**Ditching**

There are multiple man-made ditches on the Ward Investments property that have been constructed over time. The origin and purpose of these ditches vary. Historical aerial photography and historical USGS quadrangle maps were reviewed to help determine the timeframe of construction and the purpose(s) of each ditch. The location of the ditches are depicted in Figure A-8 and a description of each type is provided below.

Offsite basin drainage conveyance – A few of the larger ditches serve to convey wetland drainage and stormwater runoff from property and basins located to the north. These ditches are labeled as Offsite Basin Drainage Ditches on Figure A-8 and are also depicted on Figure C-7. They generally range in depth 1 meter to greater than 2 meters.

The 1954 USGS Quad Map for Gulfport North and 1956 Quad Map for Gulfport NW indicate that the portion of Ditch OSB 1 (see Figure A-8), north of the railroad, was the only ditch on the site at that time. Considering Ditch OSB 1 is within the headwaters and is associated with wet pine savannahs, it is likely that this ditch was not a channelized creek, but was excavated to drain the adjacent wetlands and areas from the north of the site.

The 1976 USGS Quad Map for Gulfport NW depicts a new ditch in the southeast corner of the site. This ditch originates off-site and appears to have been constructed to carry runoff from the Forest Heights subdivision and/or the wastewater pond to the north of the subdivision. This ditch system eventually became the lower third of what is depicted as Ditch OSB 2.

The remainder of Ditches OSB 2 and OSB 1, as well as Ditch OSB 1A, were constructed at an unknown date between 1976 and February 1992. These ditches and extension convey the runoff originating north of I-10, through the site, to Turkey Creek.

Wetland drainage ditches – A network of shallower ditches, not associated with roads, occurs in the northeast corner of the project site. The depth of these ditches generally ranges from 0.4 to 0.7 meter. This ditch network appears to have been constructed in association with the timbering activity at the site and is visible in early 1996 aerial photography. Since these ditches are not adjacent to roads, it is assumed that their purpose was to drain the wetland to improve site access for timbering.

Roadside/railroad ditches – The remaining ditches on site are associated with the access roads that were constructed during the timbering process and along the railroad. These roadside ditches served both to convey water and to provide the fill for the adjacent road. These ditches were also constructed by 1996 and are generally deeper (typically 0.5 to over 1 meter) than the wetland drainage ditches.

Some other excavated ditches were observed onsite, but were too shallow or had high spots that prevented them from draining the site. Since these systems do not drain the wetlands or the site, they have not been depicted on Figure A-8.