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# THE MIDWAY MONOFILL

The Best Laid Plans  
or

“Don’t Try This at Home”

Trent Peterson

- The acquisition of a monofill
- The journey to compliance, a \$2-million story
- GCC's Pueblo Colorado cement plant, plans for TDF use
- A 21<sup>st</sup> century monofill business model
- Plans for the next year; tire shredding and feed to the Pueblo cement plant

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LAST YEAR'S THEME  
**THE RIGHT PLACE AT  
THE RIGHT TIME**

- GCC commissioned a state of the art cement plant near Pueblo, CO in 2008.
- GCC has extensive experience using TDF as fuel.
- The Pueblo cement plant is engineered to replace 40% of total fuel with TDF.

# 23-MILLION CO TIRES: A 10-YEAR FUEL SUPPLY



# MIDWAY LOCATION: THE RIGHT PLACE



## FINISHING THE SUCCESS STORY

- Completing work at Midway
- The Pueblo TDF delivery system
- Shredding at Midway

## WHAT THE YEAR TAUGHT US

- Completing work at Midway
- The Pueblo TDF delivery system
- What we learned at Midway
- Next steps

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# THE MIDWAY MONOFILL COMPLETING THE WORK AT MIDWAY



# 5,000 CUBIC YARDS OF CUT AND FILL



# 18,000 square feet of erosion blanket



# 162 CUBIC YARDS OF RIP-RAP



# 1/3 MILE OF SILT FENCE



# 51 CUBIC YARDS OF CONCRETE



# 350 CUBIC YARDS OF ROAD BASE



- 3 acres drilled and seeded
- 1 ton of straw
- 800 pounds of fertilizer
- Then a funny thing happed.....

# IT RAINED!!



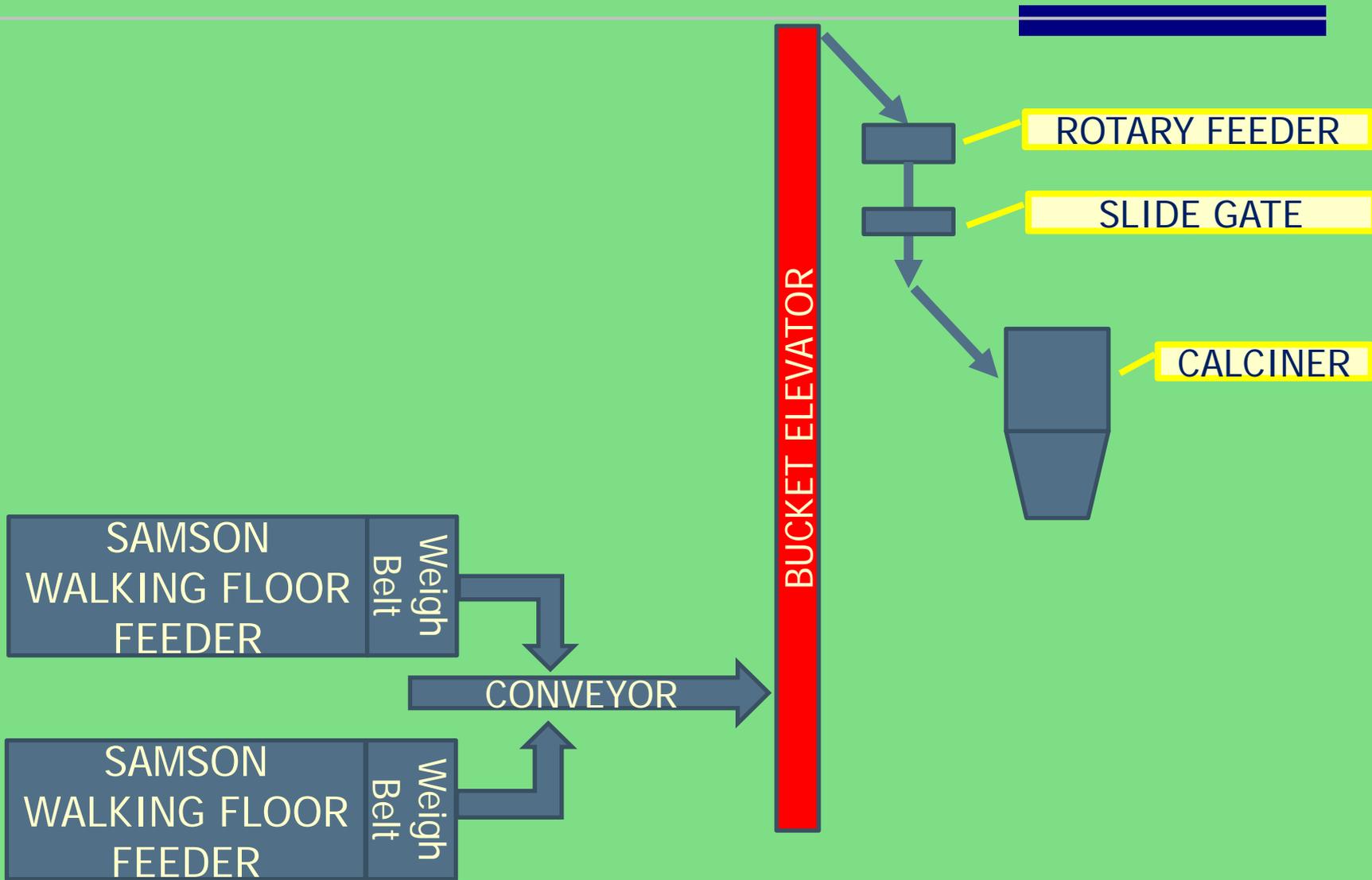




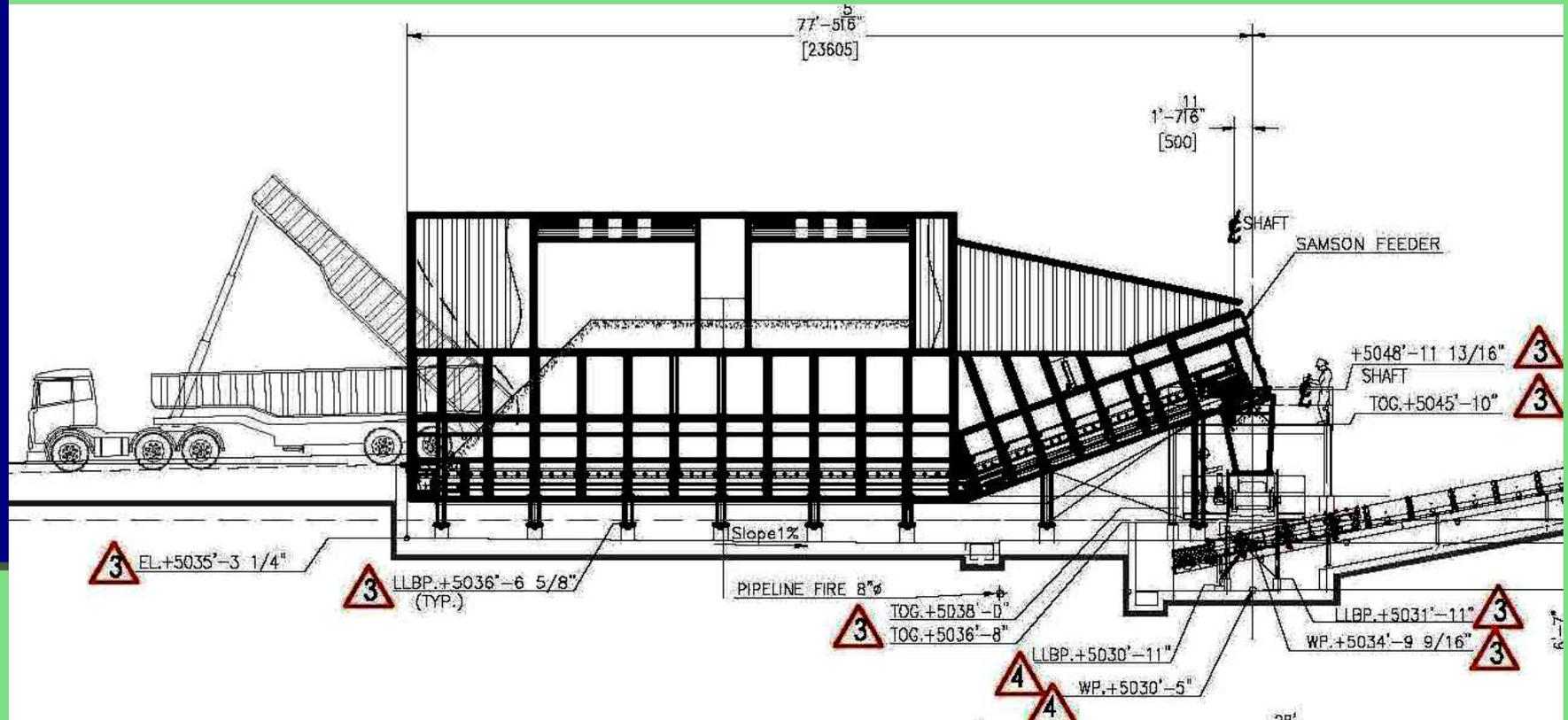
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THE END USE OF TDF  
**FEEDING TIRES TO A  
CEMENT KILN**

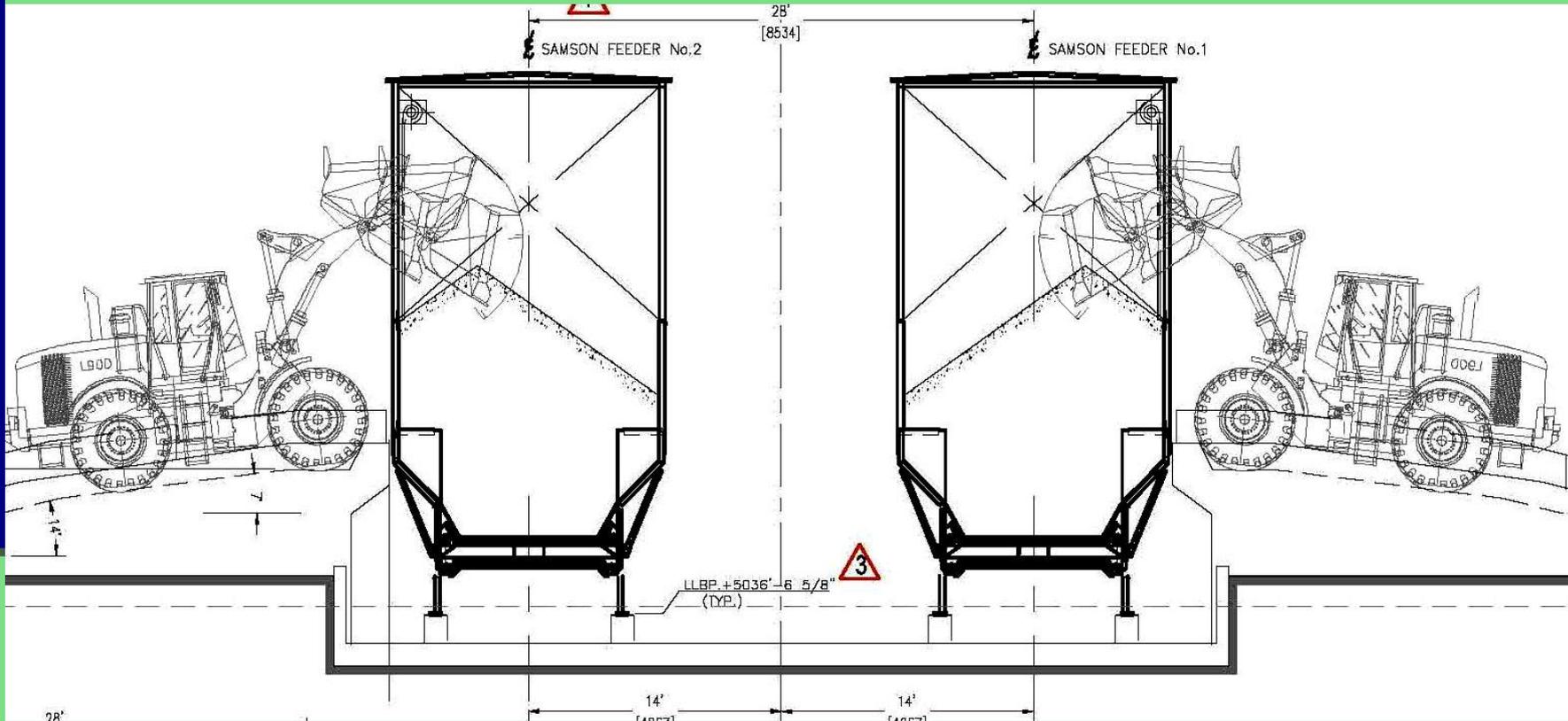
# FEED SYSTEM FLOW DIAGRAM

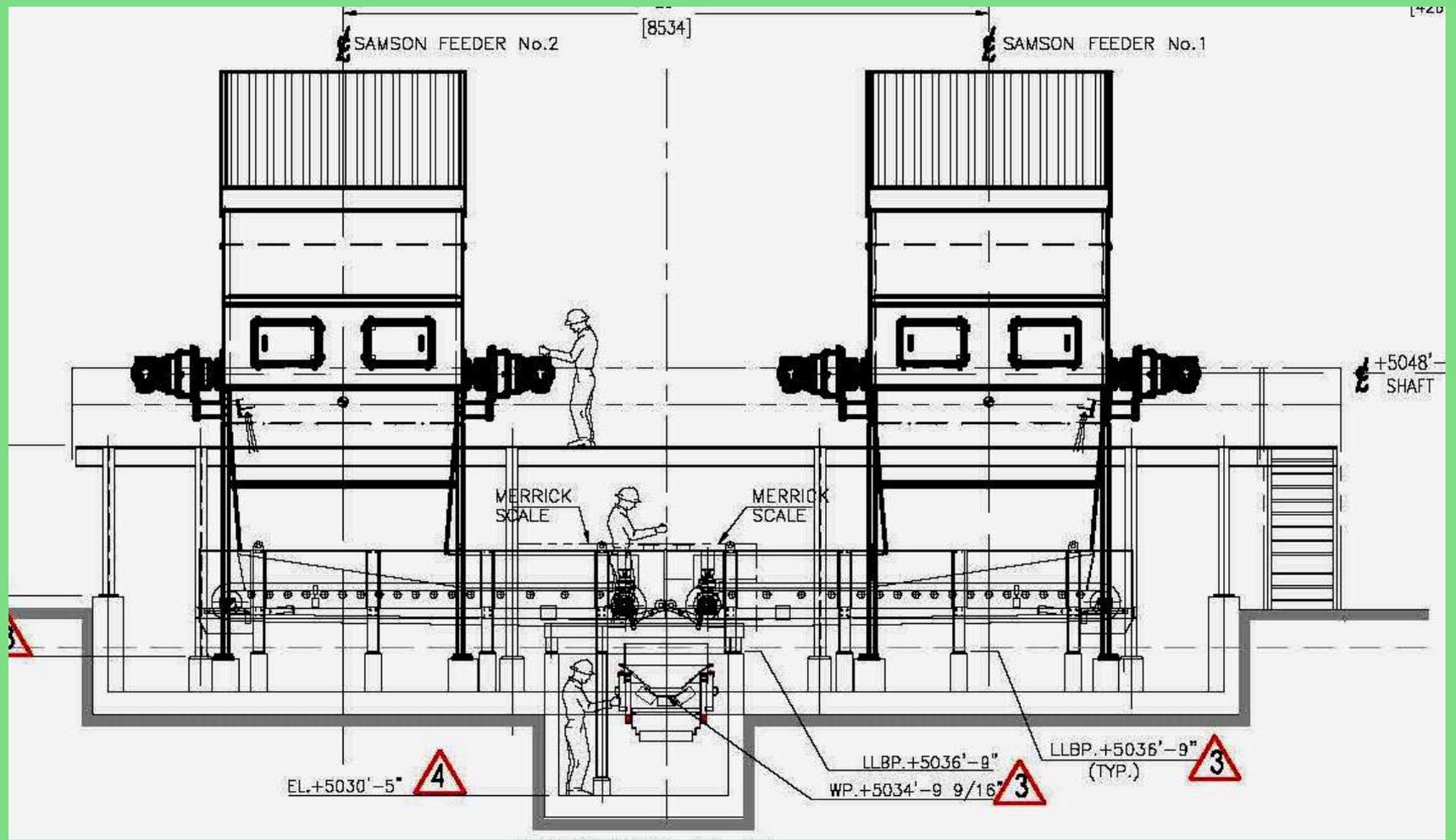


# TYPICAL FEED TO SAMSON FEEDERS

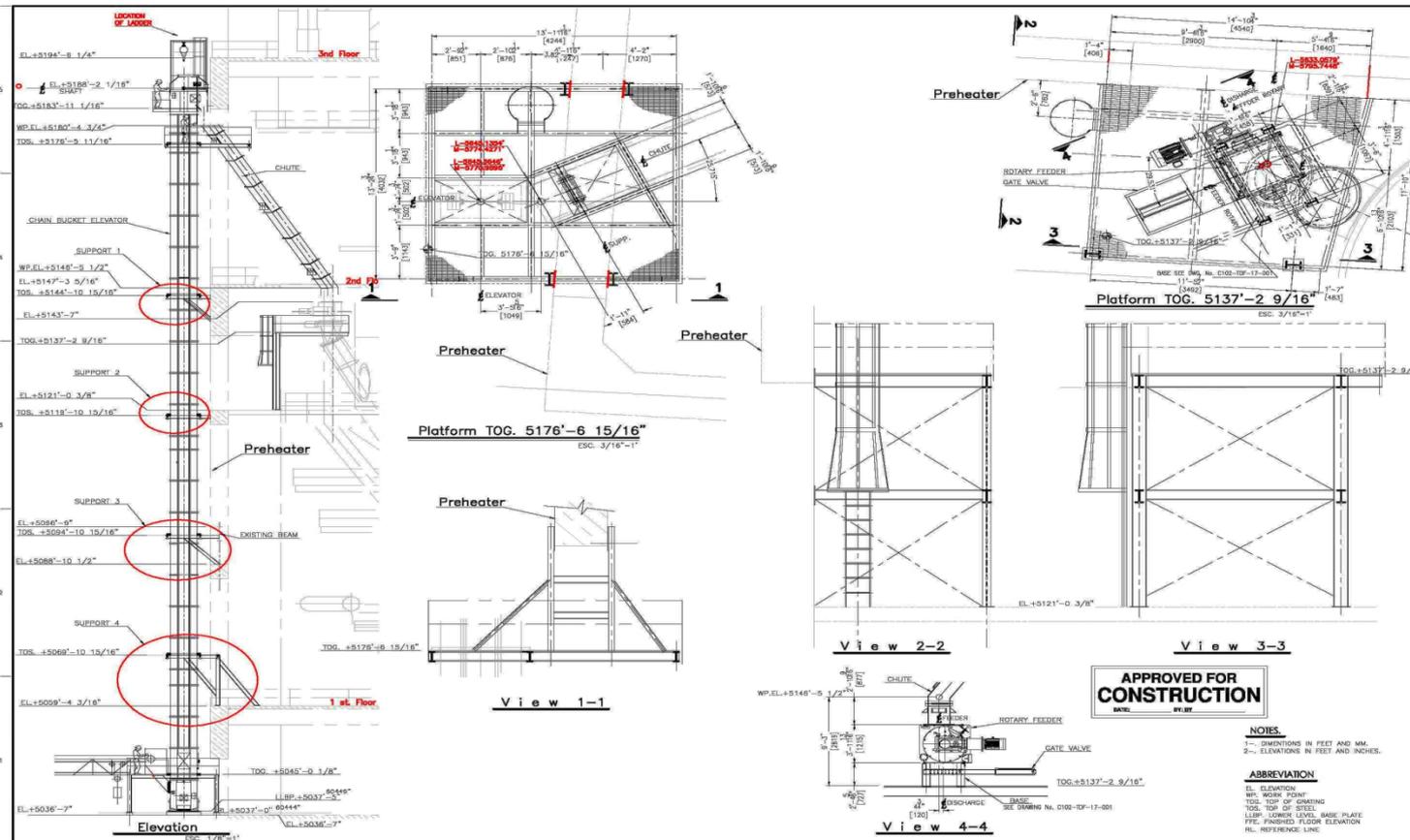


# ALTERNATE FEED TO SAMSON FEEDERS





# FEED TO THE CALCINER



REVISIONS			
No.	DATE	DESCRIPTION	FOR
1	10/05/12	ISSUED FOR REVIEW AND COMMENT	REV
2	10/08/12	APPROVED FOR CONSTRUCTION	APP

REVISION	APPROVED
REV. 0000	REV. 0000

 <p><b>GCC</b> GOLDER CONSTRUCTION COMPANY PUEBLO, COLORADO</p>	
COMPANY:	GCC RIO GRANDE
PLANT:	PUEBLO CO.
PROJECT No.:	NAME: TSP PUEBLO PLANT
TITLE:	Chain Bucket Elevator Arrangement Platforms TOG. 5137'-2 9/16" TOG. 5176'-6 11/16"
DRAWN: PGP	DATE: OCT. 13
CHECKED: INGLCBB	DATE:
REVISED: INGLVMB	DATE:
UNITS: FEET-IN/MM	SCALE: IND.
DRAWN: No FILE: 0102-TDF-12-004	REV. 0



# THE FEED SYSTEM



THE MIDWAY MONOFILL

**WHAT WE KNEW THEN**

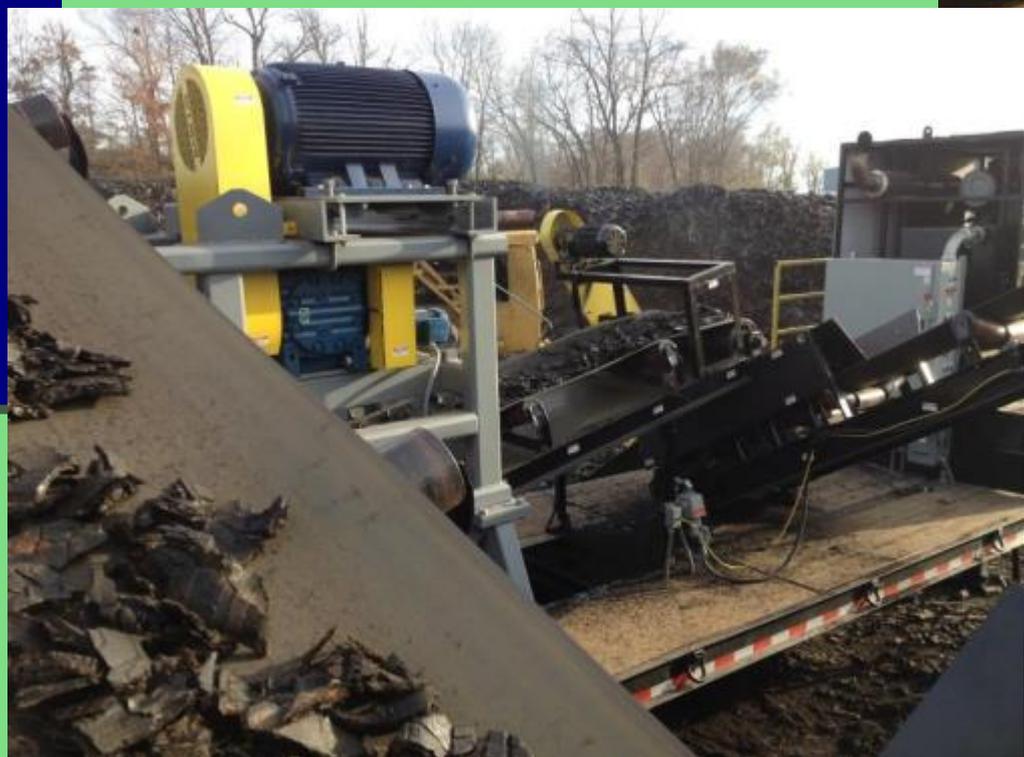
**WHAT WE KNOW NOW**

- Contracted with an experienced mobile shredder
- Experienced in illegal stockpile cleanup
- Clean, well-organized operations
- Well maintained equipment
- Good safety and maintenance practices
- **GOOD COMPLIANCE RECORD**

Barclay Primary  
Shredder



Barclay Secondary Shredder



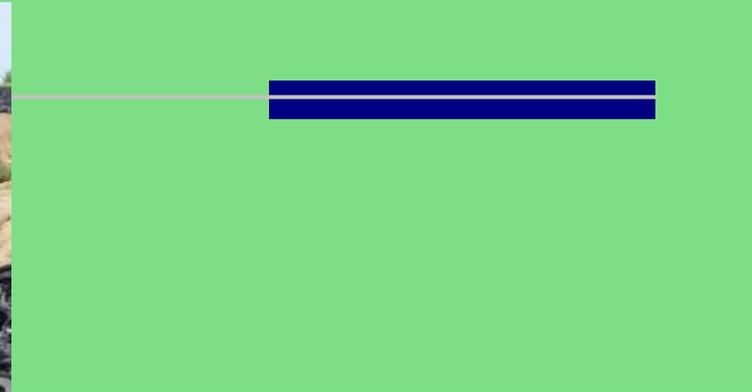
# ENOUGH CO TIRES FOR A 10-YEAR FUEL SUPPLY







# CULLING OUT CONTAMINATED TIRES



# THESE DID NOT GO TO THE SHREDDER



# BUT STILL.....



# THE SYSTEM WAS NOT SET UP FOR THIS



# OR THIS



# AND SO FINALLY



STRAW

CAMEL

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*“We know more about what is on the surface of the moon than what is ten feet in front of us.”*

- ~~We have to assume~~ WE KNOW that Midway contains some heavily contaminated tires
- A shredding system must be configured to cope with heavily contaminated tires

- The Pueblo plant has the capacity to consume over half of all the waste tires generated in Colorado.
- GCC has invested heavily in the systems necessary to deliver TDF to the Pueblo cement plant
- GCC has a clearly articulated strategic plan to complete TDF delivery systems
  - It is good economics
  - It has undeniable environmental value

- Capitalize on GCC's broad technical capacity to design and build a shredding system that:
  - Matches the unique conditions of the Midway monofill
  - Matches the designed integrity of the Pueblo TDF injection system
- Implement short term solutions to manage the flow of incoming tires
- And finally.....

**HAVE FUN  
DOING IT!**

Trent Peterson  
Vice President  
GCC Energy, LLC