



Site Plan Checklist

(9-17-13 Version)

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Cover Sheet Requirements (Separate Sheet)

Note: Provide only the following on this sheet:

- Name of project
- Name of the City of Auburn Hills, Michigan
- Location Map
- Proprietor's name and address
(Include contact person, phone, and fax)
- Engineer's name and address
(Include contact person, phone, and fax)
- Architect's name and address
(Include contact person, phone, and fax)
- Landscape Architect's name and address
(Include contact person, phone, and fax)
- Table identifying sheets of site plan
(e.g., SP-1 / Tree Survey, SP-2, etc.)
- Professional seal
- Provide brief description of the company and scope of project designed for City use in press release.
(Should be no longer than three (3) paragraphs in length.)

NOTE:

Is the site plan in the required sheet order?

1. Cover Sheet
2. Tree Survey/Existing Conditions Sheet(s)
3. Dimensional Site Plan
4. Engineering Site Plan(s)
5. Landscape Plan
6. Floor Plan(s)
7. Elevation Plan
8. Miscellaneous Sheets

Yes or No

Note: Site plans will not appear before the Planning Commission unless in proper order.

Tree Survey/Existing Conditions Requirements: (Separate Sheet)

- Wetlands, drainage courses, and flood areas per Ordinance No. 482
- Consult the Woodlands Preservation Ordinance for "Incentives for Woodlands Preservation" (§34-311) and "Incentives for Woodland Mitigation" (§34-312).
- In the field, all trees 6" d.b.h. (4-1/2' above grade) and over should be tagged with an identifying number and accurately located on the plan. If any work is off-site (including utilities), trees will need to be tagged and included in the survey within 50'.
- Indicate existing vegetation per Woodlands Preservation Ordinance Chapter 34, Article VIII (e.g., tree survey..... list of trees/create separate column for landmark trees). Tree List should include: tag number; d.b.h.; botanical name; common name; condition; whether or not the tree is considered regulated; and whether or not the tree is considered "Landmark" or "Champion". *Landmark Trees are 24" or greater in good or better condition. For a list of Champion Trees, refer to the Michigan Botanical Club (www.michbotclub.org) and the American Forests website (www.americanforests.org).*
- Existing structures, drives, or roads on parcel(s)

Tree Survey/Existing Conditions Requirements (Continued):

- Existing topography
- Show the following existing site features: (water main, sanitary sewer, storm sewer, ditches, culverts public easements, private utilities, private easements, and power poles).
- For PUD developments, refer to §1830.3.D.7, §1830.6A.2.c.vi, and §1830.6.B.2 of the Zoning Ordinance.

SAMPLE:

TREE SURVEY TABLE

Tree #	d.b.h.	Botanical Name	Common Name	Condition	Comments	Regulated (R) / Not Regulated (n)	Landmark (L)	Save (S) / Remove (x)
100	9	<i>Acer platanoides</i>	Norway Maple	good		R		S
101	26	<i>Gleditsia triacanthos 'Inermis'</i>	Thornless Honeylocust	good		R	L	S
102	25	<i>Gleditsia triacanthos 'Inermis'</i>	Thornless Honeylocust	good		R	L	S
103	16	<i>Pinus nigra</i>	Austrian Pine	fair	- Leaning - Lower limbs dead	R		x
104	14 / 13 / 8	<i>Malus spp.</i>	Crabapple	fair	- Dead branch(es) - Poor crotch	R		x
105	14	<i>Picea pungens</i>	Colorado Spruce	good		R		x
106	14	<i>Carya ovata</i>	Shagbark Hickory	good		R		x
107	8	---	---	dead		n (condition)		x
108	11	<i>Picea pungens</i>	Colorado Spruce	fair	- Lower limbs dead	R		S
109	7	<i>Rhamnus carthartica</i>	Common Buckthorn	good		n (species)		S
110	31	<i>Carya ovata</i>	Shagbark Hickory	poor	- Significantly dead	R	Not (condition)	S
111	15	<i>Tilia americana</i>	American Linden	good		R		S
112	5	<i>Picea pungens</i>	Colorado Spruce	poor	- Significantly dead	n (size)		x
113	6	<i>Acer negundo</i>	Boxelder	fair	- Located in a wetland	R		x
114	6 / 6 / 5	<i>Acer negundo</i>	Boxelder	fair	- Leaning - Poor crotch	n (species)		S
115	19	<i>Picea pungens</i>	Colorado Spruce	fair	- Lower limbs dead	R		S
116	9	<i>Ulmus pumila</i>	Siberian Elm	good	- Located in a floodplain	R		S
117	14 / 5	<i>Tilia americana</i>	American Linden	fair	- Dead branch(es) - Poor crotch	R		S
118	14	<i>Acer platanoides</i>	Norway Maple	good		R		S
119	25	<i>Ulmus pumila</i>	Siberian Elm	fair	- Dead branch(es)	n (species)	Not (species)	x
120	11	<i>Acer platanoides</i>	Norway Maple	poor	- Contorted crown / missing leader	R		x
121	7	<i>Euonymus atropurpureus</i>	Eastern Wahoo	fair	- Shaded	R		x

NOTE: If this table is ALSO used on another sheet (e.g., on the Tree Protection Plan), then the last three columns do not need to be on this sheet, if they are included there.

Dimensional Site Plan Requirements:

(Separate Sheet from Engineering Plan).... **Do not show topography and utilities on this sheet**

- Proprietor's name and address (*Include contact person, phone, and fax*)
- Name of the City of Auburn Hills, Michigan
- Date, including revisions
- Title block
- Northpoint and scale (*Label scale and show scale graphically*)
- Legal Description
- Location Map
- Professional seal
- Correct sidwell identification number(s) ... Check number with City Assessor at 248-364-9436.**
(Place sidwell number(s) in lower right-hand side of plan ... call it "part of" if part of a larger parcel under land division review)
- Provide note: Not for Construction Drawings (*Place note in bold in lower right-hand side of plan above the sidwell number*)
- Site acreage figures (*Provide gross and net*)
- Label property line dimensions
- Label actual front, side, and rear setback dimensions of building (do not show dimensions of required setbacks). Provide table on plan showing **required and provided** setbacks.

Dimensional Site Plan Requirements (Continued):

- Label zoning classifications of adjacent parcels
- Show adjacent lot lines and buildings within 100 feet
- Show ingress/egress (e.g., curb cuts) to all properties on the opposite side of the street
- Show proposed acceleration, deceleration, and passing lanes
- Label tie to major thoroughfare or section corner
- Label centerline of public or private roads
- Label existing and proposed R.O.W. lines
- Provide table showing total building floor area and usable building floor area
- Provide total square footage for pavement/impervious surface on site
- Provide table showing **required and provided** parking calculations based on usable floor area include **required and provided** handicapped spaces (If parking standard uses employees, show which standard is greater)
- Label sample off-street parking space dimension, handicapped parking space dimension ... Both regular handicapped (8 ft. wide with 5 ft. stripe) and van accessible (8 ft. wide and 8 ft. stripe). (Label van accessible handicapped spaces with "VAN" The van space is on the left hand side of the 8 ft. stripe).
- Label **all** drive dimensions
- Show loading/unloading area on plan and provide **required and provided** calculation (Shade gray to define the area / Calculate by using building length along the longest road frontage ... Section 1701, Item p and 1806.... Do not block drives or parking spaces with loading/unloading area)
- Label greenbelts paralleling R.O.W. and adjacent property lines
- Show dimensions of islands used to support trees (minimum 8' wide inside of curbs, and minimum of 100 square feet).
- Label internal sidewalks (7 ft. adjacent to buildings)
- Show and label width of 8 ft. pathway paralleling R.O.W. (Shade the pathway gray so it can be easily located on the plan)
- Show trash receptacle location, pad size, and method of screening per Section 1825 (Must be located 15 ft. away from building and adjacent property lines / Provide detail showing 6 ft. high masonry screen wall and wood gates. Do not forget to provide the "man door")
- Show sign locations and calculations
- Show 25 ft. wetland setback
- Provide locations and notes for all traffic control signs required for the site on this sheet.** Use Michigan Manual of Uniform Traffic Control Devices ... (e.g., stop signs, do not enter signs, one-way signs, right turn only signs, no left turn signs, etc.)
- Provide the following "**GENERAL NOTES**" - *verbatim* - **do not place "FIRE DEPARTMENT NOTES" on this sheet. - if you have other relevant notes place them in a separate area and call them "ADDITIONAL NOTES"**:
 1. All lighting shall be shielded and directed downward and away from adjacent properties. Lighting shall meet the requirements of Zoning Ordinance No. 372.
 2. Signs shall meet the requirements of Zoning Ordinance No. 372.
 3. No outside storage will be allowed, which includes pallet storage, overnight vehicles, or trailer storage.
 4. Ground mounted transformers and roof mounted mechanical equipment shall be screened per Zoning Ordinance No. 372.

Dimensional Site Plan Requirements (Continued):

5. Parking spaces shall be double striped per Zoning Ordinance No. 372.
6. Provide indication whether or not an Environmental Impact Statement is required as Note #6 under "general notes." (Required for sites which are 20 acres or greater)
7. Provide indication whether or not a Land Division or Combination is required as Note # 7 under "general notes."
8. Provide indication whether or not Special Land Use permit application(s) are required as Note # 8 under "general notes." (**List all Special Land Use permits requested and the relevant Sections of the Zoning Ordinance No. 372**)

(If applicable include note number 9 below)

9. The Developer has agreed to prep the parking lot with the installation of electric stubs for future electric vehicle charging station locations adjacent to the barrier free parking spaces and run conduit from the power source to the stubs to support future installation. The paces are designated with EV on the plan and will be posed if and when charging stations are installed.

Engineering Plan Requirements:

(Create Separate Sheet from General Site Plan)

<p><i>DO NOT FORGET TO PLACE FIRE DEPT. NOTES AND STANDARD NOTES ON THIS SHEET!!!!</i></p>

General Information

- Basic information required for the General Site Plan ... Do **NOT** provide "**GENERAL NOTES**" on this sheet
- Provide required "**CITY OF AUBURN HILLS STANDARD NOTES**" and "**FIRE DEPARTMENT NOTES**"...**Verbatim ... see attached**
- Show the following existing site features: (water main, sanitary sewer, storm sewer, ditches, culverts public easements, private utilities, private easements, and power poles)
- Provide a minimum of 10' horizontal separation between all proposed and existing utilities
- Show all existing above ground flammable and combustible liquid storage tanks (to remain and any new tanks proposed)
- Show the limits of wetland areas and quantify any impacts

Water Main

- Label the size of all existing and proposed water main. The minimum size of mainline water main shall be 8". Water main shall extend across property frontage to service neighboring properties. If viable and/or practical, water main shall be looped
- Label the existing and proposed minimum 12' wide public water main easement. All public water main shall be centered within the easement
- Provide a hydrant and gate valve and well at the end of all dead end water main. The maximum dead end lengths are as follows:
 - 75' for 6" fire hydrant lead
 - 450' for 8" water main
 - 1,000' for 12" water main
- Show the location of the proposed domestic and fire protection (if required) services and valves. The valves shall be contained within the public water main easement. Domestic and fire protection services shall be allowed on 8" to 16" water main only
- Show the location of all proposed fire hydrants. Hydrants shall be positioned so that any exterior point of the building is within 300' of a hydrant or at a maximum spacing of 500' within a residential development. Contact John Burmeister of the Fire Department at (248) 364-6755 to set up a meeting to confirm proper fire hydrant spacing
- Provide a note indicating that cover over existing and proposed water main must be maintained at 5.5'

Engineering Plan Requirements (Continued):

Sanitary Sewer

- Label the size of all existing and proposed mainline sanitary sewer. The minimum size of mainline sanitary sewer shall be 10". Sanitary sewer shall extend across property frontage to service neighboring properties
- Label the existing and proposed minimum 20' wide public sanitary sewer easement. All public sanitary sewer shall be centered within the easement. Wider easements will be required for deeper sewer to maintain a 1:1 excavated side slope within the easement
- Label the size, type and slope of the proposed sanitary sewer lead. The minimum requirements are as follows:
 - 6" diameter
 - SDR 23.5
 - 1% slope
- Provide a note indicating that cover over existing and proposed sanitary sewer must be a minimum of 4'.

Storm Sewer

- Label all existing and proposed storm sewer.
- Provide a note indicating that cover over existing and proposed storm sewer must be a minimum of 2.5'.
- Provide calculations showing the capacity of the existing storm sewer system if a connection is proposed.
- Indicate the ultimate storm sewer outlet (County Drain, Galloway Creek, Clinton River, etc.) The storm sewer outlet shall be in accordance with the City of Auburn Hills Master Storm Drain Plan.

Detention/Retention

- Show the location and side slopes of the proposed detention basin. Side slope shall not exceed 1:3 and all slopes exceeding 1:6 shall be fenced. A 1' freeboard area must be provided and indicated at top of bank of the detention basin. If a fence is necessary, it is recommended to be constructed of a black wrought-iron look material.
- Provide calculations for the sizing of the detention basin or inline storm sewer used as detention. All systems must be sized for a 100-year storm event, according to the Oakland County Simplification Method. The calculations should include the C-factor for the site, Discharge rate representative of the drainage district that the site is located, and the volume of storage required and provided for the site.
- If connecting to an existing detention basin, provide calculations showing the total volume of the existing basin, the C-factor used to size the existing basin, the amount of storage volume dedicated for the site and the amount of storage volume required for the site.
- Indicate the storm water overflow route.

Paving

- Provide pavement cross sections for on-site, public right of way, loading zone, pedestrian pathway, and sidewalk paving. The minimum pavement cross sections required are as follows:
 - Residential/Multi-Family – 3" asphalt on 8" 21 AA limestone aggregate base or 7" concrete on 6" 21 AA limestone aggregate base.
 - Commercial/Light Industrial – 4" asphalt on 8" 21 AA limestone aggregate base or 8" concrete on 6" 21 AA limestone aggregate base.
 - Industrial – 9" asphalt on 8" 21 AA limestone aggregate base or 9" concrete on 8" 21 AA limestone aggregate base.
 - Loading zone/dumpster pad – 8" concrete on 6" 21 AA limestone aggregate base.
 - Pedestrian pathway (8' wide) – 3" asphalt on 4" 21 AA limestone aggregate base.
 - Sidewalk (5' wide) – 4" concrete on 4" Class II sand.

Engineering Plan Requirements (Continued):

- Label drive entrance radii. The minimum radius should be 35'.
- Provide curb and gutter for the entire perimeter of paved area and include a cross sectional detail.

Site Grading

- Provide existing grades on site and a minimum of 100' beyond property lines or as necessary to determine impact on drainage.
- Provide proposed spot elevations and/or contours. Elevations shall be provided at, though not limited to, the following:
 - Top of curb and/or edge of pavement
 - Edge of walk
 - Top and bottom of wall
 - Property corners
 - Finished floor
 - Storm structures
 - Detention basin high water
- Provide proposed spot elevations Pavement slopes must be between 1% and 4% for parking areas and 1% and 6% for drives. Slopes to adjacent properties shall not exceed 1:4.
- Show the location and indicate the type of all existing and proposed retaining walls and provide a cross sectional detail.
- Indicate "grading limits", including disruption for utilities and off-site work.

Tree Protection

(Can be on separate sheet as long as at same scale as Engineering and Utility Plans)

- Show the location of the "grading limits" line
- Show the location of the "protective tree fencing" line (recommend at the limits of grading line).
- Graphically indicate on the plan, trees to be removed and trees to remain.
- Provide required "**TREE PROTECTION DETAILS**" and "**TREE PROTECTION NOTES**" ... verbatim... see **attached**.
- The City Council may require more substantial fencing, such as chain link, to protect: champion trees; plants which are threatened, endangered, or of special concern; or areas where trees being protected are in sensitive areas such as steep slopes.
- Indicate location of any existing or proposed easements.
- Indicate if proposing to use the "Incentive For Woodlands Preservation" (§34-311) or "Woodland Mitigation" (§34-312) options. If using the Incentive For Woodlands Preservation, refer to the "Suggested Vegetation List - Woodlands Mitigation".

Basic Landscape Plan Requirements:

(Separate Sheet)

- For General Landscape Requirements, refer to §1808. Additional requirements may also be found in: Corner Clearance, §1902; Screening of Mechanical Equipment, §1905; Schedule of Regulation, Article 17; Screening of waste receptacles, §1825, Planned Unit Developments, §1830; or refer to the specific Zoning District in the Zoning Ordinance.
- Basic information required on Dimensional Site Plan ... **Do NOT provide “GENERAL NOTES” or “FIRE DEPARTMENT NOTES” on this sheet.**
- Same scale as Engineering Site Plan
- Show utilities and proposed topography
- Provide the following in **TABLE FORMAT** showing landscape calculations per Section 1808 in the following order: ... **show table on site plan as follows:**

Total Site Area		Show actual acreage Example: 4.30 ac – gross 4.25 ac - net
Requirement	Required	Provided
Net Landscape Area	<u>Commentary:</u> Show percent of net area <u>required</u> . (25% of net area in B-1 and 20% of net area in all other applicable districts shall be landscaped, exclusive of R.O.W., subaqueous areas, and retention/detention ponds. 50% of wetlands may be used toward landscaping credit.) <u>Show Calculation:</u> Example: 4.25 ac x .20 = 0.85 ac or 37,026 sq. ft. required	Show percent of net area provided.
Site Area Landscaping	<u>Commentary:</u> Approximate 50/50 mix of evergreen and deciduous trees is for each 1,000 sq. ft. of required landscape area <u>Show Calculation:</u> Example: 37,026 sq. ft. /1,000 = 38 trees (round up)	Show actual provided
Frontage Landscaping	<u>Commentary:</u> 1 tree for every 30 lineal ft. of greenbelt length along public or private roads. <u>Show Calculation:</u> Example: Squirrel Rd. - 150 ft. /30 = 5 trees Auburn Rd. - 300 ft. /30 = 10 trees (round up)	Show actual provided
Parking Interior Landscaping	<u>Commentary:</u> 1 tree for every 20 spaces in a row in parking interior island. Use only deciduous trees. This provision does <u>not</u> apply to parking adjacent to greenbelts or buildings, only in parking areas that are between drives that exceed 20 spaces (e.g., in the middle of a parking lot). If this standard does not apply ... write “N/A” under this part of the table <u>Show Calculation:</u> Example: 3 islands = 3 trees	Show actual provided
Total Landscape Trees	Show total required	Show total provided
Total Replacement Trees	Show total required	Show total provided

Basic Landscape Plan Requirements (Continued):

- Regarding Frontage Landscaping requirements, along public or private roads, a 15 foot greenbelt is required in all zoning districts, except 25 foot greenbelt is required in T&R zoning districts.
- Regarding Frontage Landscaping requirements, along Public Access Drives, a 10 foot greenbelt is required.

NOTE: If this development is non-residential, and it is adjacent to a Residential zoning district:

- A minimum 15’ buffer area is required.
- One (1) deciduous or evergreen tree is required for each 20 lineal feet (rounded up).
- 5’ high continuous screening is required (masonry wall, fence, plant material, berm, or combination of above).

NOTE: Berm side slopes to be no greater than 1 on 3, with a minimum of 2 foot flat area on top. Plant material on the top of the berm or on the side of the berm facing the exterior of the site. Also, shall not alter drainage on adjacent properties, or obstruct vision for safety of ingress or egress.

- Provide a **SEPARATE** table showing quantity, key, botanical name, common name, size, species percentage, and genus percentage for all trees. Show total number of trees at end of table.

Diversity requirements for trees:

1 to 10 trees.....	N/A
11 to 50 trees.....	25% species, 50% genus
51 to 100 trees...	20% species, 40% genus
101+ trees.....	10% species, 20% genus

SAMPLE:

PLANT MATERIAL LIST:

LANDSCAPE TREES

DIVERSITY REQUIREMENTS:

One genus to contribute no more than 40% of the Trees (90 Trees x 0.40 = 36 Trees)

One species to contribute no more than 20% of the Trees (90 Trees x 0.20 = 18 Trees)

QTY	KEY	BOTANICAL NAME / COMMON NAME	SIZE / ROOT (MINIMUM)	PERCENTAGE	
				SPECIES	GENUS
8	AR	Acer rubrum 'October Glory' (OCTOBER GLORY RED MAPLE)	2.5'' cal. B&B	9%	17%
7	AS	Acer saccharum 'Green Mountain' (GREEN MOUNTAIN SUGAR MAPLE)	2.5'' cal. B&B	8%	
8	GS	Ginkgo biloba 'Saratoga' (SARATOGA MAIDENHAIR TREE)	2.5'' cal. B&B	9%	9%
6	GT	Gymnocladus dioica (KENTUCKY COFFEETREE)	2.5'' cal. B&B	7%	7%
8	PA	Platanus acerifolia (LONDON PLANETREE)	2.5'' cal. B&B	9%	9%
8	QA	Quercus alba (WHITE OAK)	2.5'' cal. B&B	9%	9%
8	TC	Tilia cordata 'Chancellor' (CHANCELLOR LITTLELEAF LINDEN)	2.5'' cal. B&B	9%	14%
5	TA	Tilia americana 'Redmond' (REDMOND AMERICAN BASSWOOD)	2.5'' cal. B&B	6%	
6	AB	Abies balsamea (BALSALM FIR)	8' ht. B&B	7%	14%
7	AC	Abies concolor (CONCOLOR FIR)	8' ht. B&B	8%	
6	PA	Picea abies (WHITE SPRUCE)	8' ht. B&B	7%	10%
3	PG	Picea glauca 'Densata' (BLACK HILLS SPRUCE)	8' ht. B&B	3%	
6	PR	Pinus resinosa (RED PINE)	8' ht. B&B	7%	11%
4	PS	Pinus strobus (WHITE PINE)	8' ht. B&B	4%	
90	TOTAL				

Basic Landscape Plan Requirements (Continued):

- Provide a **SEPARATE** table shrubs showing quantity, key, botanical name, common name, size. Show total number of shrubs at end of table.

SAMPLE:

PLANT MATERIAL LIST:

SHRUBS / PERENNIALS

QTY	KEY	BOTANICAL NAME / COMMON NAME	SIZE / ROOT
10	EA	Euonymus alatus 'Compactus' (COMPACT BURNINGBUSH)	24'' ht. Cont.
170	HB	Helictotrichon sempervirens (BLUE OAT GRASS)	No 2 Cont., 10'' o.c.
50	HS	Hemerocallis 'Stella de Oro' (STELLA DE ORO DAYLILY)	No 2 Cont., 10'' o.c.
29	JH	Juniperus horizontalis 'Plumosa Compacta Youngstown' (YOUNGSTOWN ANDORRA JUNIPER)	18'' spd. Cont.
70	PA	Pennisetum alopecuroides 'Hameln' (DWARF FOUNTAIN GRASS)	No 2 Cont., 8' o.c.
36	PF	Potentilla fruticosa 'Pink Beauty' (PINK BEAUTY POTENTILLA)	18'' ht. B&B
245	RT	Rudbeckia triloba (BROWN-EYED SUSANS)	No 2 Cont., 10'' o.c.
14	SB	Spiraea x bumalda 'Anthony Waterer' (ANTHONY WATERER SPIRAEA)	24'' ht. Cont.
14	TD	Taxus media 'Densiformis' (DENSE YEW)	24'' ht. B&B
25	TH	Taxus media 'Hicksii' (HICKS YEW)	30'' ht. B&B

- Provide basic tree planting details.
- Utility lines are shown and trees should not conflict.
- Provide the following **ONLY** if proposing to transplant trees (previously planted trees only):
 - Provide size of tree to be transplanted, and indicate size of rootball as specified in the latest edition of the American Standard for Nursery Stock.
 - Provide a note indicating that transplanted trees will be done in accordance with the latest edition of the American Standard for Nursery Stock.

Tree Replacement

- On the Landscape Plan, summarize the calculations of how many replacement trees are required, and show location of replacement trees. Applicable notes should be shown, saved trees should be on the plan, and location of Tree Protection Fence may also be shown here.
- If this site plan is part of an original City tree removal permit approval (e.g., mass grading, site condominium, subdivision, etc.) show how the trees are being placed back on the site in terms of the overall development. Hypothetically, a ten (10) acre industrial property is mass-graded, owing 1,000 replacement trees. The site is divided into four (4) lots. The lot you are building on comprises 20% of the total acreage of the four (4) lots. Therefore, you would owe 200 replacement trees (1,000 x 20%), plus any other trees you remove from your site not previously mass graded.
- Show replacement tree calculation for "Landmark Trees" (protected trees greater than 24" d.b.h.) and "Champion Trees" removed.
- Show replacement tree calculations:
 - For Regulated Trees that are not "Landmark" or "Champion" trees, replace at 1:1 basis
 - For "Landmark" trees, replace at 25% of the total d.b.h. of trees removed. (e.g. 3 trees removed are each 30" d.b.h. Take 25% of 90' = 22.5 ÷ 2.5 (caliper of replacement trees) = 9 replacement trees).

Sample Tree Replacement Table:

Description	Surveyed Trees	Replacement Trees
Non-Regulated Trees	10	0
Removed – Landmark Trees (90")	3	9
Removed – Regulated Trees	7	7
Previous Mass-Grading	---	200
Saved Trees	12	0
Totals	42	216

Basic Landscape Plan Requirements (Continued):

- For a list of non-regulated trees, refer to the definition of Non-Protected Tree in the Woodland Preservation Ordinance, §34-307.
 - Provide required “**LANDSCAPE/TREE REPLACEMENT NOTES**”... **verbatim...see attached.**
 - For acceptable tree species, refer to “Suggested Tree List - Landscape and Replacement Trees” available from the Community Development Department.
-

Basic Floor Plan Requirements:

(Separate Sheet)

- Show gross and usable square feet for each floor and a total of all floors
 - Provide plan for each floor
 - Provide a Minimum Building Code Compliance Chart per Jeff Spencer, Building Official (248-364-6940)
 - Use group classifications
 - Gross sq. ft. for all floors and number of stories including lower levels or basements
 - Construction type classification
 - Is the structure sprinkled and is it a N.F.P.A 13 system, 13R system, or 13D system
 - What mixed use options are being used for the design of the structure?
-

Basic Elevation Plan Requirements:

(Separate Sheet)

- Review the City’s Architectural Design Policy.**
- Review the City’s Green Building Policy.**
- Show north, south, east, and west elevations.
- Label the height of the building for each elevation. **Measure height to top of parapet.**
- Label the height of each floor of the building for each elevation.
- Show method of screening for rooftop mechanical equipment on elevation plan.
- Show sign locations and calculations.
- Attach a letter or legal size colored copy of the facade design with submittal.**
- Provide the following note: **“Any modifications to the facade plan (including color) must be resubmitted to the City of Auburn Hills for revised approval. The use of neon, flags, or any other type of unapproved signage shall be prohibited per site plan review.**

CITY OF AUBURN HILLS GENERAL NOTES

(Provide on Dimensional Site Plan Only)

1. All lighting shall be shielded and directed downward and away from adjacent properties. Lighting shall meet the requirements of Zoning Ordinance No. 372.
2. Signs shall meet the requirements of Zoning Ordinance No. 372.
3. No outside storage will be allowed, which includes pallet storage, overnight vehicles, or trailer storage.
4. Ground mounted transformers and roof mounted mechanical equipment shall be screened per Zoning Ordinance No. 372.
5. Parking spaces shall be double striped per Zoning Ordinance No. 372.
6. Provide indication whether or not an Environmental Impact Statement is required as Note #6 under "general notes." (*Required for sites which are 20 acres or greater*)
7. Provide indication whether or not a Land Division or Combination is required as Note # 7 under "general notes."
8. Provide indication whether or not Special Land Use permit application(s) are required as Note # 8 under "general notes." (*List all Special Land Use permits requested and the relevant Sections of the Zoning Ordinance No. 372*)

(If applicable include note number 9 below)

9. The Developer has agreed to prep the parking lot with the installation of electric stubs for future electric vehicle charging station locations adjacent to the barrier free parking spaces and run conduit from the power source to the stubs to support future installation. The spaces are designated with EV on the plan and will be posed if and when charging stations are installed.
-

CITY OF AUBURN HILLS STANDARD NOTES

CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF AUBURN HILLS' STANDARDS.

NO WORK SHALL BE PERFORMED WITHOUT INSPECTION.

A PERMIT FROM THE DPW IS REQUIRED FOR ALL CONSTRUCTION WITHIN CITY ROW. NO EQUIPMENT OR MATERIAL STORAGE WILL BE PERMITTED IN THE ROW.

ALL CITY STREETS MUST BE MAINTAINED DURING CONSTRUCTION. STREETS SHALL BE KEPT FREE OF MUD, DIRT, CONSTRUCTION DEBRIS, DUST AND THE LIKE. IF CLEAN-UP IS NOT PERFORMED WITHIN 24 HOURS OF NOTIFICATION, THE CITY RESERVES THE RIGHT TO PERFORM THE WORK AND CHARGE THE DEVELOPER ACCORDINGLY.

WORKING HOURS (INCLUDING RUNNING OF ANY MACHINERY) SHALL BE RESTRICTED TO MONDAY THROUGH SATURDAY, 7:00 AM TO 7:00 PM; SUNUP TO SUNDOWN; WHICHEVER IS LESS. CONSTRUCTION OPERATIONS BEYOND THE PERIODS MENTIONED ABOVE SHALL BE PERMITTED ONLY AFTER WRITTEN APPROVAL OF THE CITY MANAGER OR HIS DESIGNEE.

ALL MATERIALS AND MANUFACTURERS SHALL CONFORM TO THE STANDARD DETAILS.

UTILITY STRUCTURES SHALL NOT BE LOCATED IN DRIVEWAYS, AND WHERE POSSIBLE, SHALL NOT BE LOCATED IN PAVED AREAS.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH ACT 53 OF P.A. OF 1974 AND ALSO CONTACT OAKLAND COUNTY UTILITY AND PROTECTION SERVICE (MISS DIG 1-800-482-7171) THREE (3) WORKING DAYS BEFORE THE START OF ANY CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE NECESSARY SIGNS, BARRICADES AND LIGHTS TO PROTECT TRAFFIC AND THE WORK AS DIRECTED BY THE ENGINEER. SUCH DEVICES SHALL BE PLACED PRIOR TO STARTING WORK IN AFFECTED AREAS.

ALL SOIL EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE OAKLAND COUNTY STANDARDS AND DETAILS. THE CONTRACTOR SHALL FOLLOW LOCAL RULES AND REGULATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL FOR ALL MATERIALS THAT ARE DISPOSED OF OFF OF THE PROJECT SITE.

ALL SOIL EROSION MEASURES MUST BE PROPERLY PLACED PRIOR TO GRADING OR OTHER CONSTRUCTION ACTIVITIES.

FIELD CHANGES TO THE APPROVED PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE INSPECTOR ON SITE, WHO WILL DETERMINE WHETHER THE CHANGE IS CONSIDERED "SIGNIFICANT". "SIGNIFICANT" FIELD CHANGES SHALL BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER. THE CITY SHALL NOT BE HELD RESPONSIBLE FOR DELAYS IN APPROVAL OF CHANGES TO THE APPROVED SITE IMPROVEMENT (ENGINEERING) PLAN.

WHERE POSSIBLE, PUBLIC UTILITIES SHALL NOT BE PLACED UNDER PAVEMENT. THE CITY OF AUBURN HILLS SHALL NOT BE RESPONSIBLE FOR PAVEMENT, CURB, OR OTHER RESTORATION OF PERMANENT FACILITIES LOCATED WITHIN THE MUNICIPAL EASEMENT.

3 WORKING DAYS PRIOR TO STARTING CONSTRUCTION, CONTACT THE CONSTRUCTION DEPARTMENT OF ORCHARD, HILTZ & McCLIMENT, INC. AT (734) 466-4539 TO SCHEDULE INSPECTION. OHM SHALL INSPECT ALL SITE IMPROVEMENTS INCLUDING UNDERGROUND UTILITY INSTALLATION, EARTHWORK OPERATIONS, RETAINING WALLS, PAVEMENT IN CITY R.O.W., ALL SIDEWALKS OR SAFETY PATHS IN ANY PUBLIC R.O.W., AND ANY ADDITIONAL ITEMS NOTED DURING REVIEW OR AT THE PRE-CONSTRUCTION MEETING. FINAL OCCUPANCY MAY BE AFFECTED IF PROCEDURES ARE NOT FOLLOWED FOR PROPER INSPECTION.

PERMANENT STRUCTURES OF ANY TYPE, INCLUDING BUT NOT LIMITED TO, TREES, LIGHT POLES, DRAINAGE STRUCTURES, SANITARY STRUCTURES, BENCHES, TRASH RECEPTACLES, ETC., WILL NOT BE ALLOWED WITHIN THE INFLUENCE OF THE PUBLIC WATER MAIN OR SANITARY SEWER EASEMENTS.

Place Verbatim on Engineering Plan

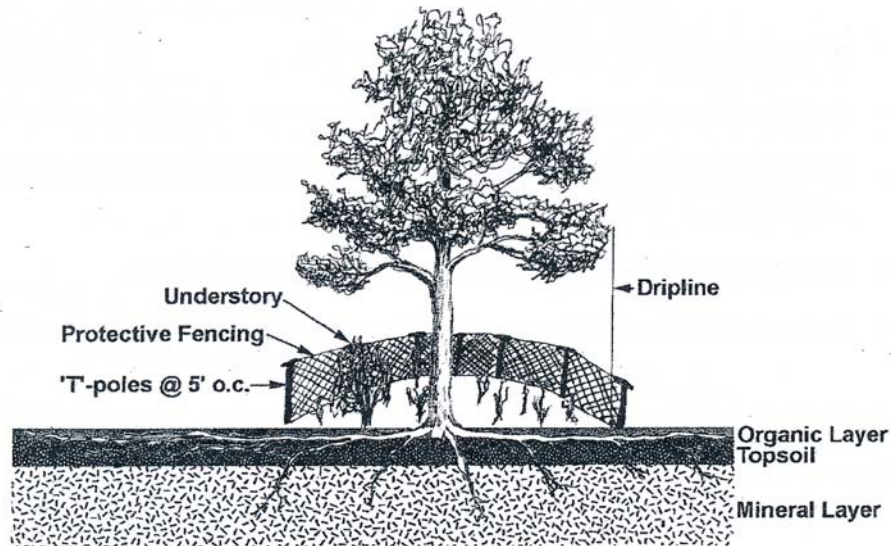
FIRE DEPARTMENT NOTES

1. THE FOUR (4) INCH STEAMER CAPS ON ALL HYDRANTS WILL BE PAINTED ACCORDING TO THE FOLLOWING:

WHITE-ON 4.00 INCH MAINS
RED-ON 6.00 INCH MAINS
ORANGE-ON 8.00 INCH MAINS
GREEN-ON 12.00 INCH MAINS
BLUE-ON 16.00 INCH OR LARGER MAINS
2. NO PARKING SHALL BE PERMITTED AND/OR NO OBSTRUCTIONS SHALL BE PLACED OR CONSTRUCTED WITHIN FIFTEEN (15) FEET OF ANY FIRE HYDRANT OR FIRE DEPARTMENT CONNECTION, PUBLIC OR PRIVATE.
3. THE FIRE DEPARTMENT CONNECTION MUST BE LOCATED WITHIN ONE HUNDRED (100) FEET OF A FIRE HYDRANT AND WITHIN FIFTY (50) FEET OF A MINIMUM TWENTY (20) FOOT WIDE PAVED DRIVEWAY OR STREET.
4. GAS METERS, PROPANE TANKS, OVERHEAD ELECTRICAL SERVICE, AND TRANSFORMERS MUST NOT BE LOCATED ON THE SAME SIDE OF THE BUILDING OR STRUCTURE AS THE FIRE DEPARTMENT CONNECTION UNLESS A CLEAR DISTANCE OF ONE HUNDRED FIFTY (150) FEET CAN BE MAINTAINED BETWEEN UTILITIES AND THE FIRE DEPARTMENT CONNECTION.
5. ALL DRIVE AREAS MUST BE POSTED AS FIRE LANES WITH UNIFORM SIGNS IN KEEPING WITH THE STANDARD ESTABLISHED IN THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. SIGNS MUST BE ERECTED ON BOTH SIDES OF THE FIRE LANES WITH SPACING BETWEEN SIGNS NOT TO EXCEED ONE HUNDRED (100) FEET.
6. DESIGNATED EXIT DOORS ONTO DRIVES OR PARKING AREAS MUST BE PROTECTED WITH GUARD POSTS OR PARKING BLOCKS.
7. A WHITE HIGH VISIBILITY STRIP SHALL BE PAINTED ON THE UPPER FLANGE OF ALL FIRE HYDRANTS.

Place Verbatim on Engineering Tree Protection Plan

TREE PROTECTION DETAIL



TREE PROTECTION NOTES

- Identify on site all trees or areas of trees which are being proposed to be preserved with fluorescent orange spray paint (chalk base) or by red flagging tape.
- Erect barriers of four (4) foot high fencing staked with metal "T-posts" five (5) feet on center or all such trees or groups of trees proposed to remain
- Protective barriers are to be erected prior to any clearing or grubbing on the site, and barriers are to remain in tact until approved by the City to be removed, or when a Certificate of Occupancy is issued.
- Keep clear all debris or fill, equipment, and material from within the required protective barrier.
- During construction, the owner, developer, or agent shall not cause or permit any activity within the fence line of any protected tree or group of trees including, but not limited to, the storage of equipment, dumpsters, boulders, dirt, and excavated material, building or waste material, or any other material harmful to the life of a tree.
- No damaging attachment, wires (other than cable wires for trees), signs, or permits may be fastened to any tree protected by this Ordinance.

Place Verbatim on Landscape Plan

LANDSCAPE/TREE REPLACEMENT NOTES

- All installed trees are to have a straight trunk.
- All installed trees are to be northern grown.
- All installed trees are to be State Department of Agriculture Nursery Grade No. 1 or better.
- All replacement trees are considered protected regardless of size.
- All trees shall be guaranteed for a minimum of two years.
- All landscaped areas shall be irrigated with an underground sprinkler system.

Suggested Tree List – Landscape and Replacement Trees

The following is a suggested plant list and minimum size requirements for landscape trees required by the Zoning Ordinance and replacement trees required by the Woodlands Preservation Ordinance. The plant list is intended as a guide. Final plant selection shall be based upon specific site conditions. The tree size specifications are not negotiable.

Evergreen Trees To Be Planted At 5' Height

<i>Abies balsamea</i>	Balsam Fir
<i>Abies balsamea phanerolepis</i>	Canaan Fir
<i>Abies fraseri</i>	Fraser Fir
<i>Abies procera</i>	Noble Fir
<i>Abies veitchii</i>	Veitch Fir
<i>Picea engelmannii</i>	Engelmann Spruce
<i>Picea mariana</i>	Black Spruce
<i>Picea orientalis</i>	Oriental Spruce
<i>Picea rubens</i>	Red Spruce
<i>Pinus ponderosa</i>	Ponderosa Pine; Western Yellow Pine
<i>Tsuga canadensis</i>	Canada Hemlock; Eastern Hemlock

Evergreen Trees To Be Planted At 8' Height

<i>Abies concolor</i>	Concolor Fir; White Fir
<i>Chamaecyparis nootkatensis</i>	Nootka Falsecypress; Alaska-cedar
<i>Picea abies</i>	Norway Spruce
<i>Picea glauca</i>	White Spruce; American White Spruce
<i>Picea omorika</i>	Serbian Spruce
<i>Picea pungens</i>	Colorado Spruce
<i>Picea pungens glauca</i>	Colorado Blue Spruce; Blue Spruce
<i>Pinus nigra</i>	Austrian Pine
<i>Pinus resinosa</i>	Red Pine
<i>Pinus strobus</i>	White Pine; Eastern White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pinus thunbergiana</i>	Japanese Black Pine
<i>Pseudotsuga menziesii</i>	Douglas fir

Canopy, Deciduous Trees To Be Planted at 2'' Caliper

<i>Acer nigrum</i>	Black Maple
<i>Aesculus hippocastanum</i>	Horsechestnut; Horse Chestnut
<i>Betula alleghaniensis</i>	Yellow Birch
<i>Carya cordiformis</i>	Bitternut Hickory
<i>Carya glabra</i>	Pignut Hickory; Pignut
<i>Carya ovata</i>	Shellbark Hickory; Shagbark Hickory
<i>Eucommia ulmoides</i>	Hardy Rubber Tree
<i>Fagus grandifolia</i>	American Beech
<i>Fagus sylvatica</i>	European Beech
<i>Nyssa sylvatica</i>	Tupelo; Sourgum; Pepperidge; Black Gum; Black Tupelo
<i>Quercus alba</i>	White Oak
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus coccinea</i>	Scarlet Oak
<i>Quercus ellipsoidalis</i>	Northern Pin Oak; Hill's Oak
<i>Quercus imbricaria</i>	Shingle Oak
<i>Quercus macrocarpa</i>	Burr Oak; Mossy Cup Oak

<i>Quercus muehlenbergii</i>	Chinkapin Oak; Yellow Chestnut Oak
<i>Quercus rubra</i>	Red Oak
<i>Quercus shumardii</i>	Shumard's Oak
<i>Quercus stellata</i>	Post Oak; Upland White Oak; Iron Oak
<i>Quercus velutina</i>	Black Oak; Champlain Black Oak; Yellow-bark Oak
<i>Sassafras albidum</i>	Red Sassafras; Sassafras

Canopy, Deciduous Trees To Be Planted at 2.5'' Caliper

<i>Acer platanoides</i>	Norway Maple
<i>Acer pseudoplatanus</i>	Sycamore Maple; European Sycamore; Planetree Maple
<i>Acer rubrum</i>	Red Maple; Scarlet Maple; Swamp Maple
<i>Acer saccharinum</i> ⁽¹⁾	Silver Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Acer x freemanii</i> ⁽¹⁾	Silver/Red Hybrid Maple
<i>Aesculus octandra</i> (flava)	Sweet Buckeye; Yellow Buckeye
<i>Betula nigra</i>	River Birch
<i>Celtis occidentalis</i>	Hackberry
<i>Ginkgo biloba</i> - male	Maidenhair Tree; Ginkgo (male)
<i>Gleditsia triacanthos inermis</i> (male only)	Thornless Honeylocust; Thornless Locust
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree; Kentucky Coffeebean
<i>Larix decidua</i>	European Larch; Larch; Common Larch
<i>Larix kaempferi</i> (leptoleptis)	Japanese Larch
<i>Larix laricina</i>	Eastern Larch; American Larch; Tamarack; Hackmatack
<i>Liquidambar styraciflua</i>	Sweetgum; Sweet Gum
<i>Liriodendron tulipifera</i>	Tuliptree; Tulip Magnolia; Yellow Poplar; Tulip Poplar
<i>Magnolia acuminata</i>	Cucumber Magnolia; Cucumber Tree
<i>Metasequoia glyptostroboides</i>	Dawn Redwood
<i>Phellodendron amurense</i>	Amur Cork-tree
<i>Platanus occidentalis</i>	American Sycamore
<i>Platanus x acerifolia</i>	London Planetree
<i>Pyrus calleryana</i> (cultivars)	Callery Flowering Pear
<i>Quercus palustris</i> ⁽²⁾	Pin Oak
<i>Quercus prinus</i>	Chestnut Oak; Basket Oak
<i>Quercus robur</i>	English Oak; Truffle Oak; Pedunculate Oak
<i>Quercus variabilis</i>	Oriental Oak
<i>Sophora japonica</i>	Pagoda Tree; Japanese Pagodatree; Scholar-tree
<i>Taxodium distichum</i>	Bald Cypress; Deciduous Cypress; Common Baldcypress
<i>Tilia americana</i>	American Basswood; American Linden
<i>Tilia cordata</i>	Littleleaf Linden
<i>Tilia heterophylla</i>	White Basswood; Beetree Linden
<i>Tilia platyphyllos</i>	American Linden; Linden; Lime; Bigleaf Linden
<i>Tilia tomentosa</i>	Silver Linden; White Linden; Silver-leaved Linden
<i>Tilia x euclora</i>	Crimean Linden
<i>Zelkova serrata</i>	Zelkova; Graybark Elm; Japanese Zelkova

(1) Plant only in wetland areas and/or a minimum of 50' from a structure. (2) Supply a soil test which shows that the pH is acceptable to the species.

Woodlands Preservation Ordinance

Suggested Vegetation List – Woodland Mitigation

Notes:

1. Suggested plant list for woodland mitigation based on plant indigenous to the Great Lakes Region and their soil preferences. This list is intended as a guide. Final plant selection shall be based upon specific site conditions.
2. Plants indicated with an asterisk (*) may be used on a limited scale and can not be more than ten percent (10%) of the total trees used in the mitigated area.

Herbaceous Understory and Ground Covers

The herbaceous understory is used to minimize soil erosion and invasion by weed species. It should be established by seed or plant plugs throughout the mitigated area. Seed mixes for varied site conditions can be obtained through a number of suppliers. Each supplier has its own selection of mixes for: dry, mesic or wet soils; tall or low growing species; woodland shade or full sun; and utility functions such as detention basins, slope stabilization, and swales. Please specify the appropriate seed mix or composition of plant plugs appropriate for the site conditions. Seeding rates and plug density should follow industry standards.

Dry sandy soils

Canopy trees

Acer saccharum	Sugar Maple
Juniperus virginiana	Eastern Red Cedar
Pinus strobus	White Pine
Quercus alba	White Oak
Quercus ellipsoidalis	Northern Pin Oak
Quercus macrocarpa	Burr Oak
Quercus muehlenbergii	Chinkapin Oak
Quercus velutina	Black Oak
Sassafras albidum	Sassafras
Tilia americana	American Linden

Understory trees

Amelanchier canadensis	Serviceberry
Hamamelis virginiana	Witchhazel
Crataegus crus gali	Cockspur Hawthorne

Understory shrubs

Ceanothus americanus	New Jersey Tea
Cornus racemosa	Gray Dogwood
Rosa setigera	Michigan Rose
Rosa carolina	Pasture Rose
Rhus aromatica	Fragrant Sumac
Rhus glabra	Smooth Sumac
Rhus typhina	Staghorn Sumac

Upland mesic soils

Canopy trees

Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Fagus grandifolia	American Beech
Gymnocladus dioicus	Kentucky Coffeetree
Liriodendron tulipifera	Tuliptree
Picea glauca	White Spruce
Pinus strobus	White Pine
Populus grandidentata	*Big Toothed Aspen
Quercus alba	White Oak
Quercus bicolor	Swamp White Oak
Quercus macrocarpa	Burr Oak
Quercus rubra	Red Oak
Quercus shumardii	Shumard's Oak
Tilia americana	American Linden

Understory trees

Amelanchier canadensis	Serviceberry
Carpinus caroliniana	Eastern Hornbeam
Cornus alternifolia	Pagoda Dogwood
Hamamelis virginiana	Witchhazel
Ostrya virginiana	Hop Hornbeam

Understory shrubs

Cornus racemosa	Gray Dogwood
Diervilla lonicera	Northern Bush Honeysuckle
Rhus typhina	Staghorn Sumac
Sambucus canadensis	Elderberry
Viburnum acerifolium	Mapleleaf Viburnum

Floodplain and poorly drained soils

Canopy trees

Acer rubrum	Red Maple
Acer saccharinum	*Silver Maple
Celtis occidentalis	Hackberry
Gymnocladus dioicus	Kentucky Coffeetree
Larix laricina	Larch
Nyssa sylvatica	Blackgum
Platanus occidentalis	Sycamore
Populus tremuloides	*Quaking Aspen
Quercus bicolor	Swamp White Oak
Quercus palustris	Pin Oak (pH sensitive)

Understory trees

Carpinus caroliniana	Eastern hornbeam
Cornus alternifolia	Pagoda Dogwood
Crataegus crus gali	Cockspur Hawthorne
Lindera benzion	Spicebush

Understory shrubs

Aronia melanocarpa	Black Chokeberry
Cephalanthus occidentalis	Buttonbush
Cornus racemosa	Gray Dogwood
Cornus sericea	Redosier Dogwood
Ilex verticillata	Winterberry Holly
Physocarpus opulifolius	Ninebark
Salix discolor	Pussy Willow
Sambucus canadensis	Elderberry
Viburnum dentatum	Arrowwood
Viburnum lentago	Nannyberry
Viburnum trilobum	American Cranberry Bush