



Section 3.0

Plant Site Description

SECTION 3.0

PLANT SITE DESCRIPTION

3.1 SITE LAYOUT

The proposed OlyWest site will include a hog holding facility, a pork processing facility, a wastewater pre-treatment facility, a protein recycling facility, a truck wash, a retention pond, and two access roads in addition to parking for employees and for refrigerated trailers. The total processing facility will be approximately 35,415 m² (381,200 ft²) in size and will be located on approximately 19 ha (48 acres) on the west side of the 46 ha (114 acre) parcel of land. The truck wash will be located to the east of the processing building. A retention pond will be located off-site to the east of the truck wash and will collect surface run-off from the site and will be owned and operated by the City of Winnipeg. The site drainage and site location plan is indicated in Figure 3.1. Site access will be accommodated by two access roads. One road will enter the site from Mazenod Road located along the western edge of the property. There are currently two options under consideration for the second access route. The first option is to connect a public access road from Camiel Sys Street to enter the site from the east (Ray Marius Road option). The second and preferred option is for a private access road on the south of the site which would connect directly with Plessis Road (Elizabeth Road option). The access road locations and options are shown in Figure 3.2. Although not planned for development at this time, consideration of a future rail spur line into the property has been contemplated. Viability of a rail spur option will be dependant upon a feasibility assessment carried out in the future.

Although the routing of electrical transmission lines and natural gas piping has not been finalized, it is anticipated electrical power will be provided from south of the proposed facility location and from the Plessis Substation located to the southeast of the site. Natural gas routing is expected to be provided from a gas main extended southward along Mazenod Road and into the site from this access road. Potable water will be supplied to the site from the existing City of Winnipeg distribution network and will enter the site from Mazenod Road and Camiel Sys Street. Fire protection will be provided and will include a fire loop with hydrants to protect the building and a designated fire access route will be constructed around the building. Wastewater will exit the site through a pump station along Mazenod Road and onward to the City of Winnipeg NEWPCC via an interceptor sewer along the route indicated in Figure 3.3.

3.2 ON-SITE FACILITIES

Process wastewater from the proposed OlyWest facility will be pre-treated on-site. Pre-treatment will consist of screening and a DAF system with chemical addition to remove and recover particles of meat, fat, bone chips, and other extraneous solids as well as phosphorous prior to discharge to the City of Winnipeg system. The sludge generated from the wastewater pre-treatment will be sent to the protein recycling facility for processing. The pre-treated wastewater will be monitored for turbidity and volume prior to leaving the site. Sanitary

wastewater from the facility will not be pre-treated, but discharged directly to the City of Winnipeg sewer system. Wastewater from the truck wash facility will pass through a rotary screen and an oil and sand interceptor prior to being sent to the City of Winnipeg sewer system. The City of Winnipeg will also specify effluent monitoring requirements for the proposed OlyWest facility prior to the interceptor sewer.

The on-site protein recycling facility will process blood, bone, trimmings, wastewater pre-treatment sludge, and hogs that die en-route to the proposed OlyWest facility. These process by-products will be used to produce tallow, blood meal and meat and bone meal on a continuous basis. Storage silos for blood meal and meat and bone meal and tanks for tallow will be located outside of the facility building. Liquid blood not sent to the protein recycling facility will be stored in refrigerated blood tanks located within the facility building for sale to a third party processor depending upon market conditions.

Room air from the protein recycling and wastewater pre-treatment areas will be treated on-site using a series of venturi/packed-media gas scrubbers and room air packed-media scrubbers prior to exhaust. The milling areas in the protein recycling facility will also be equipped with cyclones to reduce particulate loads in the air before it is treated in the multi-stage scrubber system. Fugitive emissions will be minimized by maintaining a good housekeeping program. No specific provisions have been made for point source air emission monitoring facilities as meat processing and rendering facilities are not typically required to monitor emissions.

There will be an above ground diesel storage tank to store fuel for reefer units as well as the shunting trucks. There will be two aboveground tanks for the storage of CO₂ used at the facility (one for hog stunning and one for the production of dry ice). A designated storage area within the facility will be properly designed in order to store chemicals for sanitation, maintenance and wastewater treatment.

The screened material from the truck wash and the very limited volume of bedding materials and manure solids generated from the holding facility and incoming trucks allows it to be stored on-site in an enclosed receiving bin, which is emptied on a regular basis for disposal by land application with a contingency plan for disposal of the material at a licenced landfill with an option for composting in the future. Cardboard and other paper waste generated in the processing facility will be recycled, while domestic solid waste will be disposed of in an offsite landfill.

3.3 OVERVIEW OF CONSTRUCTION

The proposed OlyWest facility construction will begin in April 2007 and continue for 28 months. A maximum of 130-140 workers will be on-site during the summer of 2007 and a maximum of over 200 workers will be on site during the summer of 2008. The average number of workers on site per month in 2007 will be 90 and the average number of workers on site per month in 2008 will be 132. An approximate construction schedule is included as Figure 3.4.

The processing equipment for the facility will be supplied from various locations throughout North America and possibly Europe. Equipment will be shipped to Winnipeg via truck or rail and hauled to the site by truck.

Construction contracts will be awarded through invited and voluntarily submitted tenders. It is anticipated that most bidders will be based in Manitoba with the exception of specialized processing equipment. The successful bidder will, in general, be selected on the basis of quality of workmanship, track record on similar projects and price from among the qualified bidders. The skills required of construction workers will be typical of any facility containing considerable processing equipment and office space including: carpenters, welders, pipefitters, electricians, sheet metal workers, plumbers, drywall specialists, painters, and labourers. It is anticipated the majority of these workers will be from Winnipeg.