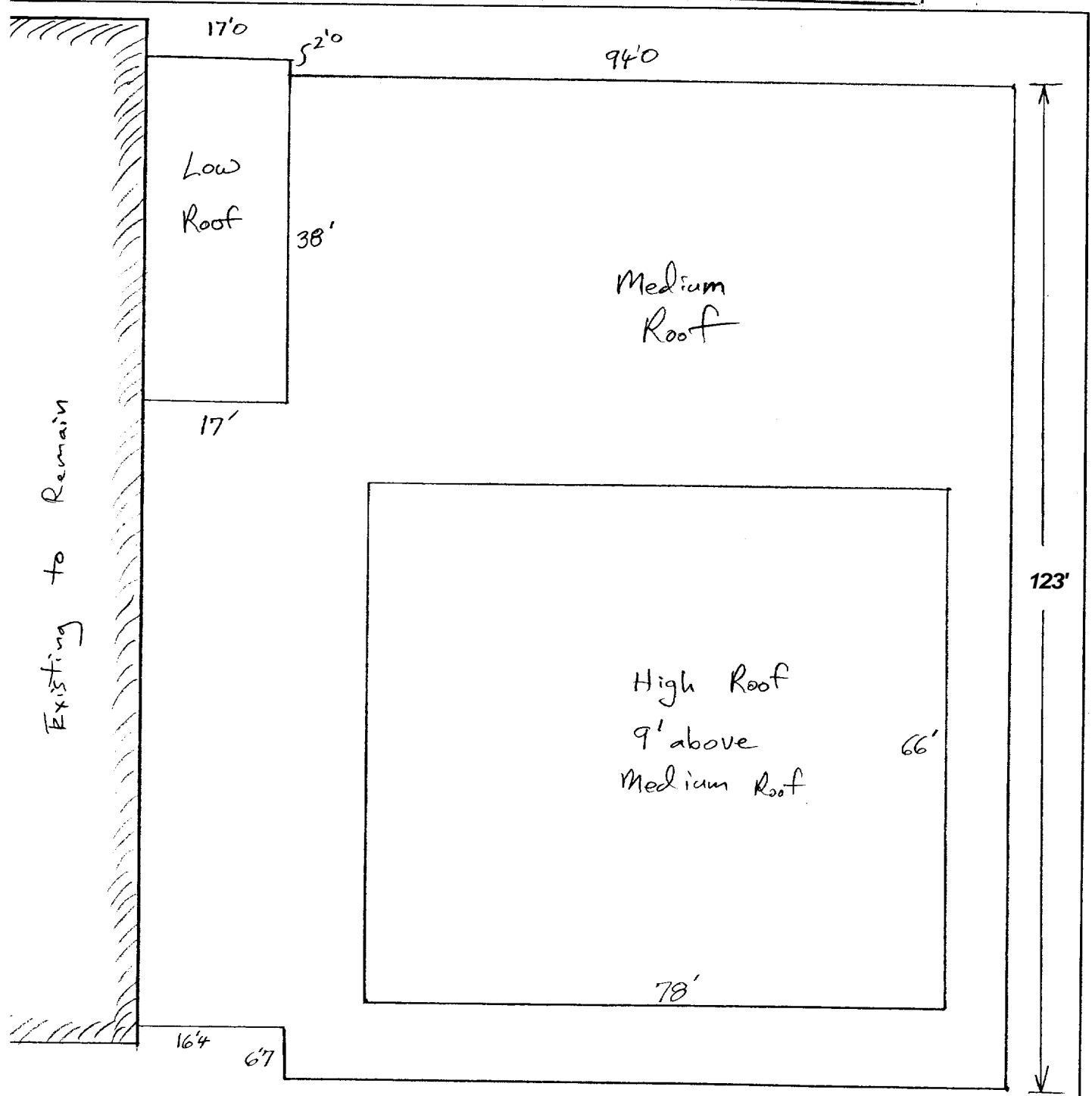
**Dept:** Zoning      **Status:** Approved with Conditions      **Reviewer:** Marge Schmuckal      **Approval Date:** 05/19/2006  
**Note:** **Ok to Issue:**   
1) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.  
2) No expansion of the existing building is being approved with this permit.

**Dept:** Building      **Status:** Approved with Conditions      **Reviewer:** Mike Nugent      **Approval Date:** 05/24/2006  
**Note:** **Ok to Issue:**   
1) Joseph Leasure P.E. to perform special inspections per Randy Alred /Wright-Ryan

**Dept:** Fire      **Status:** Approved with Conditions      **Reviewer:** Cptn Greg Cass      **Approval Date:** 05/22/2006  
**Note:** **Ok to Issue:**   
1) Fire suppression system shall comply with NFPA 13  
2) Fire detection system shall comply with NFPA 72  
3) All building construction shall comply with NFPA 101

**CWS Architects**  
 434 Curnberland Ave.  
 Portland, ME 04101-2325  
 Tel: (207) 774-4441  
 Fax: (207) 774-4016  
 CWSarch.com

JOB: Portland YWCA Malcolm Wing  
 CITY OF PORTLAND, ME  
 SHEET NO: 3  
 CALCULATED BY: MAY 16 2006 DATE: 8-12-05  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SCALE: \_\_\_\_\_  
**RECEIVED**



ROOF PLAN

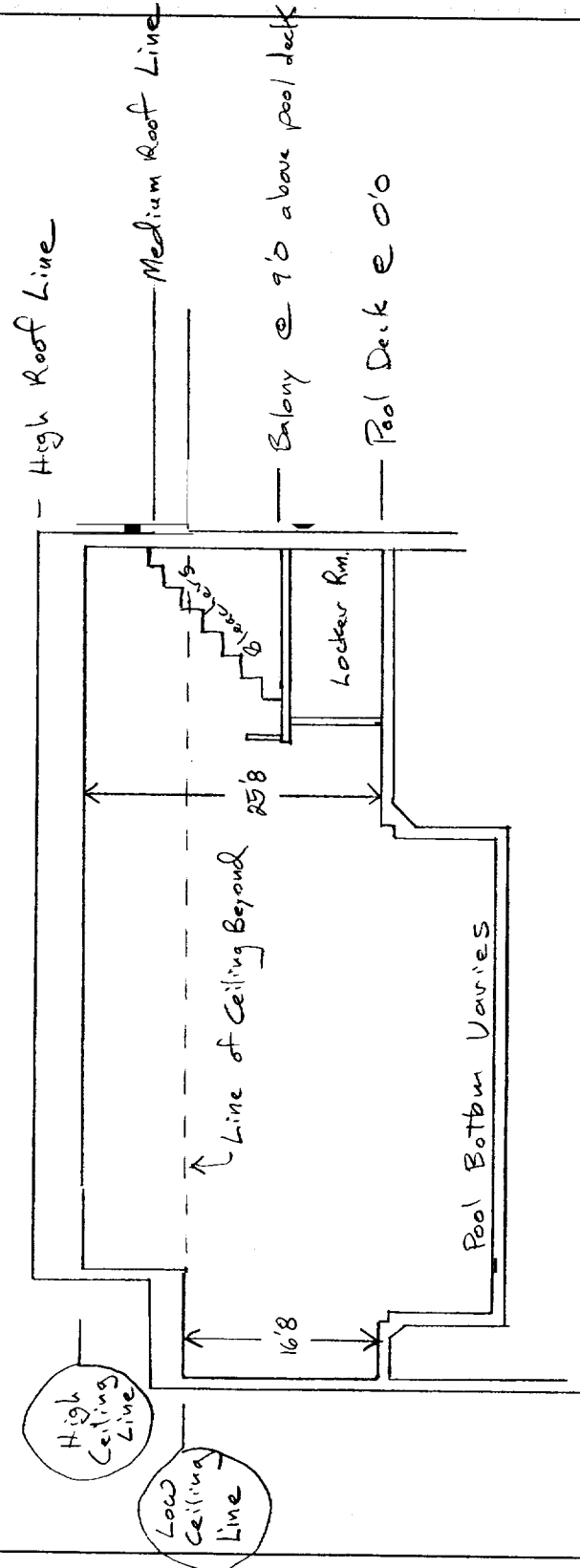
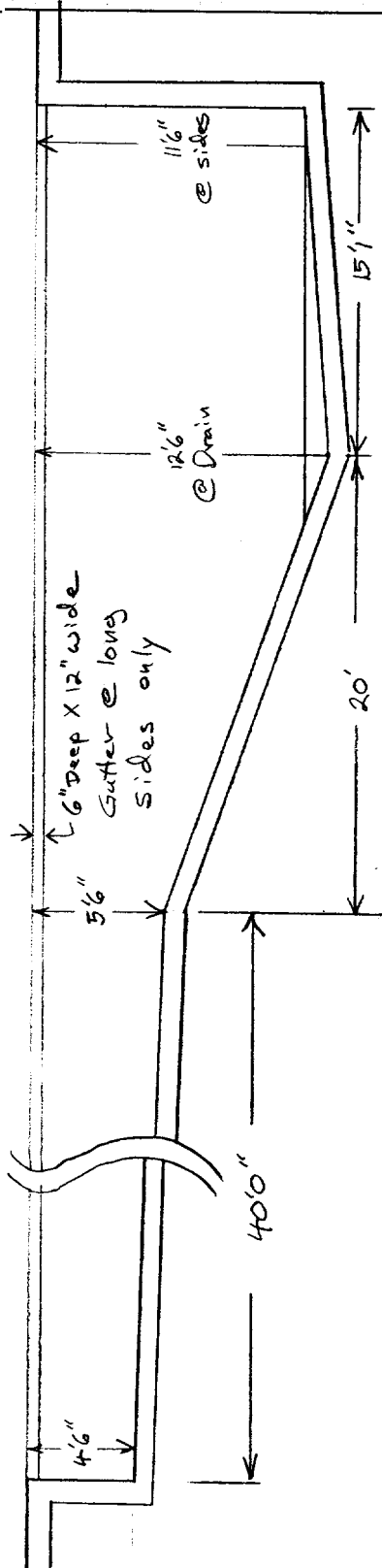
TOTAL Roof Area 13,500 #

**CWS Architects**

434 Cumberland Ave.  
 Portland, ME 04101-2325  
 Tel: (207) 774-4441  
 Fax: (207) 774-4016  
 CWSArch.com

JOB Portland YMCA Malcolm wing  
 SHEET NO. 3 OF 3  
 CALCULATED BY \_\_\_\_\_ DATE 8-12-05  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

Cross Section of Pool B-B 1/8" = 1'0"



Building Cross Section A-A 1/16" = 1'0"

**SECTION 07500  
ROOFING AND FLASHING**

**PART1 GENERAL**

**1.01 DESCRIPTION OF WORK**

A. Fully adhered EPDM sheet roofing, tapered and flat roof insulation, elastomeric flashing, wood nailers, Metal-Era fascia system, copper cap flashings, roof drains, plumbing and walkway pads.

B. Wright-Ryan Construction, Inc. may change the scope of work described herein.

**1.02 CODES, REGULATIONS AND STANDARDS**

A. Contractor Responsibility: The Contractor shall assume **full** responsibility and liability for compliance with all applicable Federal, State and local codes, regulations and standards pertaining to work practices, hauling, disposal, protection of workers and visitors to the site, and persons occupying areas adjacent to the site. This includes modification of procedures to comply with changes to codes, regulations and standards which occur during the work of this contract. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State and local regulations. The Contractor shall hold the Owner and Owner's Representatives harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulations on the part of himself, his employees or his subcontractors.

**1.03 QUALITY ASSURANCE**

A. Roofing contractor to be approved in writing by the membrane manufacturer. Contractor shall be able to substantiate that he has been trained by the membrane manufacturer.

B. Roofing and flashing workmanship to comply with industry standards. The National Roofing Contractors Association's (NRCA) **ROOFING AND WATERPROOFING MANUAL** along with **ARCHITECTURAL SHEET METAL MANUAL** as published by Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) will be used to establish industry standards.

**1.04 SUBMITTALS**

- A. Sample ten (10) year watertight warranty for the EPDM membrane.
- B. Sample twenty (20) year material warranty for the EPDM membrane.
- C. Current EPDM membrane manufacturer's application specifications.
- D. Manufacturer's details of the proposed fascia system.

**1.05 PRODUCT DELIVERY, STORAGE AND HANDLING**

A. Deliver materials in their original, unopened containers, clearly labeled with manufacturer's name. All material to be stored in waterproof trailers or sheds, up on raised platforms and under lock and key until use. Do not use materials damaged in handling or storage. Replace damaged material with new material. Store adhesives between 60 and 80 degrees F. Should they be exposed to lower temperatures, restore to room temperature for three to five days prior to use.

## 2.06 FASTENERS

A. Use annular-ring hot dipped galvanized nails by the W.H. Maze Co. on the galvanized cant dam.

B. Use fasteners recommended by the membrane manufacturer to secure anchor bars and termination bars.

C. Wood nailers to be secured using annular-ring hot dipped galvanized nails, galvanized dry-wall screws, #14-10 Heavy Duty Roofing Fasteners, carriage bolts or expansion anchors.

D. Fasteners used to secure roof insulation to the new steel deck to be #14-10 Heavy Duty Roofing Fasteners with CR-10 coating, a minimum shank diameter of 0.170" and a thread diameter of 0.125". Pressure plates to be 3" diameter Galvalume plates. Screws and plates to be manufactured by Olympic Fasteners or approved equal. Length, size and accessories to be as required by the EPDM membrane manufacturer selected.

## 2.07 WALKWAY PADS

A. Walkway pads to be 30" x 30" x .30" thick Firestone Rubbergard Walkway pads or approved equal.

## PART 3 EXECUTION

### 3.01 PREPARATION OF SURFACES

A. Completely remove existing roofing, roof insulation, base flashing, edge strips, vent flashing and roof drains. Promptly remove from site and dispose of properly.

B. Surfaces on which the roofing system is to be applied shall be clean, smooth, dry, free of fins, rot, sharp edges, loose and foreign materials, oil and grease.

### 3.02 ROOF INSULATION

A. Insulation shall be tightly butted with joints not more than 1/8" in width. Stagger joints with those in layer below. Fiberboard to be installed with a 1/16"-1/8" gap at all joints when board size is greater than 2' x 4'.

B. Fasten insulation to the roof deck with the appropriate screws and plates. Fastener quantity and layout must meet all requirements that may be imposed by the EPDM manufacturer to obtain their warranty.

C. Stagger joints in one direction for each course. For multiple layers, stagger joints in both directions between courses leaving no gaps, allowing a complete thermal envelope to be formed.

D. Provide tapered units to suit drainage pattern indicated.

E. Do not install more insulation in a day than can be covered with membrane before end of day or before start of inclement weather.

### 3.03 ROOF MEMBRANE

A. Adhere the .060" EPDM membrane to the 1/2" high density fiberboard in strict accordance with the manufacturer's specifications.

B. **Six inch (6'') wide seam tape will be required for all field seams.**

B. All roofs, building, landscape and parking areas shall be cleaned of all trash, debris and dirt caused by or associated with this work.

C. Any areas stained, dirtied, discolored or otherwise damaged due to this work shall be cleaned, restored and replaced as required.

D. All debris shall be removed from the premises promptly and the construction area left clean daily.

### 3.12 INSPECTION AND TESTING

THE OWNER RESERVES THE RIGHT TO INSPECT AND TEST ALL CONSTRUCTION OPERATIONS AND MATERIALS.

A. Any defect or noncompliance discovered by inspection shall be reported to the contractor who shall promptly remove any defective material from the site.

B. The Owner reserves the right to inspect the work or parts of it as he chooses. His failure to inspect the work in progress shall not relieve the contractor of the responsibility for properly executing the contracted work, nor shall it impair the Owner's right to reject deficiencies he may subsequently discover.

### 3.13 DIMENSIONS AND QUANTITIES

A. The roof plan was compiled from various sources and may not reflect the conditions at the time of construction.

B. It is the contractor's responsibility to verify all dimensions prior to bidding.

## PART 4 JOB CONDITIONS

A. Roofing to be applied in dry weather.

B. Completed roof areas shall not be trafficked. The work shall be coordinated to prevent this situation by working toward the roof edges.

C. This project is subject to compliance with all requirements of the Occupational Safety and Health Administration (OSHA). All work on this project must meet the requirements of all applicable state and local codes, laws and ordinances.

D. Test cuts were taken from the roofs.

1. Over existing cementitious wood fiber deck there is one layer of 1/2" fiberboard roof insulation and a fully adhered EPDM roof. There is a double tapered edge at the perimeter of the roofs. This old roof has had many repairs over the years so it is very likely that the roof composition will vary from one location to another. The contractors are encouraged to take their own test cuts to determine the exact composition of the existing roof system. Contractor will not receive any additional compensation should he later discover variations in the existing roof system. Contractor is to expect variations.

END OF SECTION



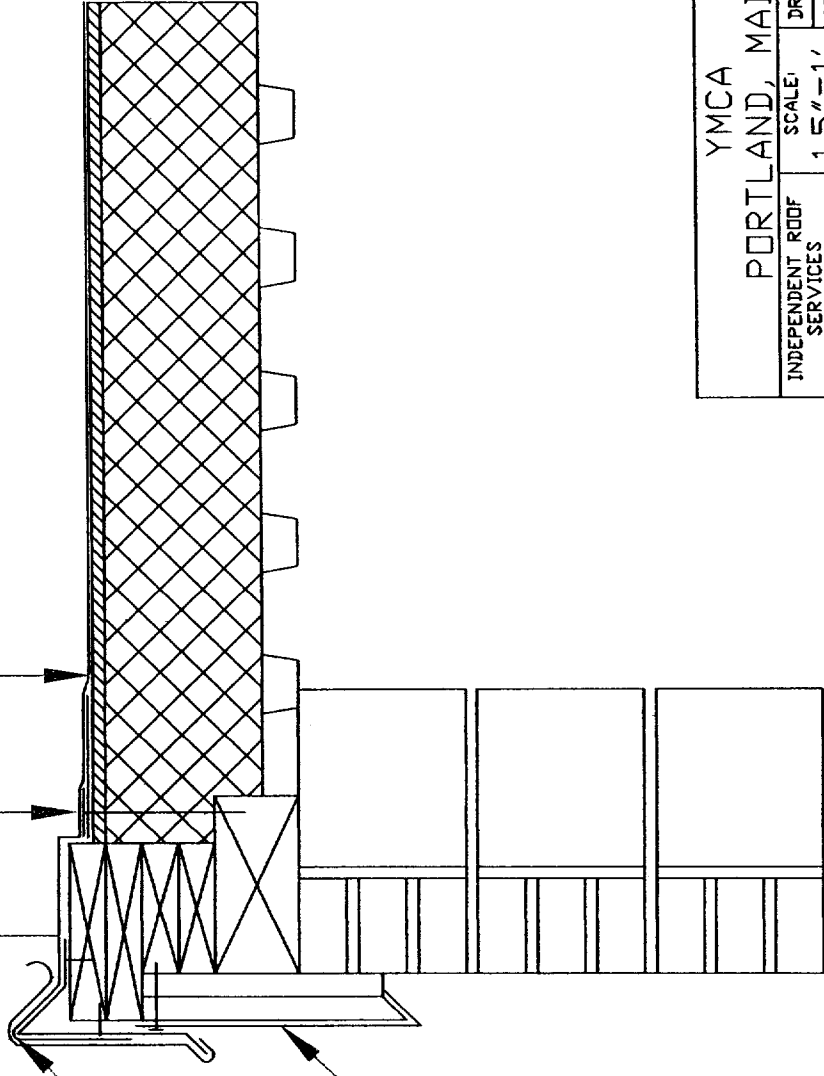
0.045" REINFORCED EPDM ANCHOR STRIP AS NEEDED

NEW AND EXISTING BLOCKING TO OBTAIN MAXIMUM INSULATION HEIGHT

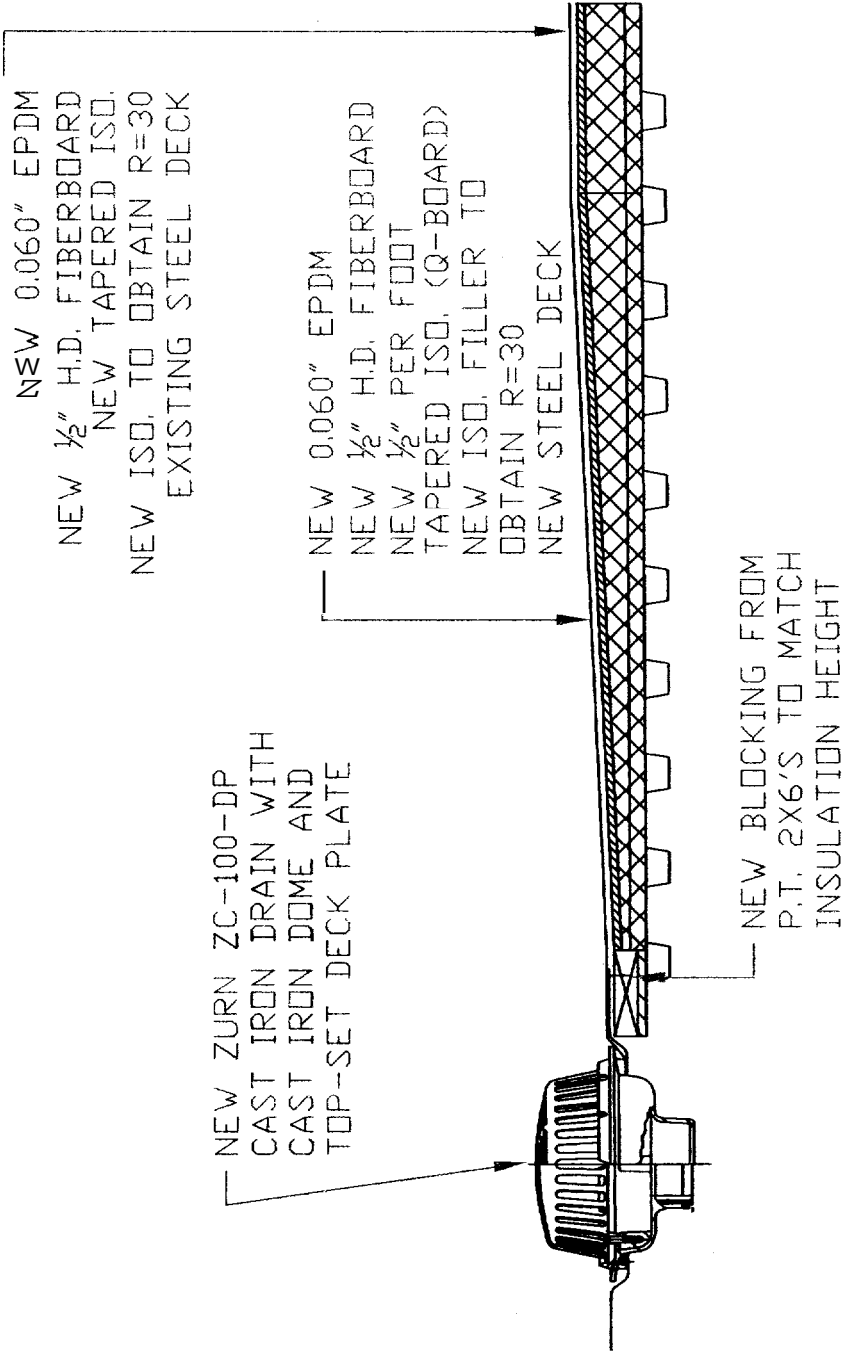
NEW METAL-ERA FA-80

NEW FASCIA EXTENDER MADE FROM 0.050" ALUMINUM, NAIL TOP OF EXTENDER AT 18" O.C. THROUGH SLOTTED HOLES

NEW 0.060" EPDM  
NEW H.D. FIBERBOARD  
NEW TAPERED ISO.  
NEW ISO. FILLER TO OBTAIN R=30  
NEW STEEL DECK



YMCA PORTLAND, MAINE			
INDEPENDENT ROOF SERVICES POWNA, MAINE	SCALE: 1.5" = 1'	DRAWN BY JTB	REVISED BY ---
TITLE: TYPICAL EDGE DETAIL			
DATE: 8-2-05	FILE NAME: YMCA PORTLAND	DRAWING #: R2	



YMCA PORTLAND, MAINE			
INDEPENDENT ROOF SERVICES POWNA, MAINE	SCALE: 1"=1'	DRAWN BY JTB	REVISED BY ---
TITLE: TYPICAL SUMP DETAIL			
DATE: 8-2-05	FILE NAME: YMCA PORTLAND	DRAWING #: R4	



## REQUEST FOR PROPOSAL

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Project: MALCOLM WING ROOF REPLACEMENT  
Location: Greater Portland YMCA, Forest Avenue, Portland, Maine  
Issued by: Wright-Ryan Construction, Inc., Rick Bergeron  
Issued on: February 22, 2006  
Site Visit: Contact Rick Bergeron to schedule a site visit  
Bid due date: March 8, 2006 at 12:00 Noon

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THE BID DOCUMENTS for this project consist of the following:

- Specification Section 07500 Roofing and Flashing consisting of 5 pages and Sketches R1 through R5 prepared by Independent Roof Services dated August 2, 2005.
  - Structural Drawings S1, S2, and S3 prepared by L&L Structural Engineering Services dated August 11, 2005.
  - Sketches 1 of 3 - Malcolm Wing Roof Plan, 2 of 3 - Pool Room Plan, and 3 of 3 - Pool Room Cross Sections, all dated August 12, 2005.
  - **NOTE:** The Original Construction Documents for the Malcolm Wing are available at Wright-Ryan's office for review.
- 

THIS PROJECT CONSISTS of the following bid packages:

1. Selective Demolition

- Remove the entire roofing system over the Malcolm Wing (approx. 13,500sft).
- Remove the existing tectum deck and supporting bulb tees. Grind smooth and touch-up paint the areas where the bulb tees are welded to the steel beams and joists.
- Remove the existing acoustical ceiling systems.
- The working platforms described in Item 2 below will be provided by others to access the roof area over the pool room and pool bleachers (about 50% of the total project area).
- This subcontractor is responsible for obtaining and paying for all state or local permits required to properly perform this scope of work.
- This subcontractor is responsible for providing the dumpsters required for debris removal. These containers will be covered at all times to control dust migration.
- When "remove" is used above, it means remove, handle, transport off site, and legally dispose of.

*Building Maine's Great Spaces*

Wright-Ryan Construction, Inc. • 10 Danforth Street • Portland, Maine 04101  
Phone (207)773-3625 • Fax (207)773-5173 • [www.wright-ryan.com](http://www.wright-ryan.com)

## 2. Working Platform over the Pool

- Design, furnish, erect, and subsequently dismantle and remove working platforms to access the roof area above the Malcolm Pool and bleacher area.
- The pool will be drained by others prior to the start of erection work. All existing tile work must be protected from damage due to scaffolding leg loading.
- These working platforms must provide access to the entire roof over the pool room and bleacher area (approx. 73' 4" by 91' 11").
- The top of these working platforms should be located about 6' 0" below the existing ceiling surfaces.
- All scaffold materials must be loaded in and out through the existing access door at the northeast corner of the pool room.

## 3. Structural Upgrades

- Fabricate, deliver, and fully install all of the structural steel upgrades indicated for both the existing steel frame and steel joists. Note that all of the upgrades that can be performed from underneath the existing roof deck will be performed before the roofing and decking are removed. The working platforms described in Item 2 above will be provided by others to access the roof area over the pool room and pool bleachers (about 50% of the total project area). This subcontractor will need to provide access to the remaining areas requiring upgrades.
- Furnish and install the new metal decking.

## 4. New Roofing System

- ± Furnish and install a new roof system in accordance with the bid documents (approx. 13,500sft).
- Furnish and install the new roof drains indicated. All interior plumbing work will be performed by others.
- ± Furnish and install all required flashing work required including that required for the existing rooftop equipment and penetrations not indicated on the drawings.
- Furnish and install walkway pads to access the existing equipment and roof protection pads for the existing wooden walkway which will be removed and reinstalled by others.
- All roof demolition work will be performed by others.
- All metal decking and wood blocking work will be performed by others.
- **NOTE:** Provide an Alternate price to substitute a FiberTite roof system in lieu of the specified EPDM system. Contact John Massengill at Seaman Corporation (Tele: 510-6868) for material pricing.

## 5. Acoustical Ceiling Systems

- ± Furnish and install a new acoustical ceiling system in the pool room. The tile shall be Armstrong Ceramiguard or approved equal.
- Furnish and install a new acoustical ceiling system in the upstairs areas adjoining the squash and handball courts.
- The working platforms described in Item 2 above will be provided by others to access the roof area over the pool room and pool bleachers.

## 6. Mechanical Systems

- Furnish and install new horizontal rain water piping from the new roof drains to the existing storm water leaders.
- Temporarily support any mechanical system component currently hung from the existing tectum decking. Reattach to the adjacent steel framing or the new metal deck.
- The working platforms described in Item 2 below will be provided by others to access the roof area over the pool room and pool bleachers.

## 7. Fire Protection Systems

- Design, fabricate, deliver, and fully install a new fire protection system for all spaces in the Malcolm Wing located directly below the roof structure (top level spaces).
- The working platforms described in Item 2 above will be provided by others to access the roof area over the pool room and pool bleachers.
- **NOTE:** Provide an Alternate price to provide fire protection coverage for the balance of the wing spaces (lower level spaces – i.e.: locker rooms, etc).

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THE PROJECT CONSTRUCTION SCHEDULE for this work is as follows:

- Subcontract awards will be made within 30 days of the bid date allowing the individual subcontractors to purchase the required building materials. Subcontractors will be paid for properly identified and insured stored materials. Actual field construction work will not begin until June 2006.
- Mobilize and start work on June 5, 2006.
- Work will be phased and will be performed in a sequence to keep the building as dry as possible. This sequence will be determined later.
- Complete all work by August 25, 2006.

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## GENERAL BIDDING REQUIREMENTS

All questions concerning this scope of work, the bid documents or the construction schedule must be submitted in writing at least 72 hours in advance of the established bid proposal due date and time. Please fax all written questions to Rick Bergeron at 773-5173. Responses will be issued in writing via addendum.

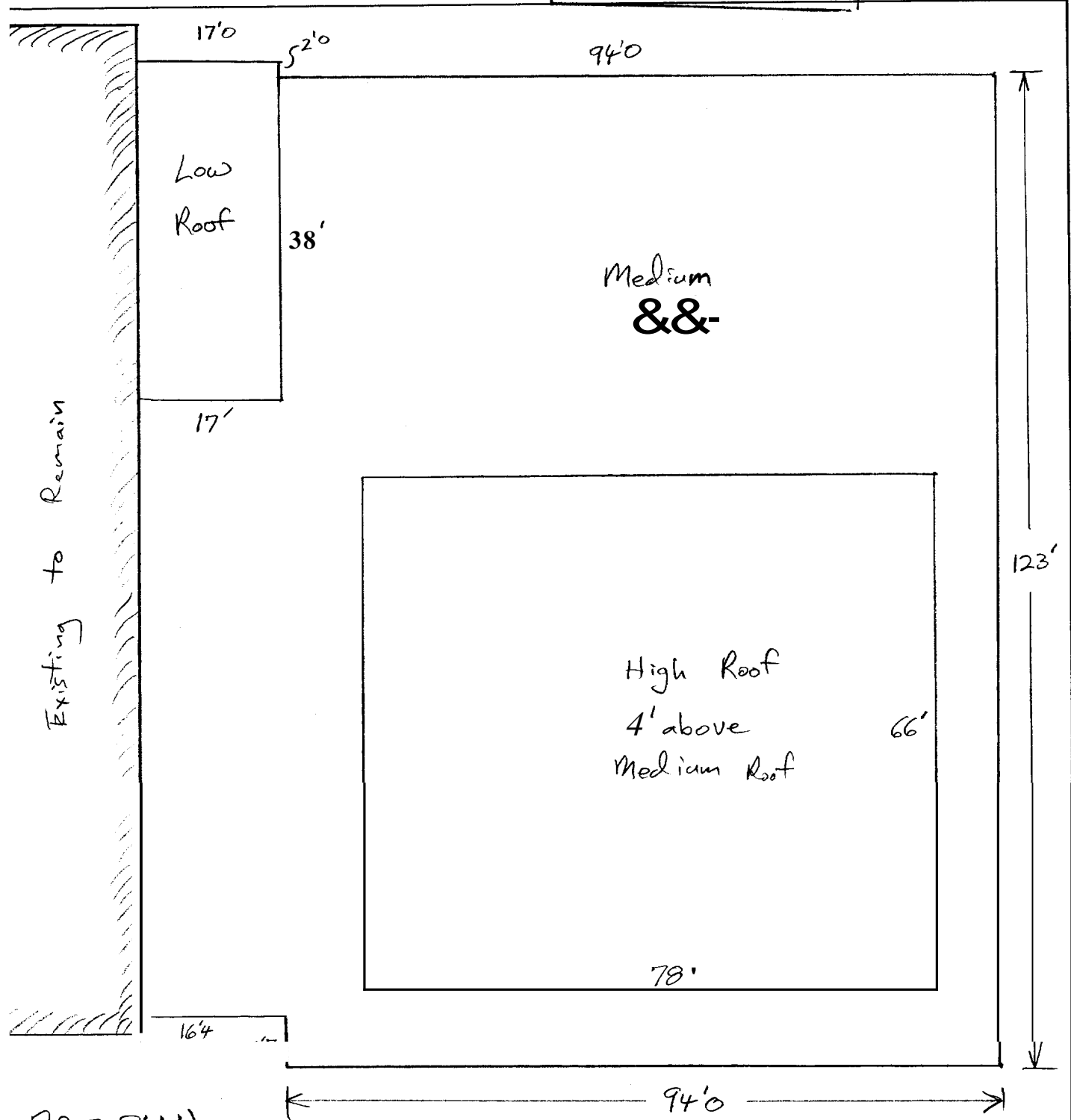
All bid proposals shall be in strict accordance with this RFP and all documents listed herein, including all addenda issued subsequently. All bid documents are complementary – should one document require a scope of work item not indicated on or within another document, it is understood that this work item will be required as if indicated by all documents, and shall not be considered a conflict within the documents. All exclusions, clarifications, and/or assumptions, relative to this scope of work, the bid documents or the construction schedule, must be clearly listed on the bidder's proposal. Bid proposals shall remain subject to acceptance for 30 days after the due date listed above. Bid proposals may be hand delivered to our main office or faxed to 773-5173.

---

End of RFP

**CWS Architects**  
 434 Curnberland Ave.  
 Portland, ME 04101-2325  
 Tel: (207) 774-4441  
 Fax: (207) 774-4016  
 CWSarch.com

JOE Portland YMCA Malcolm Wing  
 SHEET NO. CITY OF PORTLAND OF 3  
 CALCULATED BY: [Signature] DATE 8-12-05  
 CHECKED BY: MAY 18 2006 DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_  
**RECEIVED**

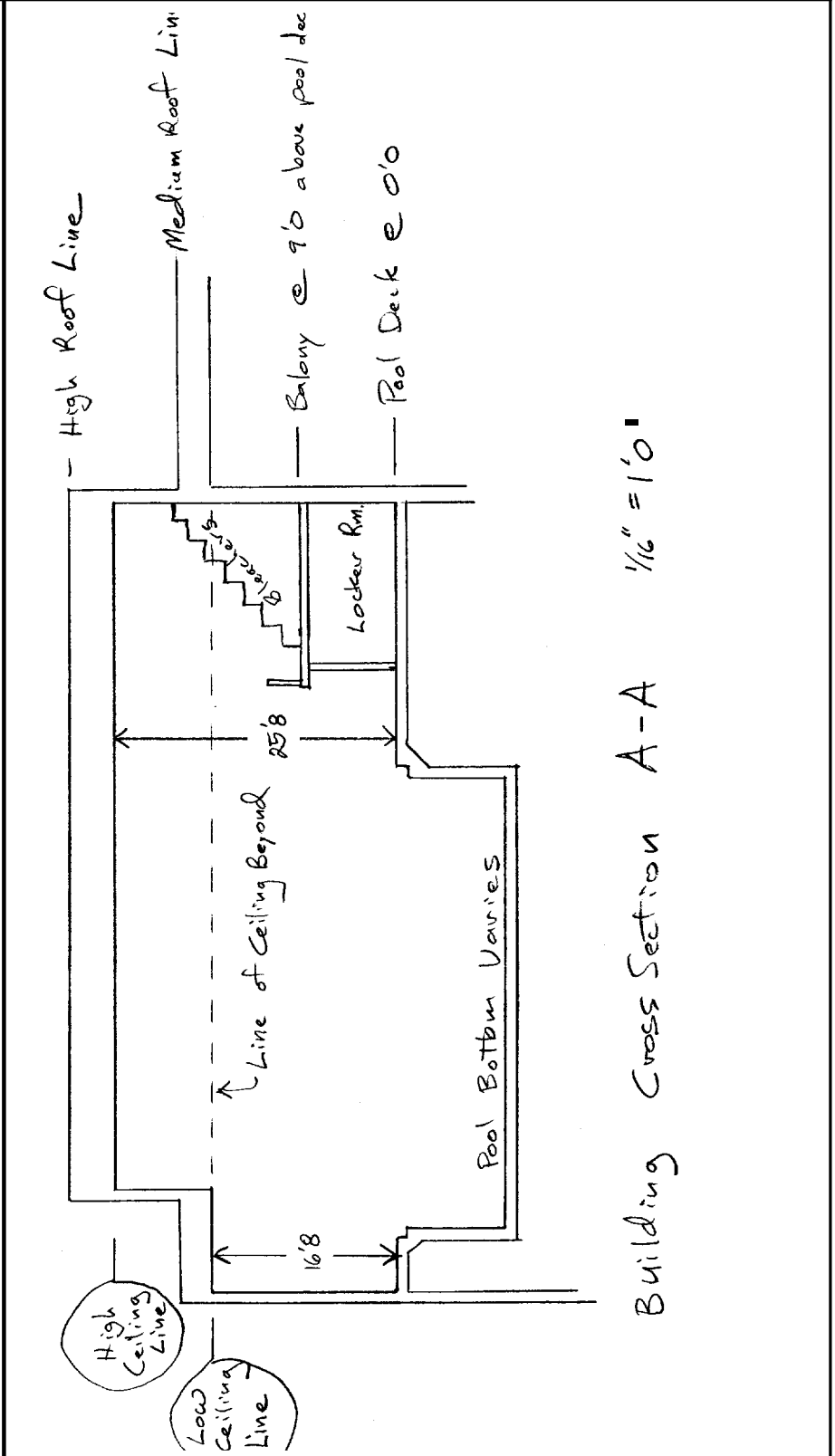
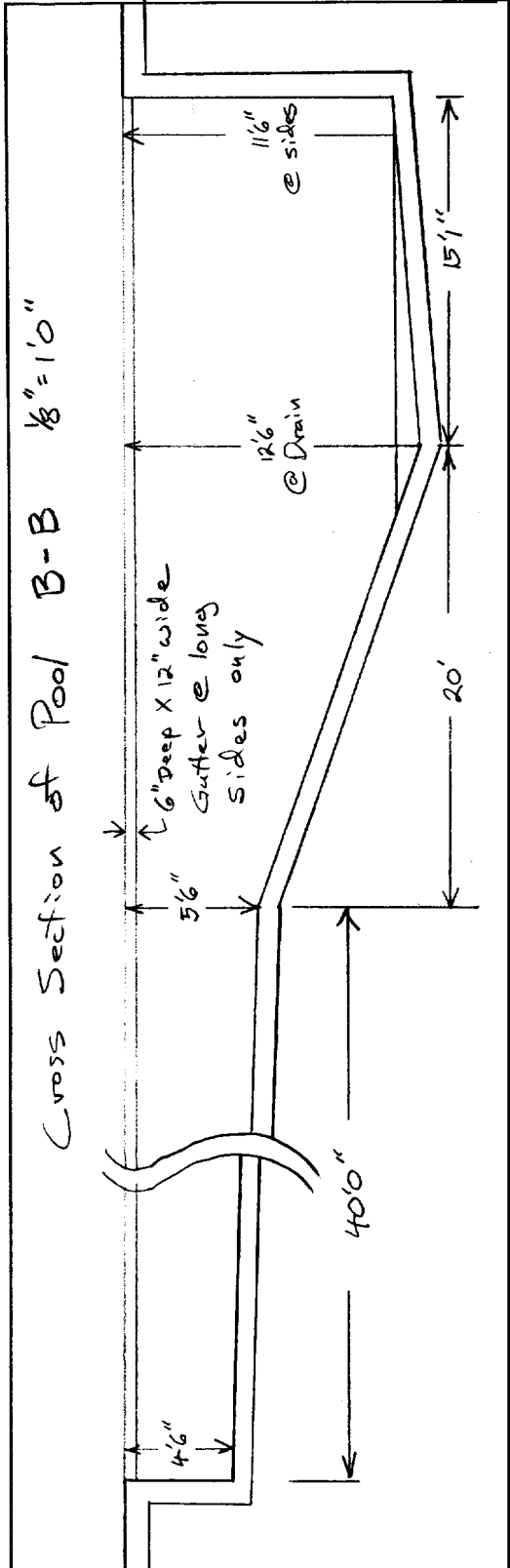


ROOF PLAN

TOTAL Roof Area 13,500 #

**CWS Architects**  
 434 Cumberland Ave.  
 Portland, ME 04101-2325  
 Tel: (207) 774-4441  
 Fax: (207) 774-4016  
 CWSarch.com

JOB Portland YMCA Malcolm Wing  
 SHEET NO. 3 OF 3  
 CALCULATED BY \_\_\_\_\_ DATE 8-12-05  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_



**SECTION 07500  
ROOFING AND FLASHING**

**PART 1 GENERAL**

**1.01 DESCRIPTION OF WORK**

A. Fully adhered EPDM sheet roofing, tapered and flat roof insulation, elastomeric flashing, wood nailers, Metal-Era fascia system, copper cap flashings, roof drains, plumbing and walkway pads.

B. Wright-Ryan Construction, Inc. may change the scope of work described herein.

**1.02 CODES, REGULATIONS AND STANDARDS**

A. Contractor Responsibility: The Contractor shall assume **full** responsibility and liability for compliance with all applicable Federal, State and local codes, regulations and standards pertaining to work practices, hauling, disposal, protection of workers and visitors to the site, and persons occupying areas adjacent to the site. **This** includes modification of procedures to comply with changes to codes, regulations and standards which occur during the work of this contract. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State and local regulations. The Contractor shall hold the Owner and Owner's Representatives harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulations on the part of himself, his employees or **his** subcontractors.

**1.03 QUALITY ASSURANCE**

A. Roofing contractor to be approved in writing by the membrane manufacturer. Contractor shall be able to substantiate that he has been trained by the membrane manufacturer.

B. Roofing and flashing workmanship to comply with industry standards. The National Roofing Contractors Association's (NRCA) **ROOFING AND WATERPROOFING MANUAL** along with **ARCHITECTURAL SHEET METAL MANUAL** as published by Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) will be used to establish industry standards.

**1.04 SUBMITTALS**

- A. Sample ten (10) year watertight warranty for the EPDM membrane.
- B. Sample twenty (20) year material warranty for the EPDM membrane.
- C. Current EPDM membrane manufacturer's application specifications.
- D. Manufacturer's details of the proposed fascia system.

**1.05 PRODUCT DELIVERY, STORAGE AND HANDLING**

A. Deliver materials in their original, unopened containers, clearly labeled with manufacturer's name. All material to be stored in waterproof trailers or sheds, up on raised platforms and under lock and key until use. Do not use materials damaged in handling or storage. Replace damaged material with new material. Store adhesives between 60 and 80 degrees F. Should they be exposed to lower temperatures, restore to room temperature for three to five days prior to use.



## 2.06 FASTENERS

A. Use annular-ring hot dipped galvanized nails by the W.H. Maze Co. on the galvanized cant dam.

B. Use fasteners recommended by the membrane manufacturer to secure anchor bars and termination bars.

C. Wood nailers to be secured using annular-ring hot dipped galvanized nails, galvanized dry-wall screws, #14-10 Heavy Duty Roofing Fasteners, carriage bolts or expansion anchors.

D. Fasteners used to secure roof insulation to the new steel deck to be #14-10 Heavy Duty Roofing Fasteners with CR-10 coating, a minimum shank diameter of 0.170" and a thread diameter of 0.125". Pressure plates to be 3" diameter Galvalume plates. Screws and plates to be manufactured by Olympic Fasteners or approved equal. Length, size and accessories to be as required by the EPDM membrane manufacturer selected.

## 2.07 WALKWAY PADS

A. Walkway pads to be 30" x 30" x .30" thick Firestone Rubbergard Walkway pads or approved equal.

## PART 3 EXECUTION

### 3.01 PREPARATION OF SURFACES

A. Completely remove existing roofing, roof insulation, base flashing, edge strips, vent flashing and roof drains. Promptly remove from site and dispose of properly.

B. Surfaces on which the roofing system is to be applied shall be clean, smooth, dry, free of fins, rot, sharp edges, loose and foreign materials, oil and grease.

### 3.02 ROOF INSULATION

A. Insulation shall be tightly butted with joints not more than 1/8" in width. Stagger joints with those in layer below. Fiberboard to be installed with a 1/16"-1/8" gap at all joints when board size is greater than 2' x 4'.

B. Fasten insulation to the roof deck with the appropriate screws and plates. Fastener quantity and layout must meet all requirements that may be imposed by the EPDM manufacturer to obtain their warranty.

C. Stagger joints in one direction for each course. For multiple layers, stagger joints in both directions between courses leaving no gaps, allowing a complete thermal envelope to be formed.

D. Provide tapered units to suit drainage pattern indicated.

E. Do not install more insulation in a day than can be covered with membrane before end of day or before start of inclement weather.

### 3.03 ROOF MEMBRANE

A. Adhere the .060" EPDM membrane to the 1/2" high density fiberboard in strict accordance with the manufacturer's specifications.

**B. Six inch (6") wide seam tape will be required for all field seams.**

B. All roofs, building, landscape and parking areas shall be cleaned of all trash, debris and dirt caused by or associated with this work.

C. Any areas stained, dirtied, discolored or otherwise damaged due to this work shall be cleaned, restored and replaced as required.

D. All debris shall be removed from the premises promptly and the construction area left clean daily.

### 3.12 INSPECTION AND TESTING

THE OWNER RESERVES THE RIGHT TO INSPECT AND TEST ALL CONSTRUCTION OPERATIONS AND MATERIALS.

A. Any defect or noncompliance discovered by inspection shall be reported to the contractor who shall promptly remove any defective material from the site.

B. The Owner reserves the right to inspect the work or parts of it as he chooses. His failure to inspect the work in progress shall not relieve the contractor of the responsibility for properly executing the contracted work, nor shall it impair the Owner's right to reject deficiencies he may subsequently discover.

### 3.13 DIMENSIONS **AND** QUANTITIES

A. The roof plan was compiled from various sources and may not reflect the conditions at the time of construction.

B. It is the contractor's responsibility to verify all dimensions prior to bidding.

## **PART 4 JOB CONDITIONS**

A. Roofing to be applied in dry weather.

B. Completed roof areas shall not be trafficked. The work shall be coordinated to prevent this situation by working toward the roof edges.

C. This project is subject to compliance with all requirements of the Occupational Safety and Health Administration (OSHA). All work on this project must meet the requirements of all applicable state and local codes, laws and ordinances.

D. Test cuts were taken from the roofs.

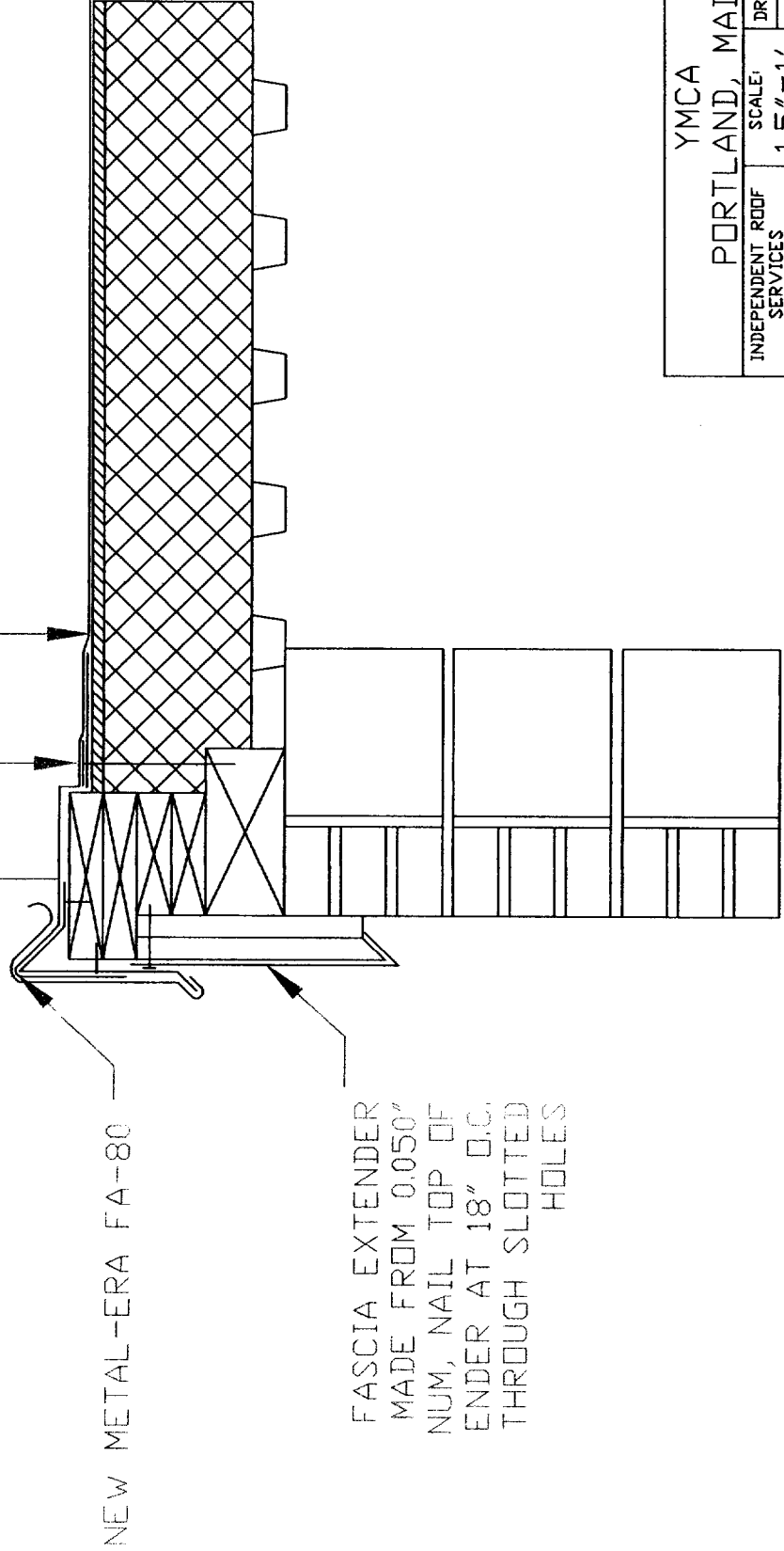
1. Over existing cementitious wood fiber deck there is one layer of 1/2" fiberboard roof insulation and a fully adhered EPDM roof. There is a double tapered edge at the perimeter of the roofs. This old roof has had many repairs over the years so it is very likely that the roof composition will vary from one location to another. The contractors are encouraged to take their own test cuts to determine the exact composition of the existing roof system. Contractor will not receive any additional compensation should he later discover variations in the existing roof system. Contractor is to expect variations.

END OF SECTION

0.045" REINFORCED EPDM ANCHOR STRIP AS NEEDED

NEW AND EXISTING BLOCKING TO OBTAIN MAXIMUM INSULATION HEIGHT

NEW 0.060" EPDM  
NEW H.D. FIBERBOARD  
NEW TAPERED ISO.  
NEW ISO, FILLER TO OBTAIN R=30  
NEW STEEL DECK



NEW METAL-ERA FA-80

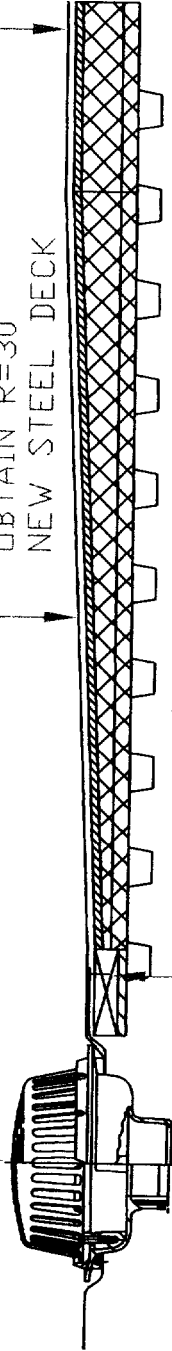
FASCIA EXTENDER MADE FROM 0.050" NUM, NAIL TOP OF ENDER AT 18" O.C. THROUGH SLOTTED HOLES

YMCA PORTLAND, MAINE			
INDEPENDENT ROOF SERVICES PORTLAND, MAINE	SCALE: 1.5" = 1'	DRAWN BY JTB	REVISED BY ---
TITLE: TYPICAL EDGE DETAIL			
DATE: 8-2-05	FILE NAME: YMCA PORTLAND	DRAWING #: R2	

NEW 0.060" EPDM  
 NEW 1/2" H.D. FIBERBOARD  
 NEW TAPERED ISO.  
 NEW ISO. TO OBTAIN R=30  
 EXISTING STEEL DECK

NEW 0.060" EPDM  
 NEW 1/2" H.D. FIBERBOARD  
 NEW 1/2" PER FOOT  
 TAPERED ISO. (Q-BOARD)  
 NEW ISO. FILLER TO  
 OBTAIN R=30  
 NEW STEEL DECK

NEW ZURN ZC-100-DP  
 CAST IRON DRAIN WITH  
 CAST IRON DOME AND  
 TOP SET DECK PLATE



NEW BLOCKING FROM  
 P.T. 2X6'S TO MATCH  
 INSULATION HEIGHT

YMCA			
PORTLAND, MAINE			
INDEPENDENT ROOF SERVICES POWNAH, MAINE	SCALE: 1"=1'	DRAWN BY JTB	REVISED BY ---
TYPICAL SUMP DETAIL		FILE NAME: YMCA PORTLAND	DRAWING #: R4
DATE: 8-2-05			



## REQUEST FOR PROPOSAL

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Project: MALCOLM WING ROOF REPLACEMENT  
Location: Greater Portland YMCA, Forest Avenue, Portland, Maine  
Issued by: Wright-Ryan Construction, Inc., Rick Bergeron  
Issued on: February 22, 2006  
Site Visit: Contact Rick Bergeron to schedule a site visit  
Bid due date: March 8, 2006 at 12:00 Noon

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THE BID DOCUMENTS for this project consist of the following:

- Specification Section 07500 Roofing and Flashing consisting of 5 pages and Sketches R1 through R5 prepared by Independent Roof Services dated August 2, 2005.
  - Structural Drawings S1, S2, and S3 prepared by L&L Structural Engineering Services dated August 11, 2005.
  - Sketches 1 of 3 - Malcolm Wing Roof Plan, 2 of 3 - Pool Room Plan, and 3 of 3 - Pool Room Cross Sections, all dated August 12, 2005.
  - **NOTE:** The Original Construction Documents for the Malcolm Wing are available at Wright-Ryan's office for review.
- 

THIS PROJECT CONSISTS of the following bid packages:

1. Selective Demolition

- Remove the entire roofing system over the Malcolm Wing (approx. 13,500 sft).
- Remove the existing tectum deck and supporting bulb tees. Grind smooth and touch-up paint the areas where the bulb tees are welded to the steel beams and joists.
- Remove the existing acoustical ceiling systems.
- The working platforms described in Item 2 below will be provided by others to access the roof area over the pool room and pool bleachers (about 50% of the total project area).
- This subcontractor is responsible for obtaining and paying for all state or local permits required to properly perform this scope of work.
- This subcontractor is responsible for providing the dumpsters required for debris removal. These containers will be covered at all times to control dust migration.
- When "remove" is used above, it means remove, handle, transport off site, and legally dispose of.

*Building Maine's Great Spaces*

Wright-Ryan Construction, Inc. • 10 Danforth Street • Portland, Maine 04101  
Phone (207)773-3625 • Fax (207)773-5173 • www.wright-ryan.com

## 2. Working Platform over the Pool

- Design, furnish, erect, and subsequently dismantle and remove working platforms to access the roof area above the Malcolm Pool and bleacher area.
- The pool will be drained by others prior to the start of erection work. All existing tile work must be protected from damage due to scaffolding leg loading.
- These working platforms must provide access to the entire roof over the pool room and bleacher area (approx. 73'4" by 91' 11").
- The top of these working platforms should be located about 6'0" below the existing ceiling surfaces.
- All scaffold materials must be loaded in and out through the existing access door at the northeast corner of the pool room.

## 3. Structural Upgrades

- Fabricate, deliver, and fully install all of the structural steel upgrades indicated for both the existing steel frame and steel joists. Note that all of the upgrades that can be performed from underneath the existing roof deck will be performed before the roofing and decking are removed. The working platforms described in Item 2 above will be provided by others to access the roof area over the pool room and pool bleachers (about 50% of the total project area). This subcontractor will need to provide access to the remaining areas requiring upgrades.
- Furnish and install the new metal decking.

## 4. New Roofing System

- Furnish and install a new roof system in accordance with the bid documents (approx. 13,500 sft).
- Furnish and install the new roof drains indicated. All interior plumbing work will be performed by others.
- Furnish and install all required flashing work required including that required for the existing rooftop equipment and penetrations not indicated on the drawings.
- Furnish and install walkway pads to access the existing equipment and roof protection pads for the existing wooden walkway which will be removed and reinstalled by others.
- All roof demolition work will be performed by others.
- All metal decking and wood blocking work will be performed by others.
- **NOTE:** Provide an Alternate price to substitute a FiberTite roof system in lieu of the specified EPDM system. Contact John Massengill at Seaman Corporation (Tele: 510-6868) for material pricing.

## 5. Acoustical Ceiling Systems

- Furnish and install a new acoustical ceiling system in the pool room. The tile shall be Armstrong Cerarniguard or approved equal.
- Furnish and install a new acoustical ceiling system in the upstairs areas adjoining the squash and handball courts.
- The working platforms described in Item 2 above will be provided by others to access the roof area over the pool room and pool bleachers.

## 6. Mechanical Systems

- Furnish and install new horizontal rain water piping from the new roof drains to the existing storm water leaders.
- Temporarily support any mechanical system component currently hung from the existing tectum decking. Reattach to the adjacent steel framing or the new metal deck.
- The working platforms described in Item 2 below will be provided by others to access the roof area over the pool room and pool bleachers.

## 7. Fire Protection Systems

- Design, fabricate, deliver, and fully install a new fire protection system for all spaces in the Malcolm Wing located directly below the roof structure (top level spaces).
- The working platforms described in Item 2 above will be provided by others to access the roof area over the pool room and pool bleachers.
- **NOTE:** Provide an Alternate price to provide fire protection coverage for the balance of the wing spaces (lower level spaces – i.e.: locker rooms, etc).

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THE PROJECT CONSTRUCTION SCHEDULE for this work is as follows:

- Subcontract awards will be made within 30 days of the bid date allowing the individual subcontractors to purchase the required building materials. Subcontractors will be paid for properly identified and insured stored materials. Actual field construction work will not begin until June 2006.
- Mobilize and start work on June 5, 2006.
- Work will be phased and will be performed in a sequence to keep the building as dry as possible. This sequence will be determined later.
- Complete all work by August 25, 2006.

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## GENERAL BIDDING REQUIREMENTS

All questions concerning this scope of work, the bid documents or the construction schedule must be submitted in writing at least 72 hours in advance of the established bid proposal due date and time. Please fax all written questions to Rick Bergeron at 773-5173. Responses will be issued in writing via addendum.

All bid proposals shall be in strict accordance with this RFP and all documents listed herein, including all addenda issued subsequently. All bid documents are complementary – should one document require a scope of work item not indicated on or within another document, it is understood that this work item will be required as if indicated by all documents, and shall not be considered a conflict within the documents. All exclusions, clarifications, and/or assumptions, relative to this scope of work, the bid documents or the construction schedule, must be clearly listed on the bidder's proposal. Bid proposals shall remain subject to acceptance for 30 days after the due date listed above. Bid proposals may be hand delivered to our main office or faxed to 773-5173.

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End of RFP

# All Purpose Building Permit Application

Property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 70 Forest Avenue Portland, Maine

Total Square Footage of Proposed Structure  
13,500 SQ/FT

Square Footage of Lot

Tax Assessor's Chart, Block & Lot  
Chart# 36 Block# 9 Lot# 020

Owner:  
Cumberland County YMCA

Telephone:  
874-1111

Lessee/Buyer's Name (if Applicable)

Applicant name, address & telephone:  
Wright-Ryan Construction  
10 Danforth Street  
Portland, ME 04101 773-3625

cost Of Work: \$400,000  
Fee: \$ 3,621

Program 5

If the location is currently vacant, what was prior use: \_\_\_\_\_

Approximately how long has it been vacant: \_\_\_\_\_

Proposed use: Roof replacement on existing structure.

Project description:

Contractor's name, address & telephone: Wright-Ryan  
10 Danforth Street 773-3625  
Portland, ME

Who should we contact when the permit is ready: Randy Alfred

Mailing address: same

We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE: 773-3625

**IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.**

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: Randy Alfred Date: 5-16-06  
DEPT. OF BUILDING PERMITS  
CITY OF PORTLAND, ME

This is NOT a permit, you may not commence ANY work until the permit is issued. If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall

RECEIVED



**City of Portland, Maine - Building or Use Permit**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

<b>Permit No:</b> 06-0743	<b>Date Applied For:</b> 05/16/2006	<b>CBL:</b> 036 GO20001
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<b>Location of Construction:</b> 70 FOREST AVE	<b>Owner Name:</b> YOUNG MENS CHRISTIAN ASS	<b>Owner Address:</b> 70 FOREST AVE	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> WRIGHT RYAN CONSTRUCT10	<b>Contractor Address:</b> 10 DANFORTH STREET Portland	<b>Phone</b> (207) 773-3625
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Alterations - Commercial	

Commercial roof replacement on existing structure	Roof replacement on existing structure
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**Dept:** Zoning      **Status:** Approved with Conditions      **Reviewer:** Marge Schmuckal      **Approval Date:** 05/19/2006**Note:** **Ok to Issue:** 

- 1) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
- 2) No expansion of the existing building is being approved with this permit.

**Dept:** Building      **Status:** Pending      **Reviewer:** Mike Nugent      **Approval Date:** 05/24/2006**Note:** **Ok to Issue:** 

- 1) Joseph Leasure P.E. to perform special inspections per Randy Alred Wright-Ryan

**Dept:** Fire      **Status:** Approved with Conditions      **Reviewer:** Cptn Greg Cass      **Approval Date:** 05/22/2006**Note:** **Ok to Issue:** 

- 1) Fire supression system shall comply with NFPA 13
- 2) Fire detection system shall comply with NFPA 72
- 3) All building construction shall comply with NFPA 101

X

FROM DESIGNER: L & L STRUCTURAL ENGINEERING SERVICES, INC.

DATE: 5/12/06

Job Name: YMCA, PORTLAND - MALCOLM POOL (ROOF REPLACEMENT)

Address of Construction: 70 FOREST AVENUE, PORTLAND ME.

2003 International Building Code

Construction project was designed according to the building code criteria listed below:

Building Code and Year 2003 IBC Use Group Classification(s) A3/A4

Type of Construction TYPE 2B UNPROTECTED/NON-COMBUSTIBLE

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IBC (NOT THIS PORTION)

Is the Structure mixed use? YES if yes, separated or non separated (see Section 302.3) EXISTING CONDITIONS (NOT MODIFIED)

Supervisory alarm system? YES Geotechnical/Soils report required? (See Section 1802.2) NO

STRUCTURAL DESIGN CALCULATIONS

YES Submitted for all structural members (102.1, 102.1.1)

DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1603)

Uniformly distributed floor live loads (7603.11, 1607)

Floor Area Use	Loads Shown
<u>NA</u>	

NA Live load reduction (1603.1.1, 1607.8, 1607.10)  
42 PSF Roof live loads (1603.1.2, 1607.11)

Roof snow loads (7603.7.3, 1606)  
60 Ground snow load,  $P_g$  (1603.2)  
42 If  $P_g > 10$  psf, flat-roof snow load,  $P_f$  (7603.3)

1.0 If  $P_g > 10$  psf, snow exposure factor,  $C_e$  (Table 1603.3.1)

1.0 If  $P_g > 10$  psf, snow load importance factor,  $I_s$  (Table 1604.5)

1.0 Roof thermal factor,  $C_t$  (Table 1603.3.2)

42 Sloped roof snowload,  $P_s$  (1603.4)

B Seismic design category (1616.3)

2D Base seismic force-resisting system (Table 1617.6.2)

5/4 1/2 Response modification coefficient,  $R$ , and deflection amplification factor,  $C_d$  (Table 1617.6.2)

1616.6 Analysis procedure (1616.6, 1617.5)

0.067 W Design base shear (1617.4, 1617.5.1)

Wind loads (1609.1.4, 1609)

1609.1.1 Design option utilized (1609.1.1, 1609.5)

100 MPH Basic wind speed (1609.3)

1.0 Building category and wind importance factor,  $I_w$  (Table 1604.6, 1609.5)

B Wind exposure category (1609.4)

+/- 0.18 Internal pressure coefficient (ASCE 7)

0 Component and cladding pressures (1603.1.1, 1609.6.2.2)

15.1/20.9 Main force wind pressures (7603.1.1, 1609.6.2.1)  
PSF

Flood loads (1603.1.5, 1612)

NA Flood hazard area (1612.3)

35 Elevation of structure (ROOF HEIGHT)

Other loads

NA Concentrated loads (1607.4)

NA Partition loads (1607.5)

NA Impact loads (1607.6)

NA Misc. loads (Table 1607.9, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)

Earthquakes design data (1603.1.5, 1614-1623)

1615 Design option utilized (1614.1)

II Seismic use group ("Category") (Table 1604.5, 1616.2)

S<sub>MS</sub> = 0.28  
S<sub>SI</sub> = 0.11 Spectral response coefficients,  $S_{DS}$  &  $S_{SI}$  (1615.1)

C Site class (1616.1.5)

ZONE 4 +18.1/-19.6
ZONE 5 +18.1/-23.6

X



CITY OF PORTLAND  
BUILDING CODE CERTIFICATE  
389 Congress St., Room 315  
Portland, Maine 04101

ACCESSIBILITY CERTIFICATE

(NOT APPLICABLE)  
"ROOF REPLACEMENT"

Designer: \_\_\_\_\_

Address of Project: \_\_\_\_\_

Nature of Project: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_

(SEAL).

**NOTE:** If this project is a new Multi Family Structure of 4 units or more, this project must also be designed in compliance with the Federal Fair Housing Act. On a separate submission, please explain in narrative form the method of compliance.



CITY OF PORTLAND  
BUILDING CODE CERTIFICATE  
389 Congress St., Room 315  
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine  
Department of Planning & Urban Development  
Division of Housing & Community Service

FROM: L & L STRUCTURAL ENGINEERING SERVICES, INC.

JOSEPH H. LEASURE

RE: Certificate of Design

DATE: 5/15/06

These plans and/ or specifications covering construction work on:

YMCA MALCOLM POOL - ROOF REPLACEMENT.  
70 FOREST AVENUE, PORTLAND, MAINE

Have been designed and drawn up by the undersigned, a Maine registered Architect/  
Engineer according to the 2003 International Bu

(SEAL)

Signature: [Handwritten Signature]

Title: PRINCIPAL

As per Maine State Law:

\$50,000.00 or more in new construction, repair  
expansion, addition, or modification for  
Building or Structures, shall be prepared by a  
registered design Professional.

Address: 6 Q STREET, SOUTH PORTLAND, ME  
04106