ENVIRONMENTAL IMPACT STATEMENT

PROPOSED SITE CONDOMINIUM SOMERSET PINES SOUTH BOULEVARD

Part of the SW ¼ of Section 32 City of Rochester Hills Oakland County, Michigan

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PART I ANALYSIS REPORT

The subject property is located in the southwest quarter of Section 32, on the north side of South Boulevard, east of Coolidge Road and west of Crooks Road. The site may be accessed from South Boulevard at the existing driveway.

The subject property had consisted of four single-family home sites, Lots 1-4 of Messmore Farms Subdivision, platted in 1955. In recent years, all structures have been removed, and at the time of this report, no structures exist on the property.

For the subject properties involved in this development, the zoning is R-4, one family residential. The zoning is also R-4 to the west, north and east of the property, at the existing Pine Trace golf course, Walnut Brook Estates, and Lot 5 of Messmore Farms Subdivision, respectively. On the south side of South Boulevard, in the City of Troy, the zoning is R-1B, one-family residential.

The National Flood Insurance Rate Map, Community Panel No. 260471 0015 B revised September 2, 1994, indicates that there is no floodplain located on the site. Wetlands on the site were flagged by King & MacGregor Environmental, Inc., and mapped by Fenn & Associates, Inc. The northern 2.18 acres of the property were designated wetland. A 0.14-acre pocket of wetland was designated, isolated from the larger contiguous wetland. Some pockets were mapped along the west property line, contiguous with areas of wetland on the golf course property. The tree survey by Mikes Tree Surgeons, Inc. indicated approximately 1,075 trees over 6-inch diameter.

The land is generally higher in the center of the site. The topographic survey indicates a ridge exists near the center of the property, falling 10 feet in a northeasterly direction, toward the designated wetland. The grade falls easterly and westerly from the ridge, with isolated pockets or depressions along the length of the ridge. From that ridge, the grade falls 10 feet, toward the west property line, and the wetland that was designated on the golf course. Along South Boulevard, the site falls 6 feet, from west to east, from the ridge toward the southeast corner. The steepest grades mapped by the topographic survey approach 1 on 3.

From the Soil Survey of Oakland County, Michigan, by the United States Department of Agriculture, Soils Conservation Service, the south portion of the site is largely Capac Sandy Loam, then classified as Thetford Loamy Fine Sand and Granby Loamy Sand in a northerly direction, toward the wetland, which is classified as Houghton and Adrian Mucks. The manual indicates that if this soil is used as a site for buildings, surface or subsurface drainage is needed to lower the water table and well-compacted fill is needed to raise the site.

Soil borings provided by Testing Engineers & Consultants, Inc., indicate ground water table ranging from approximately 3-15 feet deep. The shallowest ground water was encountered along the wetland to the north. The deepest ground water was encountered in the very center of the site, coinciding with the ridge. Site detention is proposed in the southwest corner, closest to the road drain for pumped outlet. The ground water table will create a permanent pond, when excavated.

All utilities are available to the site. Storm drainage will be detained, and released to South Boulevard to the southwest. There are sanitary sewers and water mains in South Boulevard. Other utilities such as natural gas, electricity and telephone served the 4 previous residences, and are available for the redevelopment of the site.

PART II THE PLAN - SMALL RESIDENTIAL

The proposed project is site condominium, consisting of 41 single-family homes. All ranch-style homes are planned for the community. Prices range \$350,000 to \$450,000. The southeast Michigan, Metro-Detroit area generally absorbs one to two units per month on similar new construction developments. This indicates a two to four year range for full build-out of this development.

This development proposes to have access to South Boulevard at two (2) points of intersection. Residential traffic would be characterized by 12 trips per day for site condos, for a total of about 600 trips per day. The Road Commission for Oakland County (RCOC) has given the average daily traffic of 17,562 trips per day for South Boulevard in this general area. The 600 trips per day generated by this development would increase the traffic by 3.42%. According to RCOC standards an increase less than 10% does not require widening the thoroughfare or additional lanes. However, any requirements requested by RCOC will be implemented according to their standards.

PART III IMPACT FACTORS

The property consists of 19.23 acres, currently developed as single-family residential, or vacant. The proposed development will be done selectively, to disturb the least amount of land possible. The road right-of-ways will be prepared. The front 25 feet of the lots will be disturbed to the front setback lines of the proposed home sites, which will each be developed individually, to help save trees. Only storm sewer will be placed in the rear yards. Altogether, about 10 acres will be disturbed during development operations.

King & MacGregor Environmental, Inc. delineated 2.18 acres of contiguous wetland to the north of the site. A 0.14-acre pocket of wetland lies south of that delineated wetland. Other pockets of wetland lie along the west property line, contiguous with larger areas on the adjacent golf course. Historically, these wetlands hold seasonal standing water, field observed in May of 2006.

A detention pond and forebay is planned near the north end of the site. These basins will be over-excavated to provide a permanent water feature. The forebay will be designed to pre-treat storm drain discharge by removing sediment and pollutants. Vegetation along the banks and within the proposed aquatic bench of the detention pond will enhance pollution removal, reduce algal growth, limit erosion, improve aesthetics, create habitat, and reduce water warming.

Approximately 10.6 acres of watershed is to be detained in the proposed detention pond. The basin will be oversized with a potential capacity to accommodate approximately 19 acres of drainage area. The basin will have a restricted gravity outlet and emergency overflow spillway to the wetlands to the north of the pond. Sheet flow for rear yard drainage along the east and west of the project is proposed through rain gardens/infiltration trenches. These drainage swales will treat water discharge while maintaining existing flows and ultimate offsite discharge outlets based on existing tributary areas and drainage patterns.

Approximately 3.6 acres of private open space will be provided in the existing wetland, and in the proposed detention facilities and landscaping easement fronting South Boulevard. No public open space is proposed.

As previously mentioned in this report, all utilities are available to serve the site. A portion of storm drainage will be detained and released to the north. The remaining areas are proposed to continue existing sheet flow for offsite discharge. There are sanitary sewers and water mains in South Boulevard. Other utilities such as natural gas, electricity and telephone previously served the site, and are available for the development of the site.

The planning status of the project, at the time of this report, is that Site Plan submittal will be forthcoming. The engineering of the site will take place through 2012. All construction permits should be in place to begin construction in summer 2013. Construction of the infrastructure should be complete by winter 2013, ready to begin on residence construction. Typical to Southeast Michigan, and Metro-Detroit, residences in new developments are typically consumed at one to two units per month. Full build-out of this development may be two to four years.

The existing topography ranges from gradual in the east and center to very steep in the southwest. The detention basin will be located at the north end of the site, adjacent to the existing low-lying wetlands. This aids in the creation of a permanent water feature for the basin, where the ground water table is near the surface. The roads will be constructed by cutting and filling only where necessary, to best fit the existing grades at the interior of the proposed lot areas. Most home sites will remain in pristine condition. Only those sites requiring earthwork will be cut or filled to best utilize the roads.

Pine Trace golf course lies west and north of the development. Walnut Brook Estates lies east. All surrounding uses other than the golf course are single-family residences. Being a single-family development, this project should not adversely impact the region.

No adverse impacts are anticipated during the construction of the development. It is anticipated that normal operations are to be observed in the construction of the infrastructure and buildings. South Boulevard will receive improvements, but nothing that should cause traffic disruption or hazards. All nearby structures have water and sanitary facilities. No impact to the ground water should affect any residences or businesses. Soil erosion and sedimentation control must be maintained under permit through Oakland County, so such pollutants will be controlled on-site.

The existing uses being largely residential, and proposed operations being industry standard, no existing pollutants should be encountered, nor should pollutants be introduced, by construction.

From the proposed development of the site, some physical changes to the area, and their benefits, or adverse impacts, may include:

Air quality should remain unchanged. The addition of 3% of the average daily traffic should not degrade the air quality, and the amount of landscaping distributed through the site will act to help clean the air of carbon mono- and dioxides.

Water effects will be restricted to the permanent water feature in the detention basin at the north end of the development. No nearby structures rely on the ground water for water service or septic infiltration. Therefore, no adverse impact is anticipated in causing the ground water table to be raised or lowered. All onsite, and some off-site drainage will be directed to the detention facilities, to be treated for pollutants & sedimentation, prior to its restrictive discharge, which controls flooding downstream.

Wildlife habitat may be displaced by this development. Trees within the wetland will remain. Mike's Tree Surgeons, Inc. classified the existing trees. King & MacGregor Environmental, Inc. classified the existing wetland. No other indication has been given that there is any special habitat on this site, outside of the delineated wetlands, which will remain largely intact. The rear lot lines are to be described along the wetland delineation by King & MacGregor. The 25 feet natural features setback will further protect the wetlands from impact. No storm sewer will be placed adjacent to the wetlands. The rear yard drainage will be directed to the wetlands, to continue providing them storm run-off.

The property was platted in 1955. Therefore, no specific tree preservation is required. Development of the site will be done to minimize the amount of disturbance, and tree removal. Tree replacement will be to City requirements, determined by the landscaper.

Noise should not be adversely impacted. The relation to the major thoroughfares lessens the impact of any proposed noise pollution, due to the normal daily traffic noise. The proximity of the proposed residences to the existing golf course should not create undue disturbance to the golfers, as the front entry garages will cause the buildings to block engine noise from reaching the course.

Night-light will not be an issue. Lighting would be limited to residential style porch, patio and garage lighting. Any lighting at the entrance to the development would be for the aid of motorists, and glare would be shielded from traffic and neighboring residences.

Socially adverse or beneficial changes brought about by this development may include:

Visual characteristics of the site would not adversely impact South Boulevard. A 30 feet wide landscape easement proposed for the site coincides with an existing 10 feet side water main easement. The 20 feet available for landscaping will

incorporate a berm and screen plantings, serving to replace or enhance the vegetation that now exists. Adjacent to the golf course, the existing vegetation along the property line will maintain a definitive boundary between the course and the new residences. Adjacent to the existing homes to the east, the impact will be that of any two abutting residential developments, neighboring lots will be rear yard to rear yard.

Traffic along South Boulevard will be directed east and west to the major thoroughfares and commercial districts. Traffic should be absorbed without much evident impact.

Modes of transportation will vary. Automobile traffic has access to both M-59 and I-75, and other major thoroughfares, via nearby Coolidge and Crooks Roads. This project will have sidewalk to promote residents walking, skating or bicycling, tying into the adjoining bike path along South Boulevard. Crooks Road is within one mile, a distance easily biked or walked, to access existing businesses.

Accessibility of residents to recreation is limited within this development. The detention facilities and wetlands can be viewed from the proposed sidewalks. Accessibility to schools is provided along the existing bus routes. Shopping and employment opportunities are provided in commercial areas to the west and east, along South Boulevard, and further along other major roads in the area. There are several hospitals nearby, in Rochester Hills, and the adjoining communities.

Economical adverse or beneficial changes brought about by this development may include:

- Influence on surrounding land values should be favorable, as it is with any new residential development.
- Growth inducement potential may be minimal, due the development of all land adjacent to this site. However, many golf courses are splitting off residential lots, or being developed entirely into residential communities. It is also normal to see increased commerce develop around new residential projects.
- Off-site costs of public improvements will be limited to the extension of some facilities onto the site, and improvements to South Boulevard, which will provide public benefit.
- Proposed tax revenues will be increased from the potential 4 residences to 50.
 The City stands to gain much in taxable revenue, over the current land uses.
- Availability or provisions for utilities, as mentioned previously, all utilities are available to service the site. The revenue from the City tap fees, alone, will be beneficial.

The existing land uses surrounding the proposed development should not be adversely impacted. Having access to South Boulevard, the golf course may experience future development. Other surrounding lands are built-out, so impact to future uses would not be anticipated.

Replacing the vegetative cover, as mentioned previously, will be done through extensive landscaping of the site. Areas not paved or built upon will be stabilized and revegetated.

This development has specific plans for beautification of the surrounding area. South Boulevard will be given additional landscaping, and the detention facilities at the north end of the development will have a landscaped permanent water feature. A rain garden will be constructed along the east and west property lines for water quality control that will also act as a natural buffer to the surrounding properties. The architecture of the residences will be tasteful, intended to attract ownership and patronage.

No alternative plans for this property are currently being considered.

PART IV THE SUMMARY

Should the project be approved, any adverse environmental impact will be limited to construction operations in the short-term. Once completed, and the land stabilized and landscaped, the potential for further adverse environmental impact will be very low.

In the long-term, some ecological impact will result from the removal of the secondgrowth trees, however, 2+ acres of contiguous wetlands will remain intact, along with all trees within its delineation and the 25-foot natural features setback. This wetland area is contiguous with existing wetlands and forested areas within the Pine Trace Golf Course, all of which constitutes approximately 78 acres, providing habitat to fauna displaced by this development.

The beauty of the development that will be provided in landscaping and the provision of a water feature will improve the appearance of the property.

The Economic impact to the City will be beneficial, through a 12-fold increase in residences over the subject property. Local businesses will further benefit from the additional patronage.

This development is compatible with the existing zoning and with the City Master Land Use Plan.