



*CANDO PRESENTATION
SEPT. 26, 2018*

INTRODUCTION



- Flying Dust Gravel (FDG) is located in the Meadow Lake area and has been in operation for more than 18 years
- Employs 8 people in various positions
- Generates revenue for Community programs
- Provides quality product at fair market price

INTRODUCTION



Value Added Products



- FDG has some of the cleanest raw product in the immediate area that also meets structural requirements to fulfill the market demand for value added products
- Because of its natural cleanliness the costs of processing the rock to achieve a saleable product is low and very cost effective.
- FDB Gravel has the ability to make any product to spec

Value Added Products



- **3/4" Washed Rock** This is the basis of all products created worth the highest market value. Any other products created will be a by-product of producing 3/4" washed rock.
- **Pea Rock 5/16"** This is the second highest market value. Can be sold as a washed product if needed at an added value.
- **1/2" Rock** This product is in high demand for asphalt purposes. It is also used in some concrete recipes that do not use 3/4" rock.

Value Added Products



- **Concrete and Asphalt Sands** This product can easily be produced upon request (sizing) through additional screening and washing. Recipes for both concrete and asphalt require certain amounts of these products for added structural strengths.
- **Sub Base** (3/8 minus base compacting gravel) unfortunately these screenings are normally sold with the proper amounts of clay (binder) formed naturally through the process of crushing but do to the fact of having such a clean raw product FDG will have to pug clay (binder) back into raw product.

Other Products



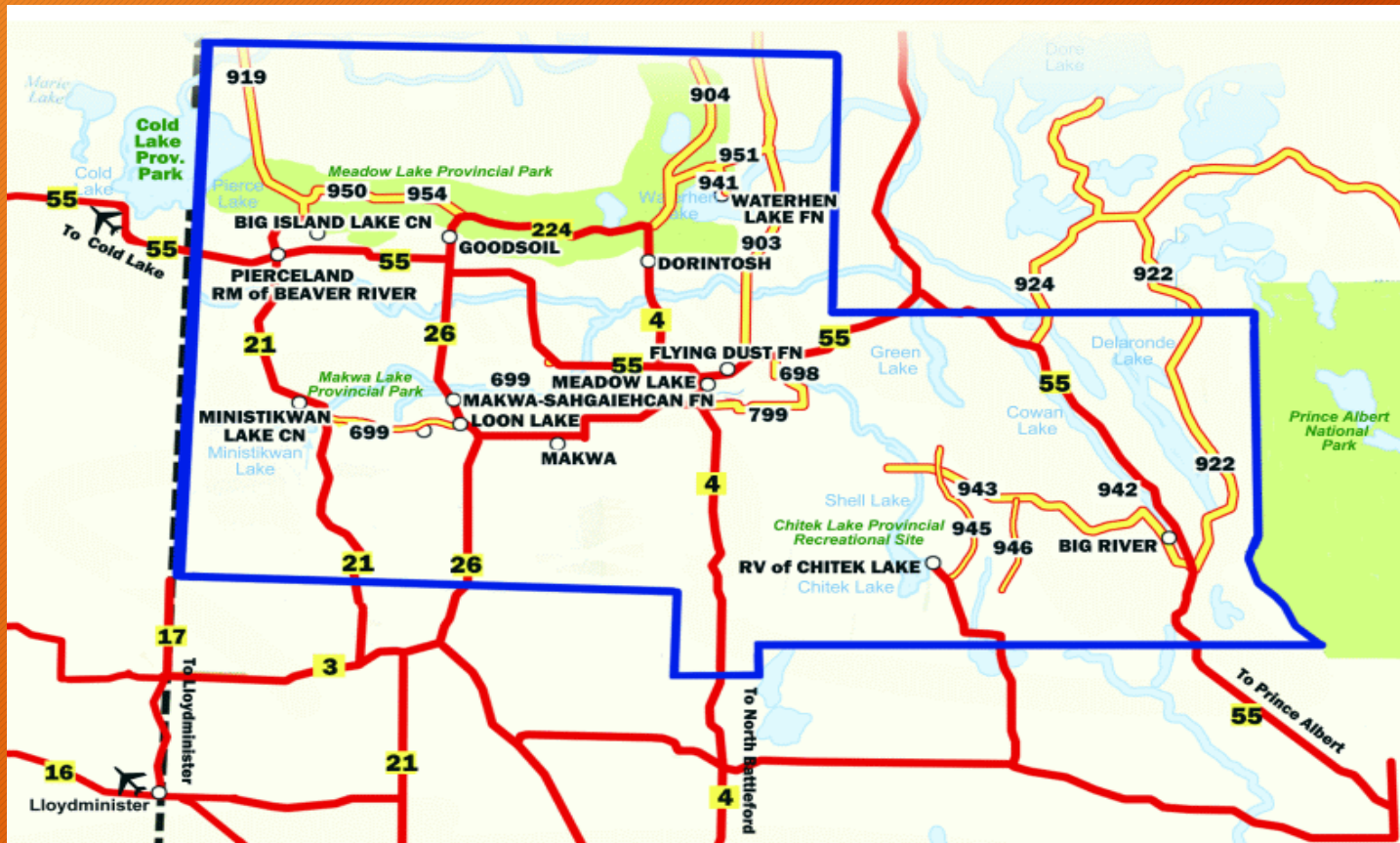
- **Jack pine sands** Raw product extracted and sold as is
- **Top soil** This is sold through FDG but is purchased from FDFN O&M
- **Screeener sands** Screenings that are by product of gravel
- **Pit Run** Raw product extracted and sold as is

Market



- **Concrete** - FDFN, Inland Concrete and Meadow Lake area
- **Asphalt** - FDFN and Meadow Lake streets
- **Road base/Construction base** - FDFN & RM of ML
- **Government Infrastructure** (bridges, water treatment stations, sewage lift stations, power stations, buildings, etc.)
- **Local Area construction** - Including all northern communities
- **MLTC** - Including MLTC's procurement for development (schools, administration buildings, housing, etc.)
- **Rural** - driveways with the last two years of heavy rain.

Market Area



Equipment Required



- **Cone crusher** needed to purchase for the first year it may be best to use the initial crush to develop the capital to look at purchasing one. Given the market speculated, a 36” cone crusher or smaller is sufficient.
- **3 Stackers** to have capability to value add to the product. Through the process of reentry into washing, screening or pugging in clay to reach Compaction, cleanliness and any other grades that may come up in the future.

Equipment Required Cont'd



- **Long conveyors** have the capability to pile at high heights to eliminate spreading the base of the piles into too large of a diameter intruding the chance of contamination
- **Washer** wash all value added product. Concrete rock, asphalt rock and sands needed for concrete. Increasing the value of the aggregate from \$29.00 yard of rock turns into a \$43.00 yard.

Equipment Required Cont'd



- **Pug Mill** Usually the byproduct of a gravel pit is screened down to sizes used for sub base purposes but the byproduct created at FDG is too clean and to turn it into a saleable product one must pug clay back into it.
- **Generator** The fact that the power source does not reach into the pit makes it mandatory to have a gen set big enough to handle the daily operations of the pit. (750kw with three phase capability)

Equipment Required Cont'd



- **Machinery** Must purchase a D7 or D8 Cat and a Track Hoe.
- **First Aid And Lunch Room** complete with eye wash station, stretcher board, first-aid supplies, power, drinking water station, furnished with all safety and MSDS manuals and possibly a land line for telephone/fax.
- **Initial Start Up Costs** advertising, establish COR safety program, insurances, wages for the first quarter, travel costs to locate equipment to purchase or rent, testing, welding repairs, administration costs.

Capital Costs Key Notes



- The biggest **DECISION** is deciding between the risk of purchasing crushing equipment compared to contracting out the service to an already established crushing company
- There is a slight added cost of purchasing the equipment as opposed to paying the fees to have a crusher come in and take care of the first speculated budget.
- Owning and maintaining FDG crushing equipment will allow the growth of the company. FDG would have the ability to crush in other gravel pits, whether newly acquired (through TLE) or other company's pits, promoting expansion inside the company.

Capital Costs Key Notes



- Through strict buying techniques FDB Gravel should be able to acquire the machinery at a cost savings compared to the prices stated.
- Another benefit of owning the equipment would be to best utilize the raw product that is being processed from the ground. If the raw product happens to change characteristics FDB Gravel would be able to adapt to meet specs of a saleable product .

NEW EQUIPMENT



Gravel Pit Management



Duties

- Implement safety program (COR)(SCSA standards)
 - Certificate of recognition, Sask. Construction safety association
- Manage gravel crushing
- Product sales (planning)
- Project Development
- Supervise crew (establish employment)
- Schedule machinery maintenance
- Establish Trades certification (red seal millwright)
- Reclamation of old areas as well as new

Benefits To Flying Dust



- **A separate identity business** that Chief and Counsel will not have to spend huge amounts of time managing. There are meetings set up on a regular basis to keep FDC&C informed and there is also full disclosure of all duties.
- **Employment** of FDFN Members.
- **Training** programs set up to train individuals as well as help with the reclamation of the past and the future.
- **The ability to grow** from within.
- Use the **financial return** of the FDG to support the community, through funding programs or infrastructure eg: Rink, elder's complex, etc.

MOVING FORWARD



- For the two decades we have spent developing this business whether it be for commercial, Industrial or residential; has been spent establishing working relationships with engineering firms, contractors, project managers, local government agencies, educational facilities.

MOVING FORWARD



- This knowledge and experience will give us the foundation needed to support the future of FDB Gravel Ltd..