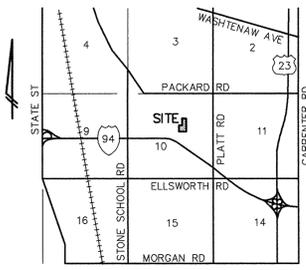


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VICINITY MAP
(NO SCALE)

NATURAL FEATURES ALTERNATIVE ANALYSIS
Mallett Woods 2, Ann Arbor, Michigan

Existing Conditions
Adjacent Mallett Woods 2, to the west, is a Wooded Wetland environment, the Mary Beth Doyle Park is characterized by optimum tree density of natural specie trees complimented with the appropriate herbaceous groundcover.

In contrast, the proposed condo development is an overcrowded tree lot; it exceeds the ideal woodlot density by approximately 60%. This is characterized by unchecked growth of pioneer species (aspens), invasive species (Buckthorn) and random domestic trees.

Previous construction activity has left the site highly disrupted with considerable construction debris, soil stockpiles and the western edge is occupied by a utility corridor within which all trees have been removed. Portions of the site have been used as a dumping ground for scrap metal, abandoned lawn equipment, furniture, yard waste and other items that should have been disposed of in a landfill.

The existing site disruption has impeded natural surface drainage and buried the bases of numerous existing trees. Good native species trees are crowded and evidenced by storm blow downs. Landmark trees are in varying stages of health showing signs of Oak decline and trunk rot.

Restoration Goals

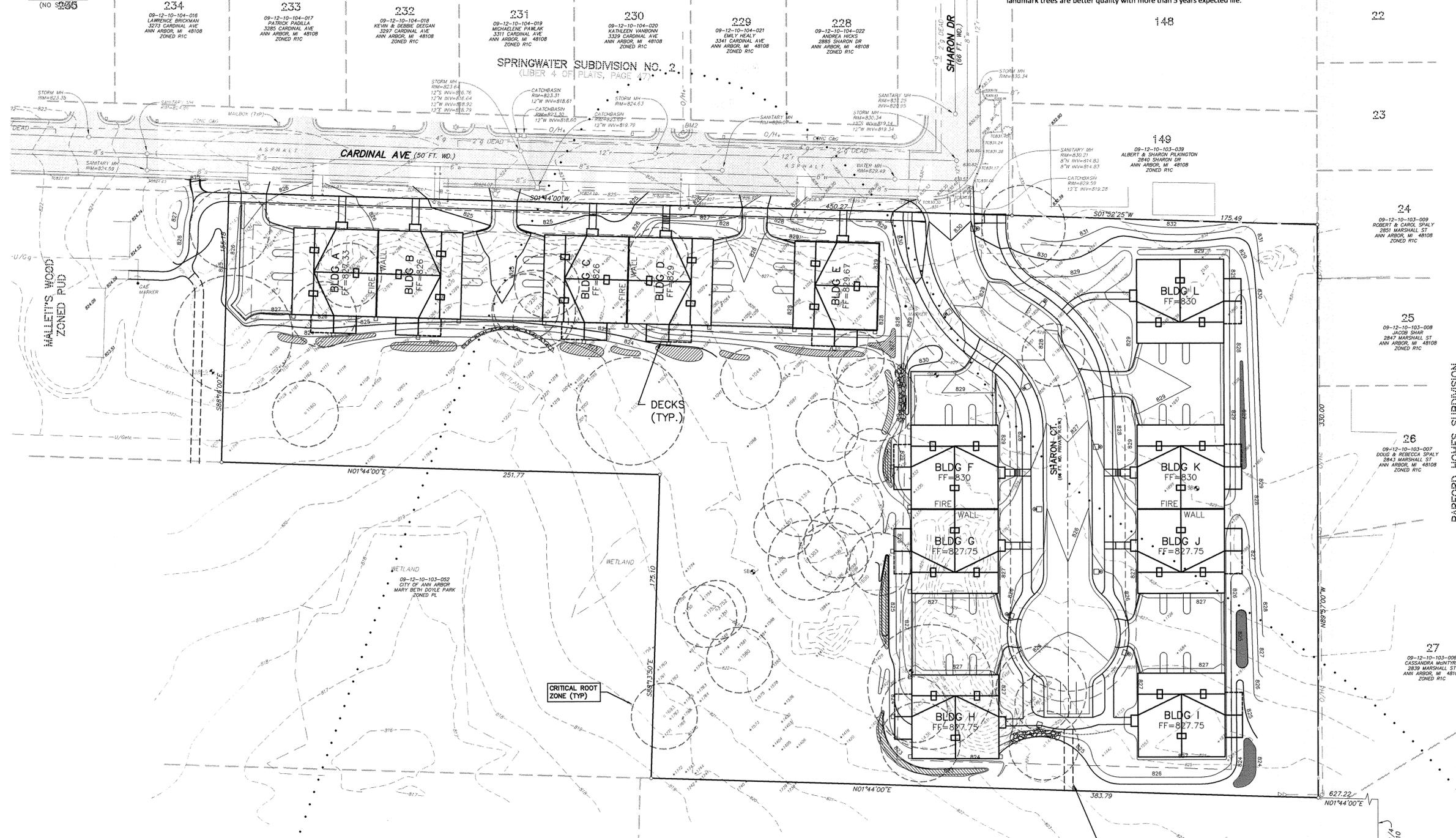
- The development plan intent is to save existing trees and improve the health of the woodlot. Selective tree removal will get the overall woodlot in a better tree per acre ratio. Diseased, dying, deformed and/or crowded trees will be selectively removed. Attention will be given to diversity of species, tree spacing and matching resultant hydrology with tree species will assist selection of trees best suited for the development plan.
- The development plan intent is to restore and improve storm water recharge and surface drainage through the creation of Rain Gardens vs. reliance on constructing a single detention pond. Re-grading the street frontage to eliminate existing spoil piles that added fill on existing trees and caused pooling of rain water runoff. Storm water will be re-directed to the rear of each lot and taken up in individual rain gardens before redirected into sub-grade and overlaid to existing wetlands. Wet species native species plants will be used to re-vegetate the Rain Garden environments.
- The development plan intent is to provide the required street trees and replacement trees.

Two Landmark trees to be removed will be mitigated. All street frontages will receive new trees to be located in the street medians. Other replacement trees will be located on site and outside the building envelopes.

Natural Features Analysis

By making the rezoning request from the previously approved PUD site plan with 36 units we are able to make significant improvements to the existing natural features on the site. In either project the current list of trees would need to be removed to reduce the density of the wood lot and aid in the health and ability of the remaining trees to continue to grow. The following is a list of additional benefits this new plan provides.

- By rezoning we are requesting R-1E which will reduce the number of units from the previously approved 36 to 21. The total amount of impervious surface needed to complete the project is reduced from 2.71 acres to 0.88 acres. (both including the area of proposed buildings)
- Traffic is lower in the am peak 35 trip ends are reduced to 25 trip ends.
- Traffic is lower in the pm peak 41 trip ends are reduced to 26 trip ends.
- Elimination of wetland impacts, the original plan was to remove 56 sqft of wetlands with the proposed plan there are no impacts to wetlands.
- The original PUD plan would require the additional removal of 21 landmark trees at 417.5 DBH (13 are better quality with more than 5 years expected life).
- The original PUD plan would require the additional removal of 139 trees at 1,369.5 DBH (90 are better quality with more than 5 years expected life)
- Though the plan would not remove additional trees for the R-1E zoning at the initial time of development the plan as shown would require the removal of some additional trees. The plan would remove 86 trees at 789.5 DBH and 8 landmark trees at 149 DBH. Of these trees only 7 are different than the original PUD plan and only 2 of the landmark trees are better quality with more than 5 years expected life.



PREVIOUSLY APPROVED P.U.D.

UNIT A	1,183 SF	12 UNITS
UNIT B	1,288 SF	12 UNITS
UNIT C	1,220 SF	12 UNITS

FUTURE BROWN PARK PERVIOUS PEDESTRIAN ACCESS

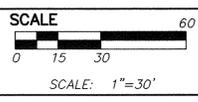
LEGEND

○ = SPOT ELEV.	TC = TOP OF CURB	--- = GRAVEL	— = EXISTING STORM
○ = LIGHT POLE	TW = TOP OF WALL	— = FENCE	— = EXISTING SANITARY
○ = UTILITY POLE	○ = MANHOLE	— = CONCRETE	— = EXISTING WATER
○ = GUY ANCHOR	— = END SECTION	— = ASPHALT	— = EXISTING GAS
○ = HYDRANT			— = EXISTING ELECTRIC
			— = EXISTING TELEPHONE

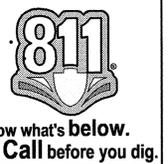
BENCHMARK BM1=TOP OF HEADWALL ABOVE 36" CULVERT AT THE NORTH END OF CARDINAL AVE, ELEV=801.77.
BM2=NAIL IN UTILITY POLE ON THE EAST SIDE OF CARDINAL AVE, ELEV=826.82.
SUBTRACT 0.67' FROM PLAN GRADES FOR NAVD 88.

REVISIONS

NO.	DESCRIPTION



PREPARED BY: JOSEPH K. MAYNARD P.E., MICH No. 52559



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ALTERNATE SITE PLAN

MALLETT WOOD 2

SECTION 70 TOWN 3 SOUTH RANGE 6 EAST
CITY OF ANN ARBOR
WASHTEENAW COUNTY • MICHIGAN
DATE 9-23-16 JOB NO. 32095
DWG NO. 095-ALT-site
FIELD BOOK 417
FILE NO. 8908

18
SHEET