City of Biggs

Agenda Item Staff Report
for the Regular City Council Meeting:
January 12, 2016

TO: Honorable Mayor and Members of the City Council
FROM: Mark Sorensen, City Administrator
Subject: Biggs Community Hall Roof Repair.

Council is asked to authorize the City Administrator to engage in a professional services agreement to repair the Biggs Community Hall (BCH) roof at a cost not to exceed $20,000

Background:
Some flat portions of the BCH roof have been in need of attention for many years. A complete resolution of the issues would involve complete removal and reframing of the roof to achieve proper drainage, and then install a completely new roof surface. This would be cost prohibitive at this time, and the current set of issues need a more timely response.

We believe that the attached proposal from Tomlinson Roofing would provide a few years of relief as a more complete resolution is formulated.

Funding would come from the following two sources: $15,140.16 from Fund 165 (CDBG Unrestricted), with the remainder from the General Fund. The increase in expenditure from Fund 165 would also require a budget modification.

Recommendation: Authorize the City Administrator to engage in a professional services agreement to repair the Biggs Community Hall (BCH) roof at a cost not to exceed $20,000; and to modify the budget by increasing authorized expenditures in Fund 165 (CDBG Unrestricted) to $72,000.

_____
Mark Sorensen, City Administrator

Tomlinson Roofing

530-755-0438 Office
530-755-4479 Fax License #964037
PO Box 292
Sutter, CA 95982

PROPOSAL & CONTRACT

Job Name & Address:	
City of Biggs Biggs Community Hall 380 B. St. Biggs, CA 95917	497

Customer Name
City of Biggs P.O. Box 307 Biggs, CA 95917

Phone:	530-868-1396	Date:
Fax:	530-868-5394	10/15/2015
Cell:		

We hereby submit specs. & proposal for:

RE: 380 B. St, Biggs

Flat Sections
Sweep roof clean of all dirt and debris.
Cut, nail and seal all blisters or splits.
Furnish and install metal flashing where necessary, but reuse the existing if possible.
Prime roof as necessary at the rate of approximately 1/2 gallon per 100 sq. ft.
Spray low areas to help facilitate drainage.
Furnish and install _1"__ of Urethane Roof Insulation System.
Coat applied Urethane with a white reflective coating at the rate of aprox. _3__ gallons per 100 sq. ft.
Clean up haul away all debris caused by our work.
Includes a FREE inspection and report 5 years after completion of our work.
A _5__ year workmanship warranty will be furnished upon completion of our work.

We hereby propose to furnish material & labor, complete in accordance with these specifications, for the sum of: Seventeen thousand five hundred ninety-eight & 00/100 dollars----------$ 17,598.00

Payment terms as follows: Payment in Full upon completion of our work. Interest at 18% per annum will be assessed on balance owed after 30 days.

"NOTICE TO OWNER" (Section 7019-Contractors License Law) Under the Mechanics' Lien Law, any contractor, subcontractor, laborer, material man or other person who helps to improve your property and is not paid for his labor, service or material, has a right to enforce his claim against your property. Under the law, you may protect yourself against such claims by filing, before commencing such work or improvement, an original contract for the work of improvement or a modification thereof, in the office of the county recorder of the county where the property is situated and requiring that a contractor's payment bond be recorded in such office. Said bond shall be in an amount not less than fifty percent (50%) of the contract price and shall in addition to any conditions for the performance of the contract be conditioned for the payment in full of the claims of all person furnishing labor, services, equipment or materials for the work described in said contract.

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from specifications involving extra costs will be executed only upon written orders and will become an extra change over and above the estimate. All Agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurances. Our workers are fully covered by Workman's Compensation Insurance. If court action is required to collect any sums due, owner agrees to pay all court costs and reasonable fees for attorneys and other experts retained by Tomlinson Roofing.

Authorized Signature: _____
Owner

NOTE: This proposal may be withdrawn by us if not accepted within 10 days.

ACCEPTANCE OF PROPOSAL - The price, specifications and conditions are satifactory and are hearby accepted. You are authorized to do the work as specified. Payment will be made as outlined above. Please sign & return one and keep the other for your records.

Upon acceptance of this proposal, please sign the white copy and mail back to this office. Thank You!

Signature:_____ **Date:**_____ **Signature:**_____ **Date:**_____

Henry

TECHNICAL DATA SHEET

PERMAX™ 108 Fast Set

ACRYLIC ELASTOMERIC COATING

Typical Physical Properties

- **Color**	White
- **Solids Content**	
Non-Volatile, by wt. (ASTM D 1644)	68.0% +/- 2%
Non-Volatile, by vol. (ASTM D 2697)	60.0% +/- 2%
- **Viscosity** (ASTM D 562-33)	95 -105 KU
- **Brookfield Viscosity** (ASTM D-2196)	30,000-40,000 cps
- **Weight per Gallon** (PTM* 3.13)	11.2 +/- 0.3 lbs
- **Flash Point** (ASTM D 93-73-PMCC)	None
- **Tensile Strength**, psi @ Break (ASTM D6083)	390 ± 100 psi
- **Elongation**, % Initial (ASTM D6083)	245 ± 100
After 1000 hrs Xenon Arc Weatherometer	230 ± 100
- **Maximum VOC**	50 g/L

- **Low Temp Flex**, ½ in @ -15°F (ASTM D6083)	Pass No cracking or checking
- **Accelerated Weathering** (ASTM D822, ASTM G23)	8000 hours No checking, fading or checking
- **Permeance** @ 20 mils (ASTM D1653)	50 perms
- **Water Swelling** (ASTM D6083)	8.6%
- **Solar Reflectance**, Initial	85% +/- 1%
- **Thermal Emittance** (ASTM C1371)	.89
- **Solar Reflective Index** (SRI)	107
- **Fungi Resistance, rating** (ASTM G21)	0
- **pH**	>9.0
- **Tear Resistance** (ASTM D6083)	126 lbf/in

Certifications

FLAMMABILITY CHARACTERISTICS UL-790 (ASTM E-108), U.L. File# R10185

Noncombustible Deck	Class A
Combustible Deck	Class B
Maintenance and Repair	Class A

- California Energy Commission Title 24 qualified. Meets California SCAQMD requirements for VOCs
- ICC-ES ESR-2132
- Exceeds ASTM D6083 requirements

Product Sizes

5 GAL Pails, 55 GAL Drums and 275 GAL Totes

Description

PERMAX™ 108FS is an exceptional quality, elastomeric coating, specially formulated to coat over spray polyurethane foam roofing. Made with premium 100% acrylic resin, **PERMAX™ 108FS** offers premium performance compared to other coatings, typically made with styrene acrylic resins. **PERMAX™ 108FS** is part of the **Permax™** series of spray polyurethane foam roof coatings.

Henry Company, 999 N. Sepulveda, Ste. 800 El Segundo CA 90245
Tel: 800-486-1278 **Email:** techservices@henry.com
www.henry.com

04/08/2013

PERMAX™ 108FS – ACRYLIC ELASTOMERIC COATING

Usage

- New and previously coated polyurethane foam roofs
- Well adhered, weathered, previously coated white roof surfaces (excluding silicone coatings)

Coverage

Application rates should be adjusted to meet each particular roof's specified requirements. Coverage rates are theoretical and do not take into account for material loss due to spraying, surface texture, etc. Thicker dry film results in better performance and longer coating life. Apply coating at a maximum of 1 to 1.5 gallons per 100 square feet per coat. Apply each additional coat in a perpendicular direction to the previous coat.

Coverage *Gallon / Square*	**Coverage** *Square Feet / Gallon*	**Wet Film Thickness** *(Theoretical)*	**Dry Film Thickness** *(based on WFT, rounded)*
1 gal/sq	100 sf/gal	16 mils	10 mils
1.5 gal/sq	67 sf/gal	24 mils	14 mils
2 gal/sq	50 sf/gal	32 mils	19 mils
2.5 gal/sq	40 sf/gal	40 mils	24 mils
3 gal/sq	33 sf/gal	48 mils	29 mils
3.5 gal/sq	29 sf/gal	56 mils	34 mils
4 gal/sq	25 sf/gal	64 mils	38 mils

Preparation

Refer to Guide Specifications and the PERMAX™ Roof Manual for detailed application information.

For previously coated substrates, apply a test patch of **PERMAX™108FS** coating and check for positive adhesion prior to coating roof. Surface must be clean and in good repair. Sweep and power wash area to remove all dust, dirt, loose granules, and residues. Scrub areas where water ponds with detergent and water, and rinse well. Carefully inspect area to be coated, including around pipes, chimneys, equipment, roof edges and walls. Repair all cracks, breaks, splits and holes by embedding **Henry #296 ElastoTape®** between 2 heavy coats of **Henry #289 White Roof Sealant** at least 3 inches beyond repair. Allow to completely cure. **Henry #289** can usually be coated within a couple hours, after the surface forms a skin which will accept the coating.

Application

Choose a warm, sunny day – the roof surface should be warm to the touch. If the roof surface is too hot to touch (140°F+), it is too hot to coat. Apply to a clean, dry surface. Do not dilute. Stir coating to a uniform consistency, and apply by heavy-duty spray, deep-pile paint roller, or 4-knot brush. Back-roll coating when sprayed. When applied by brush or roller, keep strokes in one direction. The coating is water based and requires complete evaporation of water to cure. The coating should not be employed if climate condition will prohibit cure. Application in the late afternoon with a high probability of overnight moisture condensation is to be avoided. Schedule work so that the coating can dry before nightfall. Allow to dry thoroughly between coats. Apply each additional coat in a perpendicular direction to the previous coat. Recommended spray application settings are 1000-1500psi, 1.0-2.0GPM with a suggested tip size of .030-.040. Pressure requirements will vary based on temperature and hose size.

NOTE: Roofs must have proper drainage and not pond water. For older, low-slope roofs where depressions pond water for more than 48 hours, it is recommended to provide positive slope in those areas and eliminate ponding. Consultation with building code officials and insurance agency personnel before application is recommended.

Service Temperature Range: 40° - 200°F (4°C - 93°C)

Drying Time at 24 wet mils for Permax™108 Fast Set:

Dry to Touch	(ASTM D3468)	20 minutes
Dry Through	(ASTM D1640-69, 5.6)	8 hours
Dry-to-Recoat	(ASTM D1640-69, 5.7)	12 hours

Shelf Life: (Unopened container above 32°F) – 1 Year

PERMAX™ 108FS – ACRYLIC ELASTOMERIC COATING

Precautions

DO NOT APPLY IF THERE IS A THREAT OF RAIN, FOG, DEW, OR TEMPERATURES BELOW 50° F WITHIN 48-72 HOURS. Do not heat container or store at temperatures greater than 120° F. When transporting this product, be sure the pail is secured and the lid is tight. Do not allow pail to tumble as this may loosen the lid and allow leakage to occur. **DO NOT ALLOW COATING IN PAIL TO FREEZE.** This coating is not recommended over walking decks, over gravel, T.P.O., shingles of any kind, or old roofs that are too dry and brittle to withstand the shrinkage stresses that occur after the application of any coating.

Cleanup

Before coating dries, clean tools, spillage, etc., with warm soapy water. If coating has dried, soften the dried film on tools with paint thinner then scrape clean. When using paint thinner, exercise safe practices concerning flammability and toxicity. Clean hands with waterless hand cleaner.

Caution

CAUTION! Do not heat container or store at temperatures greater than 120° F. Close container after each use. DO NOT TAKEINTERNALLY! Use protective measures to avoid contact with eyes and skin. **If swallowed**, CALL PHYSICIAN IMMEDIATELY! **In case of eye contact**, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. In case of accidental injection by power spray equipment, GET MEDICAL ATTENTION IMMEDIATELY! Dispose of container and unused contents in accordance with Local, State and Federal regulations.

KEEP OUT OF REACH OF CHILDREN!

DO NOT ALLOW THIS PRODUCT TO FREEZE!

WARNING: This product may contain detectable amounts of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

EMPLOYERS should obtain a copy of the **Material Safety Data Sheet (MSDS)** from your supplier or directly from Henry at the toll free number or website below.

STATEMENT OF RESPONSIBILITY

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

TECHNICAL DATA SHEET

PERMAX™ 3.0

Polyurethane Spray Foam Roof System
(based upon RT-2035 series resins)

Typical Physical Properties of Cured Foam

-Nominal Density, ASTM D1622, lbs/ft³	3.0	**-Surface Burning Characteristics** ASTM E84 Flame Spread Index	35
		Smoke Development Index	>500
-Compressive Strength ASTM D1621, psi	45-50	**Aged Thermal Performance** -K Factor	
-Tensile Strength ASTM D1623, psi	70	ASTM C518 aged 140F @ 90 days	0.149
		-R Factor ASTM C518 aged 140F @ 90 days	6.71
-Shear Strength ASTM C273 , psi	45	- K Factor ASTM C518 aged 75F @ 180 days	0.145
-Closed Cell Content Minimum %	90	-R Factor ASTM C518 aged 75F @ 180 days	6.89
-Water Absorption ASTM D2842, gm/cc	0.017	**Dimensional Stability** ASTM D2126, % volume change @+158F, 100% R.H. 1day/7days/28 day	3.1 / 5.5 / 10
		@ -10F, Ambient R.H., 28 days	±1
-Water Vapour Transmission ASTM C 355, perms	1.9		

Compliance Standards of Coated SPF System: inclusive of Permax 108 or Permax 115 Acrylic Elastomeric Coating

UL Class A	**ICC ESR-2132**	**FMRC 4470** Listing # 3032539	**FMRC 4470** Rated: 1-270 & Severe Hail

Typical Physical Properties of RT-2035 Liquid Resins

Liquid Resins – Component B -Specific Gravity @ 77°F ASTM D1638	1.20	**Liquid Resins – Component A** -Specific Gravity @ 77°F ASTM D1638	1.24
-Viscosity, cps	650± 100	-Viscosity, cps	200 ±50

Description

PERMAX 3.0 is a 2-component polyurethane spray foam roof system consisting of RT-2035 Resin Components A and B, which when sprayed through special plural component spray equipment, will produce a premium seamless, monolithic, and durable closed-cell polyurethane foam roof. Surfacing with 'cool roof' or an elastomeric multi-coat waterproofing coating, applied immediately onto underlying foam will provide a complete UV and weather barrier system.

System Features

- A monolithic, sustainable roof membrane which improves thermal performance of the building envelope
- Ideally suited for both new construction as well as re-roofing applications
- Light in weight vs. traditional BUR
- Surfacing options include Energy-Star® listed coatings
- Meets stringent industry standards including UL, ICC-ES, Factory Mutual, Energy-Star®, CEC Title 24
- Easily maintained
- Excellent for extending the life of aged metal roofing and metal structures
- Most effective method of insulating cold wine tanks and heated storage tanks

Usage

The versatility and durability allows use in both new roof construction as well as re-roofing applications. Applied to a variety of substrates, from flat to vertical and surfaced with 'cool-roof' or an elastomeric membrane, Permax 3.0 offers long term roofing performance for a variety of commercial and residential constructions. Re-roofing applications benefit from additional thermal performance of 6.7 R per inch thickness of PERMAX SPF applied to existing structure.

Coverage

Average cured foam density is 3.0 pounds per cubic foot
3,000 to 3,200 board feet per 1000 lbs 'kit' consisting of 1 drum Part A and 1 drum Part B - assuming proper field processing.

Storage and Shelf Life

Both components should be stored in their original containers and away from excessive heat and moisture, especially after the seals have been broken or some materials have been used. Drums must be stored indoors and jobsite tanks maintained between 50°F and 75°F. Containers should be opened carefully to allow any pressure buildup to be vented safely while wearing full safety protection. Excessive venting of the 'B' component may result in higher density foam and reduced yield. Materials stored at temperatures below 50°F will increase in viscosity and some application equipment may not reach adequate spray temperature set points. Supply pumps and hoses must be sized to provide adequate supply when materials are cold and at a higher viscosity. **Shelf Life:** Excessive low or high temperatures may decrease shelf life. When stored in the original unopened container at 50°F-75°F, the shelf life of the "Part B" component is six months. Temperature above 75°F decreases the shelf life. The "Part A" component has a shelf life of 6 months in unopened containers when stored at 65°- 85°F.

Surface Preparation

Surfaces to receive **PERMAX 3.0** must be clean and dry, free of dirt, oil, solvent, grease, loose particulates, frost, ice and other foreign matter which could inhibit adhesion. Moisture content and surface conditions of substrate are critical to adhesion of **PERMAX 3.0** and need to be verified by installing contractor in small test areas before proceeding with full application.

Priming options:

Substrate	Primer	Application Rate
New Construction: plywood, OSB, cleaned concrete, CMU	**Acryprime Substrate Primer or Acryprime Substrate SG Primer**	**½ gallon / 100 ft²**
Re-Cover: Existing cleaned roof surfaces to receive SPF	**Acryprime Substrate Primer or Acryprime Substrate SG Primer**	**½ gallon / 100 ft²**
Galvanized steel or aluminum surfaces including: flashing, vents, ducts, piping, etc.	**Sherwin Williams® DTM Wash Primer or Krylon® Industrial Coatings™ Water-Reducible Wash Primer**	**¼ to 1/3 gallon /100 ft²**

Note: All primers must be applied per published technical data sheets and product labels.
Plywood, OSB, and lumber shall not have greater than 15% moisture content. Generally a primer is not required for these surfaces. On substrates where the moisture content cannot be determined or exceeds 15%, a suitable primer is recommended. Adhesion spray tests may be performed with insulating foam and the interface line checked upon cure for good cell structure and adhesion. Warming of these surfaces during winter conditions may increase adhesion.

CMU, structural and poured-in-place concrete must have a minimum 28-day cure and moisture content below 15%. Painted Steel, galvanized steel, and aluminum panels: check surfaces for mill oil used in the manufacturing process and moisture condensate. All oil must be removed and the surface clean and dry before priming. Washed and dry painted steel panels may not require priming. All aluminum and galvanized panels must be primed using **Sherwin Williams® DTM Wash Primer** or **Krylon® Industrial Coatings™ Water-Reducible Wash Primer.**

Recommended Substrate Temperatures

PERMAX 3.0 is formulated in three different reactivity profiles to meet varying substrate temperatures at jobsite. For applications below 50°F, Henry Company technical personnel should be consulted.

	Winter Grade	Regular Grade	Summer Grade
Minimum substrate & air temp	50°F	70°F	100°F
Maximum substrate & air temp	75°F	100°F	120°F

PROCESSING CHARACTERISTICS

Liquid Component Properties

Viscosity/Specific Gravity at 77°F	
Part A Component (CPS)/(g/cc)	200±50 /1.24
Part B Component (CPS)/(g/cc)	650±100/1.20
Mixing Ratio by Volume	
Part A Component (CPS)	50
Part B Component (CPS)	50

Recommended Pre-Heater Processing Temperatures **

Component - A	100-120°F
Component - B	110-125°F
Hose	110-120°F

Processing temperatures typically used with conventional **Gusmer® or **Graco®** equipment. Environmental conditions may dictate the use of other temperature ranges, however 140°F must never be exceeded. It is the responsibility of the installing contractor to determine the specific temperature settings to meet environmental, equipment and product limitations.

Machine Mix at Recommended Temperatures*	Winter Grade	Regular Grade	Summer Grade
Cream Time	2-3 seconds	3-5 seconds	4-5 seconds
Tack Free Time	8-9 seconds	12-13 seconds	15-16 seconds
Initial Cure Time	4 Hours **	4 Hours **	4 Hours **

- Properties cited were achieved using a **Gusmer H-2000 Proportioner** and **GAP Pro Gun** with #01 module with a static proportioner pressure setting of 1400 psi.

** Complete cure will depend on temperature, humidity and degree of ventilation. Complete cure usually occurs within 24-72 hours

Climatic Conditions and Humidity
Moisture in the form of rain, dew or frost can seriously affect the quality and adhesion of the **PERMAX 3.0** to the substrate or itself. Henry Company does not recommend the spraying of this system when the relative humidity (RH) exceeds 85%.

Application

Equipment
The proportioning equipment shall be manufactured specifically for heating, mixing, and spray application of polyurethane foam and be able to maintain 1:1 metering with a ±2% variance and adequate main heating capacity to deliver heated and pressurized materials up to 130°F. Heated hose must be able to maintain pre-set temperatures for the full length of the hose. Minimum 2:1 ratio feeder pumps are required to supply stored materials through minimum ½ inch supply hoses. Pressurized and heated tanks systems may be used if sized appropriately to provide adequate flow at maximum operating capacity and temperatures. Older equipment may be upgraded with supplemental heaters or minimum H-2000 heater / proportioner to adequately pre-heat to process temperatures.

Spray guns such as **GX-7, GAP Pro Gun and Fusion gun**, are well suited for roofing applications where 20 lbs/min or higher volume is desired. These guns may be fitted with smaller output tips (15 – 18 lbs/min.) to perform detail work on pipes, curbs, platforms and parapets etc.

Processing Temperatures
Recommended processing temperatures 'Part A' Main 100-120°F, 'Part B' Main 110-125°F, Hose 110-120°F are critical settings to achieve viscosity to allow balanced pressure during spraying. Balanced chemical output pressures are important to produce a good mix. Foam output pressures greater than 200 psi differential indicate either improper chemical temperatures, or worn gun/packing parts. Unequal pressures will cause poor chemical mixing through the module and uneven backpressure. A critical requirement for good spray mixing requires appropriate tip/module sizing to the proportioner and adequate heating capacity. Unequal pressure (>200 psi) can cause excessive pump wear.

Do not re-circulate the 'B' component for increased storage temperature as frothing or boil-over may occur at material temperatures above 60°F.

Spraying
Thin "flash passes" (<1/2 inch) are not permitted. They can result in reduced yield and loss of adhesion. It is recommended that the total design thickness be completed each day.

This spray system should be applied in uniform minimum pass thickness of 3/4-inch, maximum pass thickness 1 ½ inch. Application temperatures below 50°F may require reduction in single pass application thickness. Additional thickness may be applied after a brief waiting period. Yield and in-place density is dependent upon the temperature of the substrate, ambient air temperature, gun speed application, gun tip size, and the output of the proportioning unit. **PERMAX 3.0** is designed to provide maximum yield when sprayed in ¾ inch to1inch thick passes. Excessive pass thickness can cause reduced density, poor cell structure and lower physical properties.

Elastomeric Coating Options
All SPF surfaces need be coated within 24 hours of application to protect from UV and weather degradation. Coating selection criteria is based upon project specifications, building use and other design criteria. PERMAX coating options include:

PERMAX SPF ROOF Coatings Options	Energy Star Listed White	Color Options
Permax 120 – good grade, 100% acrylic, water-based, several reactivities including Permax 120 FS – fast set formula. UL, CRRC listed		White, Off-white, Tan, Gray, Light Gray, Dark Gray, Custom Colors
Permax 108 – better grade, 100% acrylic, water-based, including Permax 108 FS – fast set formula. UL, CRRC and FM listings over PERMAX 3.0	✓	White, Off-white, Tan, Gray, Light Gray, Dark, Gray,
Permax 115 – best grade, 100% acrylic, high-tensile strength and durability. UL, CRRC and FM listings over PERMAX 3.0	✓	White, Tan, Gray, Light Gray, Custom Colors
Permax 500 – aromatic urethane base coat w/ accelerator. Use with Permax 600 top coat		Black
Permax 600 – aromatic urethane top coat w/ accelerator		White, Tan, Gray
Permax 700 –2-component, polyurea base-coat for urethane. Sold as special 2 drum 'kit' of part-A and part-B. Top coat with Permax 800 for tank coating		Gray, Black, Tan
Permax 800 – aliphatic urethane top-coat, single component. Use in multi-coat application or with base-coat of Permax 700 for maximum durability.		White, Tan, Gray
Permax 2000 - solvent based silicone coating. Durable and ice/snow resistant roof coating. UL and CRRC listed	✓	White, Gray, Light Gray, Dark Gray

All coating systems require either a 2-coat or 3-coat application to SPF surfaces. Permax acrylic coatings are specified with PERMAX White Roofing Granules for hail resistance and added durability. Refer to individual coatings technical data sheet or PERMAX Roofing Installation Manual for details on coating application to SPF.

Precautions
Read and understand the Material Safety Data Sheet for this product before use. The numerical flame spread and all other data presented is not intended to reflect the hazards presented by this or any other material under actual fire conditions. Polyurethane foam may present a fire hazard if exposed to fire or excessive heat (i.e. cutting torches). The use of polyurethane foam in interior applications on walls or ceiling presents an unreasonable fire risk unless protected by an approved fire resistant thermal barrier with a fire rating of not less than 15 minutes. A UBC or IRC code definition of an approved "thermal barrier" is a material equal in fire resistance to ½ inch gypsum board. Each firm, person, or corporation engaged in the use, manufacture, or production or application of the polyurethane foams produced from these resins should carefully examine the end use to determine any potential fire hazard associated with such product in a specific use and to utilize appropriate precautionary and safety measures.
Consult with local building code officials and insurance agency personnel before application. Do not re-circulate the 'B' component for increased storage temperature as frothing or boil-over may occur at material temperatures above 60°F. Polyurethane foams will burn when exposed to fire. Caution during application must be observed with signs posted for other trades, "**Caution Combustible Insulation, No Welding or Hot Work Allowed**". On a daily basis remove all debris and shavings from the job site leaving a clean work area.

Worker Exposure Hazards – Both Components A and B can cause severe inhalation and skin sensitization. For interior applications: full body protection required including air supplying respirator such as a self-contained breathing apparatus (SCBA) or a supplied air respirator (SAR) in the positive pressure or continuous flow mode (this includes air supplied hoods). For exterior applications: required either a full face air purifying respirator or half face worn in combination with chemical safety goggles. The recommended APR cartridge is an organic vapor/particulate filter combination cartridge (OV/P100). It is recommended that all applicators and workers obtain recurrent formal training before exposure to or applying this product. More product information and training materials can be found at Henry Company www.henry.com – or on SPFA or CPI websites including: www.spraypolyurethane.com, www.polyurethane.org, www.sprayfoam.org

Product Sizes

Component A – 551 lbs drums, 2500 lbs totes (disposable or returnable)
Component B - 500 lbs drums

Freight Classification

Component A - Resin Compounds Item 46030, Class 55, NOIBN Non-Hazardous
Component B - Resin Compounds Item 46030, Class 55, NOIBN Non-Hazardous

Limited Warranty

A variety of warranty options are available with terms of up to 20 years– subject to specific terms and conditions and application by a Henry Authorized Contractor. Contact Warranty Department at warranty@henry.com or location shown below, for product & systems warranty information.

STATEMENT OF RESPONSIBILITY

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

ESTIMATE / CONTRACT

December 16, 2015

Paul Pratt
Email: paul@biggs-ca.gov

RE: 280 B street Biggs CA. lower front hot roof

We propose to remove and dispose of the existing roof area. Then we will apply a fire rated solo sheet and then mechanically attach a 60 mil TPO membrane roofing system. Bid includes new metal on edge of walls, pipe boots and building up 4 low spots. This bid also includes the required permit.

BID: $ 14,350.00

Note: This includes a 5 yr workmanship warranty.
To tear off lower roof in front (same spec as above) add $1550.00 to the above bid price.
To tear off back two roofs (same spec as above) add $2900.00 to the above bid price.
Bid does not include prevailing wage.
Excluded from this bid is any dry rot woodwork, which is billed on a time and material basis.

Sincerely,

Joe Rubino

Joe Rubino
Four Counties Roofing

Our State License classification is C-39 (Roofing Contractor). We carry General Liability and Workers Compensation insurance per state requirements. Estimate valid for ten (10) days unless otherwise specified. Any alterations or deviations from the plans, specifications, or order, above referred to, requiring additional materials or labor will be completed upon receipt of a written order therefore and will be charged separately from the contract price hereof. The company will not be held responsible for any damage occurring during the roofing process to interior or contents of buildings that have no ceilings. The company further agrees to guarantee a new roof for two (2) years after completion of work. Said guarantee to cover defects in material and workmanship only, and not to extend to damage to roofing caused by extreme winds, lightning, hailstorms, earthquakes or any unusual causes and shall not cover any liability for damage or injury to interior fixtures, decorations, walls, contents of building, or other part of structure. See the back of this page for Warranty Information and Exclusions.
TERMS OF PAYMENT: Payment hereof is due immediately upon completion of work. The purchaser(s) agrees that if the contract price plus any extra charges, is not paid when due, he/they will pay in addition hereto a monthly service charge of one and a half percent (1. 5%) on the unpaid balance plus all costs of collection, including reasonable attorney's fees. Down payment may not exceed $1000 or 10% whichever is less.

ACCEPTANCE

You are hereby authorized to furnish all material and labor required to complete the work mentioned in the above proposal for which we agree to pay the amount of **$**_____

Date:_____ **Signed:**_____
OWNER OR CONTRACTOR

If you accept this proposal, please sign one copy of the contract and return it to our office.

Four Seasons ROOFING
11 COMMERCE CT., #1
CHICO, CA 95928
(530) 895-0418 / FAX (530) 895-9201
Contractor License No. 659073

BBB CARE

Proposal and Contract

This Proposal made by **Four Seasons Roofing** (Contractor) to CITY OF BIGGS (Owner). When accepted by Owner within 35 days of the date set forth below, and subject to all of the terms and conditions printed on both the front and reverse side hereof, this proposal shall become the Contract between the parties for the work described below under Description of Work.
Contract Price: For the price of $ SEE BELOW Contractor proposes to perform the work described below under Description of Work.
Description of Work: The work to be performed by Contractor (hereafter called the "Project" or the "Work") is described as follows: Contractor shall supply all labor, materials, equipment, supplies, hoisting, scaffolding, transportation, scheduling, coordination, supervision and sales taxes necessary to:

PROJECT: 280 B ST BIGGS, CA-COMMUNITY CENTER

AT FLAT ROOF AREAS, WE WILL TEAR OFF EXSITING ROOFING TO BARE SHEATHING. INSPECT FOR DRY ROT. CUT DOWN DUTCH GUTTERS AT ONE ROOF SECTION. AT MAIN FLAT ROOF AREA, OVER SOLID ROOF SHEATHING INSTALL A ¼" PER FOOT TAPERED INSULATION SYSTEM WITH ½" PER FOOT CRICKETS. OVER TAPERED INSULATION ON MAIN FLAT ROOF AND OVER CLEAN SOLID ROOF SHEATHING, ON OTHER FLAT ROOFS, APPLY ONE LAYER ¼" DENSDECK FOLLOWED BY A CARLISLE SURE-WELD 60 MIL MECHANICALL ATTACHED TPO ROOFING SYSTEM. WE WILL REPLACE ALL FLASHINGS AS NEEDED, INCLUDING NEW COUNTERFLASHING AND COPING. BID INCLUDES 52' OF 7" GUTTERS AND 2 DOWNSPOUTS. BID DOSE NOT INCLUDE GAMBREL ROOF AREAS. THIS BID INCLUDES: THE CLEAN UP AND REMOVAL OF ALL ROOFING DEBRIS FROM JOB SITE. **NOTE: THIS IS BID AT STANDARD LABOR RATES, BID WILL NEED TO BE REAJUSTED IF PREVAILING WAGES RATES REQUIRED.**

TOTAL PROJECT PRICE **$ 32,282.00**

*THIS BID DOES NOT INCLUDE: 1.) THE REPAIR OF DRY ROT. SHOULD THIS CONDITION BE FOUND TO EXIST, REPAIRS WILL BE MADE ON A TIME AND MATERIAL BASIS. 2.) CODE UPGRADES

and to complete the work in a good, and workmanlike manner. Unless otherwise specifically set forth above in the Description of Work, the work includes installing but not furnishing necessary sheet metal roof flashing, roof jacks or other appurtenances which are to be furnished by the Owner or others. Unless otherwise specifically stated in the Description of Work, the work does not including furnishing or installing gutters, down spouts or storm drain piping.

Changes in the Work: Should Owner, construction lender, or any public or regulatory agency or inspector direct any modification of or addition to the work covered by this Contract, the cost of said modification or addition shall be added to the contract price. Unless otherwise agreed, such additional cost shall include Contractor's actual cost including but not limited to labor, materials, equipment and supplies, plus 15 percent for Contractor's overhead and plus 7½ percent for Contractor's profit. In the event any of a deletion there shall be no deletion from the Contract Price unless the cost to perform the deleted work would exceed 5 percent of the total contract price and in such case the contract price shall be reduced by the actual savings to Contractor not including any reduction for overhead and profit unless the parties agree in writing to some other amount.

Extra Work: Orders for extra work should be made in writing, with the price agreed to in advance, but Contractor is entitled to be paid for all extra work, whether or not the extra work order is reduced to writing.

Withdrawal of Proposal: This Proposal, when signed by Contractor, is a proposal that may be withdrawn by Contractor at any time before Owner has delivered a fully executed copy to Contractor.

Acceptance: The proposal shall be deemed accepted when a fully executed copy is returned and delivered to Contractor, either personally or at Contractor's place of business during normal working hours.

Late Acceptance: Contractor may at its sole option accept a late return and if so accepted this proposal shall become binding upon the parties.

Payments: Payments shall be due upon receipt of Contractor's invoice and shall be late if not made within 10 days after receipt. It is understood and agreed by the parties that all payments are to be promptly made. It is further agree that Contractor would suffer damages which would be difficult and impracticable to determine if payments are not made when due. It is therefore agreed that, in the event that payments are not made when due, Owner will pay to Contractor the additional sum of 1½ percent per month on all amounts that are not paid when due as an adjustment to the contract price or as liquidated damages. Nothing in this section shall be deemed or construed to be a waiver of any right or remedy Contractor may have to collect past due amounts. Payment for any bond required by the owner or tenant shall be made in advance and before work commences or the requirement is waived.

Final Payment: The final payment shall be due and paid by Owner within ten days after substantial completion of the project. If corrective work of a minor nature remains to be accomplished by Contractor after the project is substantially complete, Contractor will perform such work expeditiously and Owner shall not withhold payment pending completion of such minor work. If major items of corrective or repair work remain after substantial completion of the project, the cost of which aggregates more than 5% of the contract price, Owner after payment of any retention, may withhold an amount necessary to pay for the correction or repair, pending completion of such work.

Acknowledgment and Agreement to Terms and Conditions: By signing below Owner acknowledges and certifies that he or she has read and agrees to all of the terms and conditions contained herein including all terms and conditions printed on the reverse side hereof and any attachment hereto.

Corporate Owner: In the event Owner is a Corporation this Contract shall be signed by the president and secretary of the corporation or such other officers as may be authorized to sign contracts on behalf of the corporation. By signing this Contract on behalf of the corporation, said officers and or directors do jointly and severely guarantee to Contractor the full and faithful performance of this contract by the Corporate Owner.

Bonds: If this is a "Home Improvement" contract the owner or tenant has the right to require the contractor to have a performance and payment bond.

Warranty: Contractor warrants its work to be free of defects in materials and workmanship for a period of 5 YRS. The warranty shall not cover preexisting conditions of defects, faulty chimneys, flashing or carpenter work or against wind velocities exceeding manufacturers warranty or conditions beyond the control of Contractor.

Date 11-14-15 Contractor _____

Date _____ Owner _____

Title _____

VISA MasterCard

Assignment: Neither party may assign this Contract, without the written consent of the other party.
Binding on Successors: All the provisions of this Contract shall be binding on the assignees, successors, parent companies, and subsidiary companies of both parties. If either party is acquired by a corporation through purchase, merger or consolidation, the provisions of this Contract shall be binding on the successor or surviving corporation.
Delay in Commencement: If through not fault of Contractor the commencement of the work is delayed more that 60 calendar days after the execution of the Contract, Contractor may, by written notice, cancel the Contract.
Acceleration: If Owner requires Contractor to accelerate the work, either by accelerating the schedule or by refusing to grant extensions of time to which Contractor is entitled, Owner shall reimburse Contractor for all cost of accelerations including but not limited to overtime pay, double shifting, oversized crews and special equipment.
Delay: Contractor shall be excused for delay in completion of the contract caused by acts of God, acts of the Owner, acts of the Owner's employees, agents or other contractors, inclement weather, flood, earthquake, wind, fire, rain, snow, hail, explosion, toxic contamination, labor trouble, strike, shortage of materials, acts of public agencies, inspectors, or public utilities, extra work, failure of the Owner to make progress payments promptly, or other contingencies unforeseen by Contractor and beyond reasonable control of Contractor. Owner realizes Contractor would suffer damages should it or any of its employees, agents or other contractors delay, impede or interfere with the work of Contractor and that it would be difficult and impracticable to determine the amount of such damages. Therefore, it is agreed that Owner shall pay to Contractor the sum of $ _____ for each day's delay caused by such delay, interference or impediment as liquidated damages.
Building Permits, Charges and Exactions: Contractor will obtain and pay for all building permits required for the work included in this Contract. Owner shall pay all fees, charges, reimbursements, hook-up charges, facilities fees, revolving fees and other extractions of public agencies and utilities. As used in this paragraph building permit cost are those cost directly associated with the cost to inspect the work of Contractor and do not include other fees, charges or extractions that may be assessed or collected in connection with the issuance of building permits, such as but not limited to, Road, Park, School, Traffic, Sewer and Storm Drain assessments or fees. Such extractions are to be paid by Owner.
Labor and Material: Contractor shall pay all valid charges for labor and materials incurred by Contractor and used in the work covered by this Contract. Contractor is excused from this obligation for bills received in any period during which Owner is in arrears in making progress payments to Contractor. No waiver or release of mechanic's lien given by Contractor shall be binding until all payments due Contractor when the release was executed have been made.
Substantial Completion: Substantial completion is defined as the accomplishment of all elements of the work so Owner can enjoy the beneficial use of the work, even though minor items remain to be installed, finished or corrected. The work shall be deemed substantially complete not later than the date the work is approved or accepted by the local building department or other agency having jurisdiction.
Concealed Conditions: If Contractor should encounter concealed conditions, including but not limited to dry rot, delaminated sheathing, decayed or damaged sheathing or framing members or any condition that could effect the integrity or performance of the work to be performed by Contractor, Contractor will call such condition to the attention of the Owner and the contract price shall be increased, as provided in the section on Extra Work, to cover the cost of repairing or replacing such condition. In the event Contractor declines to preform such repair or replacement, Owner shall immediately cause such repair or replacement to done at Owner's sole cost and expense and in a manner so as not to unreasonably delay Contractor. Contractor shall be granted an extension of time to complete the project for delays caused by such conditions including delays resulting from reduced productively and the time needed to make needed repairs and or replacements.
Allowances. If the contract price includes allowances and the cost of performing the work covered by an allowance is either greater or less than the allowance, then the contract price shall be increased or decreased accordingly. Unless otherwise requested in writing by the Owner, Contractor shall use its judgment in accomplishing the work covered by the allowance. If Owner request that the work coved by an allowance be accomplished is such a way that the cost will exceed the allowance, Contractor will comply with Owner's request provided that Owner provides the additional cost in advance and acknowledges in writing that compliance with Owner's methods may void any warrantees and guarantees to be provided and further agrees to waive such warrantees and guarantees if Contractor so request.
Insurance: Owner will procure, at its own expense and before commencement of the work hereunder an "all risk" insurance with course of construction, theft, vandalism and malicious mischief endorsements attached. The insurance to be in a sum at least equal to the contract price. The insurance shall name Contractor and its subcontractors as additional insureds and shall be written to protect Owner, Contractor and subcontractors as their interest may appear. Should Owner fail to procure such insurance, Contractor may do so at the expense of Owner, but is not required to do so. Owner and Contractor waive rights of subrogation against each other to the extent that any loss is covered by valid and collectable insurance. If the project is destroyed or damaged by accident, disaster, or calamity such as fire, storm, flood, landslide, subsidence or earthquake, work done by Contractor in rebuilding or restoring the project shall be paid for by Owner as extra work.
Default: If Owner should default on any of its obligations under this Contract, Contractor may recover, as damages, either the reasonable value of the work performed by Contractor, or the balance of the contract price plus any other damages sustained as a result of Owner's default. If after signing this Contract, Owner refuses to permit Contractor to proceed with the construction of the project, Owner realizes Contractor would suffer damages including loss of profit which Contractor would otherwise have made on the project. It would be difficult and impracticable to determine the amount of such damages, and it is therefore agreed that, in the event of such default, Owner will pay Contractor 15 percent of the contract price as liquidated damages.
Acceptance of Payment Not Waiver: The acceptance of any payment will not constitute a waiver of any prior default by the Owner.
Right to Stop Work: Contractor shall have the right to stop work if payments are not made when due under this Contract, and may keep the job idle until all payments have been received. Failure to exercise the right to stop work and keep the job idle shall not act of a waiver of the right to do so.
Job site Access: Owner shall be responsible for ensuring that the construction or Job site is freely accessible to the workers and equipment of Contractor and that the work of others has progressed to the point that Contractor will not be delayed in the performance of its work. In the event that on the day Contractor is scheduled to commence its work the construction or Job site is not freely accessible to the workers and equipment of Contractor or the work of others is not complete and ready for Contractor to commence its work, Contractor may, at its sole option, by written notice to Owner terminate this Contract and be relieved from any and all of its obligations under this Contract. The provisions of this paragraph shall apply regardless of the cause or causes that restrict or prevent access to the workers and equipment of Contractor, including but not limited to those caused by inclement weather. In the event that the construction or Job site becomes inaccessible or access becomes restricted, after Contractor has begun its performance under this Contract, Contractor shall have the right to withdraw its workers and equipment until the construction or Job site is made freely accessible to Contractor's workers and equipment. Contractor shall be granted an extension of time to complete its work for all time the construction or job site is not freely accessible or is restricted. If Owner fails to make the construction or Job site freely accessible to Contractor's workers and equipment within a reasonable time, Contractor may terminate this Contract and shall be entitled to payment for the reasonable value of all labor, material and equipment supplied to the date of withdrawal.
Coordination of Work with Owner or Others: Contractor will endeavor to coordinate his work with the work of others, including work being performed by the Owner. However, Contractor will not be liable for any loss, damage, or delay caused by the failure of others to promptly perform their work or to complete their work in a timely manner or for the failure of others to complete their work on time as scheduled. In the event that the work of Contractor is delayed due to the failure of others to complete their work on time Contractor shall be granted additional time to complete its work and shall be entitled to reasonable delay damages.
Protection of Work and Property of Owner: Contractor will take all reasonable efforts to protect the work and property of the Owner at the job site. However the parties agree that Contractor shall not be liable for any loss or damage, incidental or direct, caused in whole in part by others or due to but not limited to acts of God, acts of Owner, acts of Owner's other contractors and suppliers, inclement weather, flood, earthquake, wind, fire, rain, snow, hail, explosion, toxic contamination or other perils. Owner is specifically advised to secure appropriate "all risk" insurance to provided protection against such perils.
Claims for Damages: If either party should claim damages from the other party for any reason, including delay, interference, default, failure to comply with the requirements of the contract documents, injury, loss or destruction of property or otherwise, the aggrieved party shall give the other party a written notice of such claim within 10 days after the circumstances arise that give rise to the claim. It is further specifically agreed that in no event will Contractor be liable for lost wages, rents, royalties, income or profits of Owner or Owner's other contractors and suppliers.
Cleanup: Upon the completion of the work, Contractor will remove any of its debris and surplus material from the project area and will leave the Job site in a neat and broom clean condition.
Limitations: No action of any character arising out of or related to this Contract or the performance thereof shall be commenced by either party against the other more than two years after completion or cessation of work under this Contract.
Attorney Fees: The prevailing party in any action, litigation or arbitration to enforce the terms of this Contract shall be awarded cost and reasonable attorney fees. Further, in the event a party becomes involved in litigation because of the wrongful acts of the other party, the court shall award the innocent party all cost and attorney fees incurred in good faith.
Notice to Owner: A Notice to owner and supplemental terms and conditions are attached and incorporated by this reference ☐ yes ☐ no.
Payment Bond Owner requires that Contractor provide a performance and payment bond. ☐ yes ☐ no. If yes it is agreed that the contract price shall be increased by the full premium required for the bond and that Owner or tenant will pay the full premium before work commences or this requirement is forever waived.