WEAVER CONSTRUCTION MANAGEMENT, INC.
3679 S. Huron St., Suite 404
Englewood, CO 80110
Phone: (303) 789-4111 FAX: (303) 789-4310

S U B M I T T A L T R A N S M I T A L

December 8, 2011
Submittal No: 03300-009.I

PROJECT: Harold Thompson Regional WRF
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: GMS, Inc.
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: Lower Fountain Metropolitan
Sewage Disposal District
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: Baker Concrete Construction
1904 Jasper Street
Aurora, CO 80011
937-536-9000 Nick Dewald

SUBJECT: Supplemental Submittal concerning the fiber product to be used with mix design A70F

SPEC SECTION: 03300 – Cast-In-Place Concrete

PREVIOUS SUBMISSION DATES: 7/26/11

DEVIATIONS FROM SPEC: ___ YES _X_ NO

CONTRACTOR'S STAMP: This submittal has been reviewed by WCM and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

Contractor's Stamp:	Engineer's Stamp:
Date: 12/8/11 Reviewed by: H.C. Myers (X) Reviewed Without Comments ( ) Reviewed With Comments ENGINEER'S COMMENTS:_____	

Letter of Transmittal/Submittal

BAKER CONCRETE CONSTRUCTION expect more

FROM:

Baker Concrete Construction
1904 Jasper Street
Aurora, CO 80011
303.367.8111
Nick Dewald 303.229.2695

TO:

John Jacob/Leslie Brown
Weaver General Construction Co.
3679 South Huron St., Suite 404
Englewood, CO 80110
john@weavergc.com / leslie@weavergc.com

DATE	*12/08/11*
JOB NUMBER	*9921*
ATTENTION	*John Jacob/Leslie Brown*
RE:	*Harold Thompson Regional WRF*
TR#	*03300-028*
SM#	*03300-009I*

We are sending you: *ATTACHED* via *EMAIL* the following: *SPECIFICATION*

COPIES	DATE	PAGES	Description
1	*11/1/2011*	*2*	*Buckeye - Ultra Fiber 500*

THESE ARE TRANSMITTED as noted below:

FOR APPROVAL

REMARKS *BCCI proposes to use the Ultra Fiber 500 where the drawings call for fiber to be added to A70F concrete mix.*

COPY TO *File*

SIGNED: Nick Dewald
Baker Concrete Construction, Inc.

If enclosures are not as noted, kindly notify us at once

BUCKEYE BUILDING FIBERS LLC

BUCKEYE UltraFiber 500®

Secondary Reinforcement Fiber for Concrete

Description:

Buckeye UltraFiber® 500 reinforcement fiber for concrete is 100% virgin specialty cellulose fiber with a patented alkaline resistant coating specifically engineered and manufactured in an ISO 9001 certified facility. UltraFiber 500® provides secondary reinforcement in concrete (temperature and shrinkage crack control) and meets ICC evaluation criteria for use in slab on grade. UltraFiber 500® is manufactured in the USA from renewable resources and complies with National Building Codes, ASTM C1116-08 and ASTM D7357-07. A dosage rate of 1.0 to 4.0 lb/yd^3 is recommended depending on the application.

Applications:

- Commercial & Residential Slabs
- Composite Metal Decks
- Paving
- Pervious Paving
- Curb and Gutter
- Slip Form
- Architectural & Decorative
- Pre-Cast
- Shotcrete
- Walls
- White Topping

CLASSIFIED UL

Advantages:

UltraFiber 500® provides excellent secondary reinforcement from high fiber surface area, close fiber spacing, excellent bonding within the cement matrix, high fiber tensile strength, and easy dispersion in concrete so it is always positioned correctly. It is safe, easy to use, and offers superior finish-ability. UltraFiber 500® provides significant benefits in numerous applications.

Benefits:

- Alternate system to traditional secondary reinforcement in concrete
- Reduces the formation of intrinsic cracking in concrete
- Reduces concrete permeability and absorption.
- Improves concrete freeze/thaw resistance
- Improves concrete durability
- Provides enhanced hydration which improves concrete strength properties
- Improves concrete impact resistance
- Improves concrete shatter resistance
- Improves bond strength between rebar and cement paste

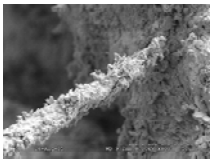
Concrete Fire Resistance:

- UL Classified for use in all composite metal deck Designs No. D700, D800 & D900.
- UL Classified for use in composite metal deck Design No. D973 Reduced Thickness of NWC (normal weight concrete) while achieving a 2 Hour Fire Rating

Perfomance Characteristics:

Water Absorption	Up to 80% of the fiber weight
Specific Gravity	1.10
Avg. Fiber Length	2.1 mm
Projected Fiber Diameter	18 um
Fiber Tensile Strength	90 -130 ksi
Alkali Resistance	High (ASTM D6942)

UltraFiber® 500



UltraFiber
Excellent Bond

Polypropylene Fiber
Minimal Bond

UltraFiber 500® vs. Synthetic Fibers

Attribute, units	UF-500	Synthetic Fiber
Avg. Length, mm	2.1	16
Denier, g/9,000m	2.5	6
Diameter, um	18	30
Count, fibers/lb.	720,000,000	44,000,000
Density, g/cm^3	1.10	0.91
Tensile, N/mm^2	600 - 900	200 - 500
Surface area, cm^2/g	25,000	1,500
Fiber Spacing, um	640	950

Application Rate
The minimum application rate for Buckeye UltraFiber 500® is 1.0 lb/yd^3. A dosage of 1.5 lb/yd^3 is recommended for most commercial slab on grade applications. Dosages of 2.0 to 4.0 lb/yd^3 may be used for applications requiring maximum impact and/or abrasion resistance and crack control.

Mix Design
The addition of UltraFiber 500® reinforcing fibers at normal dosage rates does not require any mix design changes. UltraFiber 500® is compatible with typical admixtures and other mix constituents.

Finish-ability
UltraFiber 500® reinforcing fiber provides superior finish-ability and has no restrictions or barriers to normal finishing techniques. These finishes include: trowel, swirl, broom, exposed, decorative, colored, and stained. All finishes exhibit excellent results, and the finisher can use normal timing.

Compatibility
UltraFiber 500® reinforcing fiber is compatible with all normal concrete constituents and admixtures and will not adversely affect their performance or concrete workability.

Buckeye Building Fibers LLC
1001 Tillman
Memphis, TN 38108
866-663-8999
www.ultrafiber500.com

Usage Guideline
UltraFiber 500® reinforcing fiber can be used as an alternate system to provide secondary reinforcement. It cannot be used as an alternative for structural reinforcement. UltraFiber 500® fiber should not be used to alter the concrete design for thickness or strength. ACI recommended curing practices, joint spacing and depth should be followed.

Mixing Procedure
UltraFiber 500® reinforcing fibers disperse best when added at the beginning of the batching sequence. Follow normal mixing, time and speed, as recommended by ASTM C94.

Packaging
UltraFiber 500® reinforcing fibers are available in 1.0 pound and 1.5 pound, water-soluble bags. Larger 20 pound non-soluble bags are also available. For automated dispensing, 500 pound bulk bags are recommended.

Engineering Specification
Use only 100% virgin alkali-resistant cellulose fibers manufactured for use in concrete for secondary reinforcement. Dosage rates are 1.0 lb/yd^3 (minimum), 1.5 lb/yd^3 (recommended), and up to 4.0 lb/yd^3 for special applications. Buckeye UltraFiber 500® fiber is for the control of cracking due to plastic shrinkage and thermal expansion/contraction, to reduce water migration, and for increased impact capacity and shatter resistance. Fiber manufacturer must provide compliance with applicable building codes, ISO 9001 certification of manufacturing facility and ASTM C1116-08 compliance. Fibrous concrete reinforcement shall be manufactured by Buckeye Building Fibers LLC, 1001 Tillman, Memphis, TN 38108.
Phone: 866-663-8999, Fax: 901-320-8844

Website: www.ultrafiber500.com.

Spirit Bank Event Center
UltraFiber added @ 3.0 lbs/cyd