





LANDSCAPE MAINTENANCE SPECIFICATIONS

THE CONTRACTOR SHALL PROVIDE AS A SEPARATE BID, MAINTENANCE FOR A PERIOD OF 1 YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT LANDSCAPING. THE CONTRACTOR MUST BE ABLE TO PROVIDE CONTINUED MAINTENANCE IF REQUESTED BY THE OWNER OR PROVIDE THE NAME OF A REPUTABLE LANDSCAPE CONTRACTOR WHO CAN PROVIDE MAINTENANCE.

STANDARDS

ALL LANDSCAPE MAINTENANCE SERVICES SHALL BE PERFORMED BY TRAINED PERSONNEL USING CURRENT, ACCEPTABLE HORTICULTURAL PRACTICES. ALL WORK SHALL BE PERFORMED IN A MANNER THAT MAINTAINS THE ORIGINAL INTENT OF THE LANDSCAPE DESIGN.

ALL CHEMICAL APPLICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT COUNTY, STATE AND FEDERAL LAWS, USING EPA REGISTERED MATERIALS AND METHODS OF APPLICATION. THESE APPLICATIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED CERTIFIED APPLICATOR.

APPROVALS

ANY WORK PERFORMED IN ADDITION TO THAT WHICH IS OUTLINED IN THE CONTRACT SHALL ONLY BE DONE UPON WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE. ALL SEASONAL COLOR SELECTIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO ORDERING AND INSTALLATION.

SOIL TESTING

THE MAINTENANCE CONTRACTOR SHALL PERFORM SOIL TESTS AS NEEDED TO IDENTIFY ANY IMBALANCES OR DEFICIENCIES CAUSING PLANT MATERIAL DECLINE. THE OWNER SHALL BE NOTIFIED OF THE RECOMMENDATION FOR APPROVAL, AND THE NECESSARY CORRECTIONS MADE AT AN ADDITIONAL COST TO THE OWNER.

ACCEPTABLE SOIL TEST RESULTS:

	LANDSCAPE TREES & SHRUBS	TURF
PH RANGE	5.0-7.0	6.0-7.0
ORGANIC MATTER	>1.5%	>2.5%
MAGNESIUM (MG)	100+LBS/ACRE	100+LBS/ACRE
PHOSPHORUS (P2O5)	150+LBS/ACRE	150+LBS/ACRE
POTASSIUM (K2O)	120+LBS/ACRE	120+LBS/ACRE
SOLUBLE SALTS	NOT TO EXCEED 900PPM/1.9 MMHOS/CM	NOT TO EXCEED 750PPM/0.75 MMHOS/CM
	IN SOIL, NOT TO EXCEED 1400 PPM/2.5 MMHOS/CM IN HIGH ORGANIC MIX	IN SOIL, NOT TO EXCEED 2000 PPM/2.0 MMHOS/CM IN HIGH ORGANIC MIX

FOR UNUSUAL SOIL CONDITIONS, THE FOLLOWING OPTIONAL TESTS ARE RECOMMENDED WITH LEVELS NOT TO EXCEED:

BORON	3 POUNDS PER ACRE
MANGANESE	50 POUNDS PER ACRE
POTASSIUM (K2O)	450 POUNDS PER ACRE
SODIUM	20 POUNDS PER ACRE

WORKMANSHIP

DURING LANDSCAPE MAINTENANCE OPERATIONS, ALL AREAS SHALL BE KEPT NEAT AND CLEAN. PRECAUTIONS SHALL BE TAKEN TO AVOID DAMAGE TO EXISTING STRUCTURES. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER TO THE OPERATORS, THE OCCUPANTS AND ANY PEDESTRIANS.

UPON COMPLETION OF MAINTENANCE OPERATIONS, ALL DEBRIS AND WASTE MATERIAL SHALL BE CLEANED UP AND REMOVED FROM THE SITE, UNLESS PROVISIONS HAVE BEEN GRANTED BY THE OWNER TO USE ON-SITE TRASH RECEPTACLES. ANY DAMAGE TO THE LANDSCAPE, STRUCTURES, OR IRRIGATION SYSTEMS CAUSED BY THE MAINTENANCE CONTRACTOR, SHALL BE REPAIRED BY THE MAINTENANCE CONTRACTOR WITHOUT CHARGE TO THE OWNER.

TURF

GENERAL CLEAN UP  
PRIOR TO MOWING, ALL TRASH, STICKS, AND OTHER UNWANTED DEBRIS SHALL BE REMOVED FROM LAWNS, PLANT BEDS, AND PAVED AREAS.

MOWING

TURF GRASSES, INCLUDING BLUE GRASS, TALL FESCUE, PERENNIAL RYEGRASS, ETC., SHALL BE MAINTAINED AT A HEIGHT OF 2" TO 3" IN SPRING AND FALL. FROM JUNE THROUGH SEPTEMBER, MOWING HEIGHT SHALL BE MAINTAINED AT NO LESS THAN 3".

THE MOWING OPERATION INCLUDES TRIMMING AROUND ALL OBSTACLES, RAKING EXCESSIVE GRASS CLIPPINGS AND REMOVING DEBRIS FROM WALKS, CURBS, AND PARKING AREAS. CAUTION: MECHANICAL WEEDERS SHOULD NOT BE USED AROUND TREES BECAUSE OF POTENTIAL DAMAGE TO THE BARK.

EDGING

EDGING OF ALL SIDEWALKS, CURBS AND OTHER PAVED AREAS SHALL BE PERFORMED ONCE EVERY OTHER MOWING. DEBRIS FROM THE EDGING OPERATIONS SHALL BE REMOVED AND THE AREAS SWEEP CLEAN. CAUTION SHALL BE USED TO AVOID FLYING DEBRIS.

FERTILIZING

SEASONALLY STEPPED FERTILIZER SHALL BE APPLIED IN AREAS BASED ON THE EXISTING TURF SPECIES.

LAWN WEED CONTROL: HERBICIDES

SELECTION AND PROPER USE OF HERBICIDES SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY. ALL CHEMICAL APPLICATIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED CERTIFIED APPLICATOR. READ THE LABEL PRIOR TO APPLYING ANY CHEMICAL.

INSECT & DISEASE CONTROL FOR TURF

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING THE SITE CONDITIONS ON EACH VISIT TO DETERMINE IF ANY INSECT PEST OR DISEASE PROBLEMS EXIST. THE CONTRACTOR SHALL IDENTIFY THE INSECT PEST OR DISEASE, AS WELL AS THE HOST PLANT, AND THEN CONSULT THE MOST CURRENT EDITION OF THE COOPERATIVE EXTENSION SERVICES' 'COMMERCIAL INSECTICIDE RECOMMENDATION FOR TURF' FOR CONTROL. THE LICENSED APPLICATOR SHALL BE FAMILIAR WITH THE LABEL PROVIDED FOR THE SELECTED PRODUCT PRIOR TO APPLICATION.

INSPECTION AND TREATMENT TO CONTROL INSECT PESTS SHALL BE INCLUDED IN THE CONTRACT PRICE.

TREES, SHRUBS, & GROUND COVER

ALL ORNAMENTAL TREES, SHRUBS AND GROUND COVER SHALL BE PRUNED WHEN APPROPRIATE TO REMOVE DEAD OR DAMAGED BRANCHES. DEVELOP THE NATURAL SHAPES. DO NOT SHEAR TREES OR SHRUBS. IF PREVIOUS MAINTENANCE PRACTICE HAS BEEN TO SHEAR AND BALL, THEN A NATURAL SHAPE WILL BE RESTORED GRADUALLY.

PRUNING GUIDELINES:

- PRUNE PLANTS THAT FLOWER BEFORE THE END OF JUNE (SPRING BLOOMING) IMMEDIATELY AFTER FLOWERING. FLOWER BUOS DEVELOP DURING THE PREVIOUS GROWING SEASON. FALL, WINTER OR SPRING PRUNING WOULD REDUCE THE SPRING FLOWERING DISPLAY.
- PRUNE PLANTS THAT FLOWER IN JULY - SEPTEMBER (SUMMER OR AUTUMN BLOOMING) IN WINTER OR SPRING BEFORE NEW GROWTH BEGINS. SINCE THESE PLANTS DEVELOP FLOWERS ON NEW GROWTH.
- DELAY PRUNING PLANTS GROWN FOR ORNAMENTAL FRUITS, SUCH AS COTONEASTERS AND VIBURNUMS.
- HOLLIES AND OTHER EVERGREENS MAY BE PRUNED DURING WINTER, IN ORDER TO USE THEIR BRANCHES FOR SEASONAL DECORATION. HOWEVER, SEVERE PRUNING OF EVERGREENS SHOULD BE DONE IN EARLY SPRING ONLY.
- BROADLEAF EVERGREEN SHRUBS SHALL BE HAND-PRUNED TO MAINTAIN THEIR NATURAL APPEARANCE AFTER THE NEW GROWTH HARDENS OFF.
- HEDGES OR SHRUBS THAT REQUIRE SHEARING TO MAINTAIN A FORMAL APPEARANCE SHALL BE PRUNED AS REQUIRED. DEAD WOOD SHALL BE REMOVED FROM SHEARED PLANTS BEFORE THE FIRST SHEARING OF THE SEASON.
- CONIFERS SHALL BE PRUNED, IF REQUIRED, ACCORDING TO THEIR GENUS.
  - YEW, JUNIPERS, HEMLOCKS AND ARBORVITAE MAY BE PRUNED AFTER NEW GROWTH HAS HARDENED OFF IN LATE SUMMER. IF SEVERE PRUNING IS NECESSARY, IT MUST BE DONE IN EARLY SPRING.
  - FIRS AND SPRUCES MAY BE LIGHTLY PRUNED IN LATE SUMMER, FALL, OR WINTER AFTER COMPLETING GROWTH. LEAVE SIDE BUOS. NEVER CUT CENTRAL LEADER.
  - PINES MAY BE LIGHTLY PRUNED IN EARLY JUNE BY REDUCING CANDLES.
- GROUND COVER SHALL BE EDGED AND PRUNED AS NEEDED TO CONTAIN IT WITHIN ITS BORDERS.
- THINNING: REMOVE BRANCHES AND WATER SPROUTS BY CUTTING THEM BACK TO THEIR POINT OF ORIGIN ON PARENT STEMS. THIS METHOD RESULTS IN A MORE OPEN PLANT, WITHOUT STIMULATING EXCESSIVE GROWTH. THINNING IS USED ON GRAB APPLES, ULACS, VIBURNUMS, ETC.
- RENEWAL PRUNING: REMOVE OLDEST BRANCHES OF SHRUB AT GROUND, LEAVING THE YOUNGER, MORE VIGOROUS BRANCHES. ALSO REMOVE WEAK STEMS. ON OVERGROWN PLANTS, THIS METHOD MAY BE BEST DONE OVER A THREE-YEAR PERIOD. RENEWAL PRUNING MAY BE USED ON FORSYTHIA, HYDRANGEA, SPIRAEA, ETC.

PLANTS OVERHANGING PASSAGEWAYS AND PARKING AREAS AND DAMAGED PLANTS SHALL BE PRUNED AS NEEDED.

SHADE TREES THAT CANNOT BE ADEQUATELY PRUNED FROM THE GROUND SHALL NOT BE INCLUDED IN THE MAINTENANCE CONTRACT. A CERTIFIED ARBORIST UNDER A SEPARATE CONTRACT SHALL PERFORM THIS TYPE OF WORK.

SPRING CLEANUP

PLANT BEDS SHALL RECEIVE A GENERAL CLEANUP BEFORE FERTILIZING AND MULCHING. CLEANUP INCLUDES REMOVING DEBRIS AND TRASH FROM BEDS AND CUTTING BACK HERBACEOUS PERENNIALS LEFT STANDING THROUGH WINTER, E.G. ORNAMENTAL GRASSES, SEDUM AUTUMN JOY.

FERTILIZING

FOR TREES, THE RATE OF FERTILIZATION DEPENDS ON THE TREE SPECIES, TREE VIGOR, AREA AVAILABLE FOR FERTILIZATION, AND GROWTH STAGE OF THE TREE. MATURE SPECIMENS BENEFIT FROM FERTILIZATION EVERY 3 TO 4 YEARS; YOUNGER TREES SHALL BE FERTILIZED MORE OFTEN DURING RAPID GROWTH STAGES.

THE CURRENT RECOMMENDATION IS BASED ON THE RATE OF 1000 SQUARE FEET OF AREA UNDER THE TREE TO BE FERTILIZED. FOR DECIDUOUS TREES, 2 TO 6 POUNDS OF NITROGEN PER 1000 SQUARE FEET; FOR ORNAMENTAL SHRUBS, 1 TO 4 POUNDS OF NITROGEN PER 1000 SQUARE FEET; FOR BROADLEAF EVERGREENS, 1 TO 3 POUNDS OF NITROGEN PER 1000 SQUARE FEET.

SHRUBS AND GROUND COVER SHALL BE TOP-DRESSED WITH COMPOST 1" DEEP OR FERTILIZED ONCE IN MARCH WITH 10-6-4 ANALYSIS FERTILIZER AT THE RATE OF 3 POUNDS PER 100 SQUARE FEET OF BED AREA. ERICACEOUS MATERIAL SHALL BE FERTILIZED WITH AN ERICACEOUS FERTILIZER AT THE MANUFACTURER'S RECOMMENDATION RATE. IF PLANTS ARE GROWING POORLY, A SOIL SAMPLE SHOULD BE TAKEN.

TREES, SHRUBS, & GROUND COVER (CONT.)

MULCHING

ANNUALLY, ALL TREE AND SHRUB BEDS WILL BE PREPARED AND MULCHED. TO A MINIMUM DEPTH OF 3" WITH QUALITY MULCH TO MATCH EXISTING. BED PREPARATION SHALL INCLUDE REMOVING ALL WEEDS, CLEANING UP SAID BED, EDGING AND CULTIVATING DECAYED MULCH INTO THE SOIL. DEBRIS FROM EDGING IS TO BE REMOVED FROM BEDS WHERE APPLICABLE. IF DEEMED NECESSARY, A PRE-EMERGENT HERBICIDE MAY BE APPLIED TO THE SOIL TO INHIBIT THE GROWTH OF FUTURE WEEDS.

ORGANICALLY MAINTAINED GARDENS SHALL NOT RECEIVE ANY PRE-EMERGENT HERBICIDES. MULCH IN EXCESS OF 4" WILL BE REMOVED FROM THE BED AREAS. SPECIAL CARE SHALL BE TAKEN IN THE MULCHING OPERATION NOT TO OVER-MULCH OR COVER THE BASE OF TREES AND SHRUBS. THIS CAN BE DETRIMENTAL TO THE HEALTH OF THE PLANTS.

WEEDING

ALL BEDS SHALL BE WEEDED ON A CONTINUOUS BASIS THROUGHOUT THE GROWING SEASON TO MAINTAIN A NEAT APPEARANCE AT ALL TIMES.

PRE-EMERGENT (SOIL-APPLIED) AND POST-EMERGENT (FOLIAR-APPLIED) HERBICIDES SHALL BE USED WHERE AND WHEN APPLICABLE AND IN ACCORDANCE WITH THE PRODUCT'S LABEL.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUND COVER

THE MAINTENANCE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING THE LANDSCAPE SITE ON A REGULAR BASIS. THE MONITORING FREQUENCY SHALL BE MONTHLY EXCEPT FOR GROWING SEASON, WHICH WILL BE EVERY OTHER WEEK. TRAINED PERSONNEL SHALL MONITOR FOR PLANT DAMAGING INSECT ACTIVITY, PLANT PATHOGENIC DISEASES AND POTENTIAL CULTURAL PROBLEMS IN THE LANDSCAPE. THE PEST OR CULTURAL PROBLEM WILL BE IDENTIFIED UNDER THE SUPERVISION OF THE CONTRACTOR.

FOR PLANT DAMAGING INSECTS AND MITES IDENTIFIED IN THE LANDSCAPE, THE CONTRACTOR SHALL CONSULT AND FOLLOW THE RECOMMENDATIONS OF THE MOST CURRENT EDITION OF THE STATE COOPERATIVE SERVICE PUBLICATION ON INSECT CONTROL ON LANDSCAPE PLANT MATERIAL.

PLANT PATHOGENIC DISEASE PROBLEMS IDENTIFIED BY THE CONTRACTOR THAT CAN BE RESOLVED BY PRUNING OR PHYSICAL REMOVAL OF DAMAGED PLANT PARTS WILL BE PERFORMED AS PART OF THE CONTRACT. FOR AN ADDITIONAL CHARGE, PLANT PATHOGENIC DISEASES THAT CAN BE RESOLVED THROUGH PROPERLY TIMED APPLICATIONS OF FUNGICIDES SHALL BE MADE WHEN THE OWNER AUTHORIZES IT.

IF THE CONTRACTOR NOTES AN ESPECIALLY INSECT-OR DISEASE-PRONE PLANT SPECIES IN THE LANDSCAPE, HE/SHE WILL SUGGEST REPLACEMENT WITH A MORE PEST-RESISTANT CULTIVAR OR SPECIES THAT IS CONSISTENT WITH THE INTENT OF THE LANDSCAPE DESIGN.

NOTE: FOR IDENTIFICATION OF PLANT-DAMAGING INSECTS AND MITES, A REFERENCE TEXTBOOK THAT CAN BE USED IS INSECTS THAT FEED ON TREES AND SHRUBS BY JOHNSON AND LYON, COMSTOCK PUBLISHING ASSOCIATES. FOR PLANT PATHOGENIC DISEASES, TWO REFERENCES ARE SUGGESTED: SCOUTING AND CONTROLLING WOODY ORNAMENTAL DISEASES IN LANDSCAPES AND NURSERIES, AUTHORIZED BY GARY MOORMAN, PUBLISHED BY PENN STATE COLLEGE OF AGRICULTURAL SCIENCES, AND DISEASES OF TREES AND SHRUBS BY SINGLAIR AND LYON, PUBLISHED BY COMSTOCK PUBLISHING PRESS.

TRASH REMOVAL

THE MAINTENANCE CONTRACTOR SHALL REMOVE TRASH FROM ALL SHRUB AND GROUND COVER BEDS WITH EACH VISIT.

LEAF REMOVAL

ALL FALLEN LEAVES SHALL BE REMOVED FROM THE SITE IN NOVEMBER AND ONCE IN DECEMBER, IF REQUESTED BY THE OWNER, THE MAINTENANCE CONTRACTOR, AT AN ADDITIONAL COST TO THE OWNER SHALL PERFORM SUPPLEMENTAL LEAF REMOVALS.

WINTER CLEAN-UP

THE PROJECT SHALL RECEIVE A GENERAL CLEAN-UP ONCE DURING EACH OF THE WINTER MONTHS, I.E., JANUARY, FEBRUARY, AND MARCH.

CLEAN-UP INCLUDES:

- CLEANING CURBS AND PARKING AREAS
- REMOVING ALL TRASH AND UNWANTED DEBRIS
- TURNING MULCH WHERE NECESSARY
- INSPECTION OF GROUNDS

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

THE INSTALLATION OF PERENNIALS, ANNUALS, AND BULBS, UNLESS SPECIFIED HEREIN, SHALL BE REVIEWED WITH THE OWNER, AND, IF ACCEPTED, INSTALLED AND BILLED TO THE OWNER.

SEASONAL COLOR MAINTENANCE

PERENNIALIZATION OF BULBS:

- AFTER FLOWERING, CUT OFF SPENT FLOWER HEADS.
- ALLOW LEAVES OF DAFFODILS AND HYACINTHS TO REMAIN FOR SIX WEEKS AFTER FLOWERS HAVE FADED, CUT OFF AT BASE.
- ALLOW LEAVES OF OTHER BULBS TO YELLOW NATURALLY AND THEN CUT OFF AT BASE.
- APPLY FERTILIZER AFTER FLOWERING IN SPRING, POSSIBLY AGAIN IN FALL. APPLY 10-10-10 AT THE RATE OF 2 POUNDS PER 1000 SQUARE FEET OR TOP-DRESS WITH COMPOST 1" DEEP. FALL FERTILIZATION WITH A BULB FERTILIZER OR MULCHING WITH 1" OF COMPOST IS OPTIONAL.

FLOWER ROTATION:

- BULBS: REMOVE THE ENTIRE PLANT AND BULB AFTER FLOWERS HAVE FADED OR AT THE DIRECTION OF THE OWNER AND INSTALL NEW PLANTS IF INCLUDED IN CONTRACT.
- SUMMER ANNUALS OR FALL PLANTS.
  - DEAD HEADING: PINCH AND REMOVE DEAD FLOWERS ON ANNUALS AS NECESSARY.
  - FERTILIZING SUMMER ANNUALS: FERTILIZE USING ONE OR TWO METHODS: APPLY A SLOW-RELEASE FERTILIZER IN MAY FOLLOWING MANUFACTURER'S RECOMMENDATIONS. A BOOSTER SUCH AS 10-10-10 MAY BE NECESSARY IN LATE SUMMER. OR, APPLY LIQUID FERTILIZATIONS OF 20-20-20 WATER-SOLUBLE FERTILIZERS, NOT TO EXCEED 2 POUNDS OF 20-20-20 PER 100 GALLONS OF WATER, MONTHLY, OR MULCH WITH COMPOST 1" DEEP.
  - REMOVAL: IF FALL PLANTS ARE TO BE INSTALLED, SUMMER ANNUALS SHALL BE LEFT IN THE GROUND UNTIL THE FIRST KILLING FROST AND THEN REMOVED, UNLESS OTHERWISE DIRECTED BY THE OWNER.

PERENNIALS:

- AFTER INITIAL INSTALLATION, IF A TIME-RELEASED FERTILIZER HAS BEEN INCORPORATED DURING PLANT INSTALLATION, NO MORE FERTILIZER NEED BE APPLIED THE FIRST GROWING SEASON.
- THE FOLLOWING YEAR:
  - FERTILIZE PERENNIALS WITH A SLOW-RELEASE FERTILIZER OR ANY 50% ORGANIC FERTILIZER, OR MULCH PERENNIALS WITH COMPOST 1" DEEP.
  - CUT ALL DECIDUOUS PERENNIALS FLUSH TO THE GROUND BY MARCH 1, IF THIS WAS NOT DONE THE PREVIOUS FALL, TO ALLOW NEW GROWTH TO DEVELOP FREELY.
  - MULCH THE PERENNIAL BED ONCE IN EARLY SPRING AT 1"-2" DEPTH. IF SOIL IS BARED IN LATE FALL, RE-MULCH LIGHTLY AFTER GROUND IS FROZEN TO PROTECT PERENNIALS.
  - INSPECT FOR INSECT OR DISEASE PROBLEMS ON PERENNIALS. MONITOR AND CONTROL SLUGS ON HOSTAS AND LIGULARIAS. POWDERY MILDEW ON PHLOX, MONARDAS, AND ASTERS CAN BE PREVENTED WITH PROPERLY TIMED FUNGICIDES OR USE OF DISEASE-RESISTANT VARIETIES.
  - WEED PERENNIAL BED AS SPECIFIED IN "WEEDING" ABOVE.
  - PRUNE BRANCHING SPECIES TO INCREASE DENSITY. CUT ONLY THE FLOWERING STEMS AFTER BLOOMING. DO NOT REMOVE THE FOLIAGE.
  - THE FOLLOWING FALL, CUT BACK DETERIORATING PLANT PARTS UNLESS INSTRUCTED TO RETAIN FOR WINTER INTEREST, E.G. SEDUM AUTUMN JOY AND ORNAMENTAL GRASSES.
- LONG-TERM CARE:
  - DIVIDE PLANTS THAT OVERCROWD THE SPACE PROVIDED. DIVIDE ACCORDING TO THE SPECIES. SOME NEED FREQUENT DIVIDING, E.G. ASTERS AND YARROW EVERY TWO YEARS; OTHER RARELY, IF EVER, E.G. PEONIES, HOSTAS, AND ASTILBE.
  - FOR DETAILED INFORMATION REGARDING THE CARE OF SPECIFIC PERENNIALS, REFER TO ALL ABOUT PERENNIALS BY ORTHO; PERENNIALS: HOW TO SELECT, GROW AND ENJOY BY PAMELA HARPER AND FREDERICK MCGOWDY, HP BOOKS PUBLISHER; HERBACEOUS PERENNIAL PLANTS: A TREATISE ON THEIR IDENTIFICATION, CULTURE AND GARDEN ATTRIBUTES BY ALLAN ARMITAGE, STIPES PUB LLC.

SUMMARY OF MAINTENANCE

LAWN MAINTENANCE

- SOIL ANALYSIS PERFORMED ANNUALLY TO DETERMINE PH. IF PH DOES NOT FALL WITHIN SPECIFIED RANGE, ADJUST ACCORDING TO SOIL TEST RESULTS IN A MORE OPEN PLANT, WITHOUT STIMULATING EXCESSIVE GROWTH.
- MAINTAIN PROPER FERTILITY AND PH LEVELS OF THE SOIL TO PROVIDE AN ENVIRONMENT CONDUCTIVE TO TURF VITALITY FOR TURF GRASSES.
- NOW TURF ON A REGULAR BASIS AND AS SEASON AND WEATHER DICTATES. REMOVE NO MORE THAN THE TOP 1/3 OF LEAF BLADE. CLIPPINGS ON PAVED AND BED AREAS WILL BE REMOVED.
- AERATE WARM SEASON TURF AREAS TO MAINTAIN HIGH STANDARDS OF TURF APPEARANCE.
- APPLY PRE-EMERGENT TO TURF IN TWO APPLICATIONS IN EARLY FEBRUARY AND EARLY APRIL TO EXTEND BARRIER.
- APPLY POST EMERGENT AS NEEDED TO CONTROL WEEDS.
- MECHANICALLY EDGE CURBS AND WALKS.
- APPLY NON-SELECTIVE HERBICIDE, TO MULCHED BED AREAS AND PAVEMENT AND REMOVE EXCESS RUNNERS TO MAINTAIN CLEAN DEFINED BEDS.

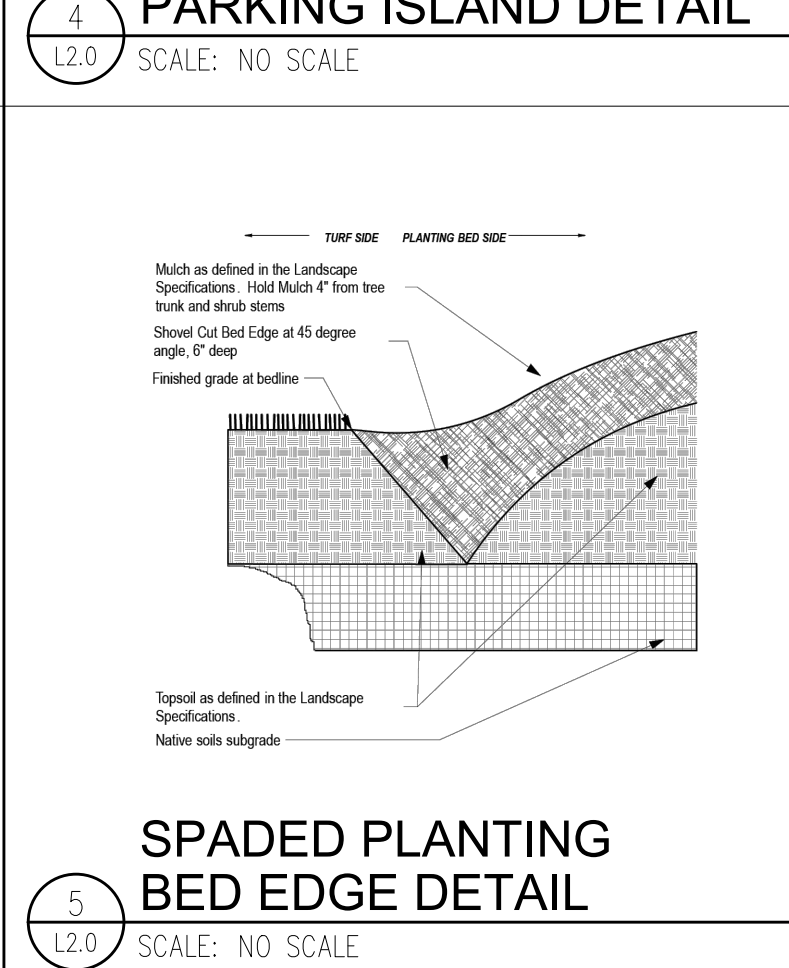
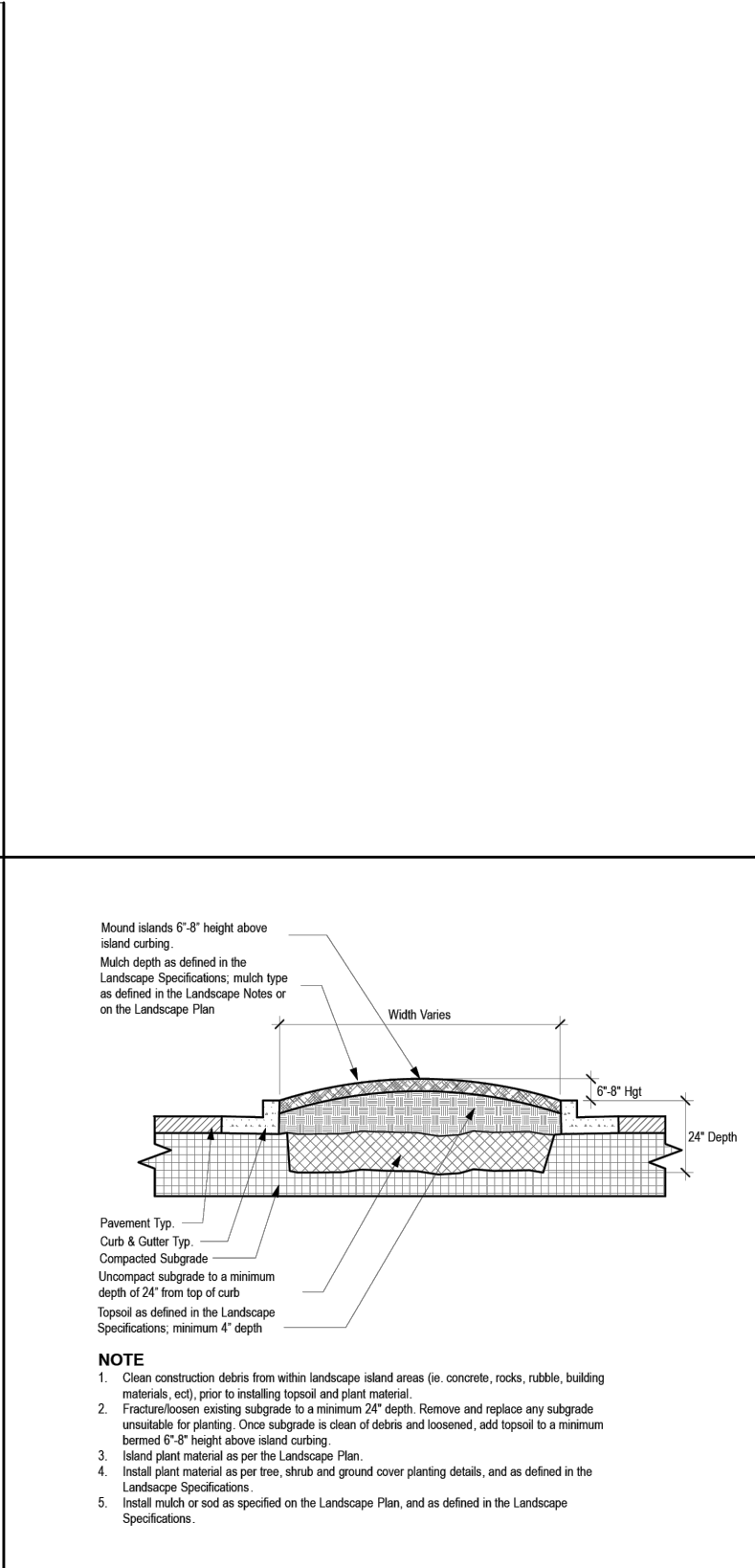
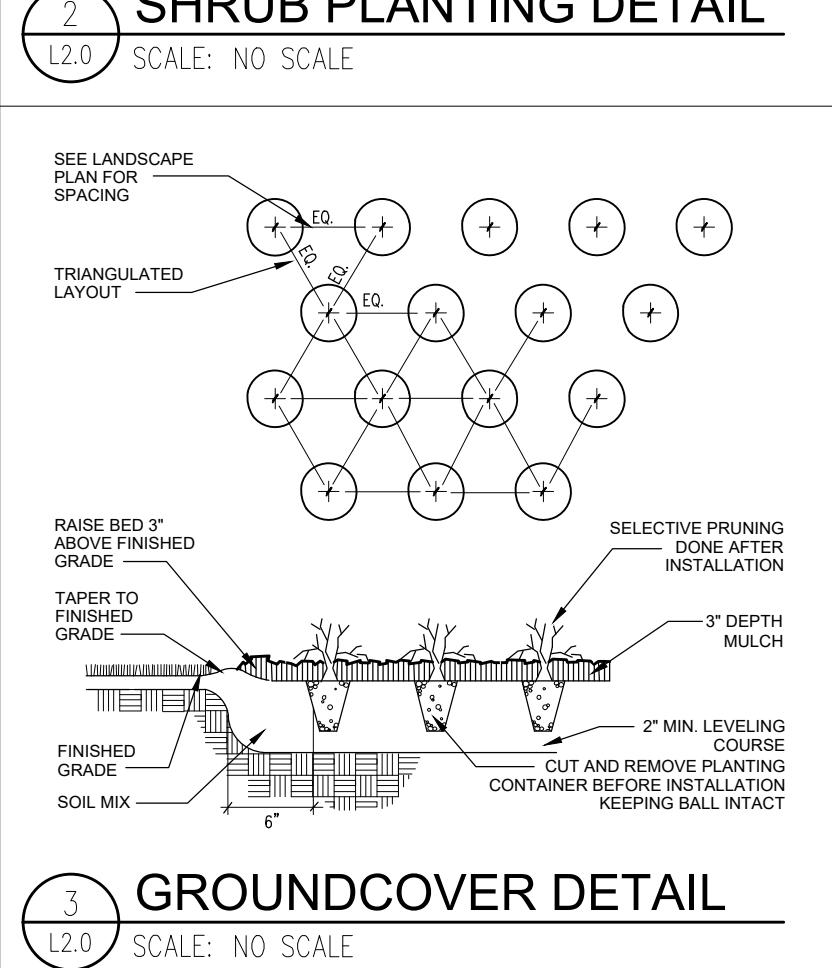
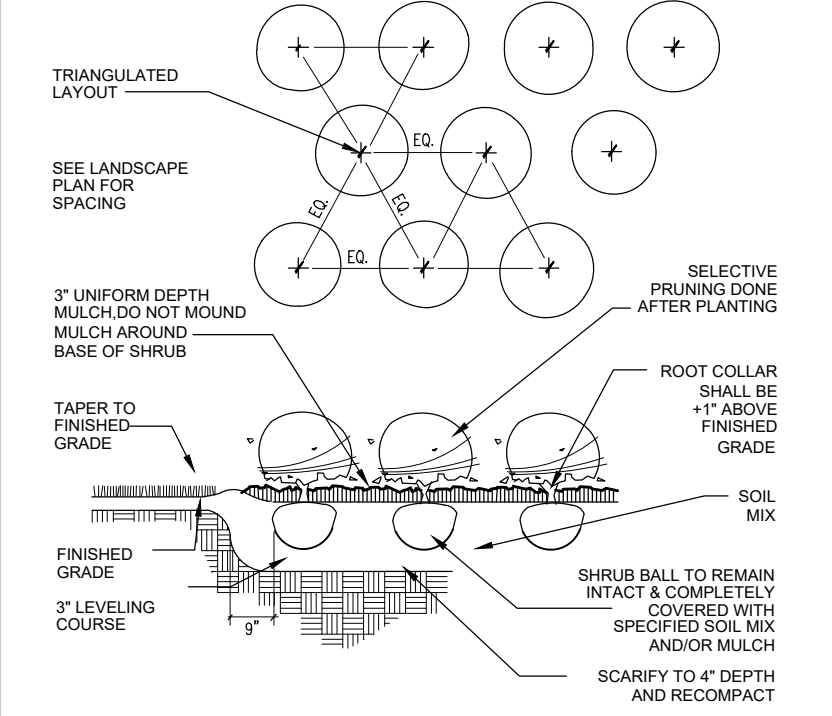
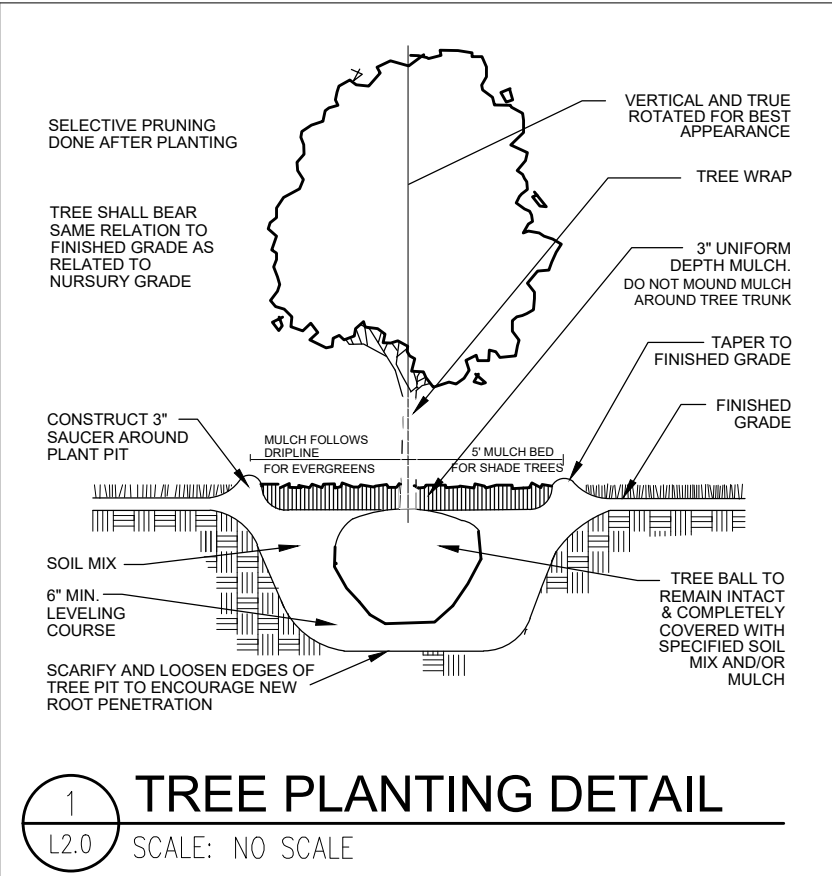
TREE, GROUND COVER AND SHRUB BED MAINTENANCE

- PRUNE SHRUBS, TREES AND GROUND COVER TO ENCOURAGE HEALTHY GROWTH AND CREATE A NATURAL APPEARANCE.
- MULCH TO BE APPLIED IN FEBRUARY/MARCH WITH A HALF RATE IN LATE SUMMER TO TOP DRESS.
- APPLY PRE-EMERGENT HERBICIDES IN FEBRUARY AND APRIL.
- MANUAL WEED CONTROL TO MAINTAIN CLEAN BED APPEARANCE.
- APPLY FUNGICIDES AND INSECTICIDES AS NEEDED TO CONTROL INSECTS AND DISEASE.
- ORNAMENTAL SHRUBS, TREES AND GROUND COVER TO BE FERTILIZED THREE (3) TIMES PER YEAR WITH A BALANCED MATERIAL (JANUARY/FEBRUARY, APRIL/MAY, AND OCTOBER/NOVEMBER)
- EDGE ALL MULCHED BEDS.
- REMOVE ALL LITTER AND DEBRIS.

GENERAL MAINTENANCE

- REMOVE ALL MAN-MADE DEBRIS, BLOW EDGES.
- INSPECT GROUNDS ON A MONTHLY BASIS AND SCHEDULE INSPECTION WITH UNIT OPERATOR.

Master Plant List						
Shade Trees						
Symbol	Quantity	Botanical Name	Common Name	Size	Origin	Notes
AFR	2	ACER X FREEMANII 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN MAPLE	3" BB		MOIST
CEO	4	CELSTUS OCCIDENTALIS	HACKBERRY	3" BB		URBAN, MOIST
GTI	5	GLEDITSIA TRIACANTHOS F. INERMIS	THORNLESS HONEYLOCUST	3" BB		URBAN, MOIST
LIT	2	LIRIODENDRON TULIPIFERA	TULIP TREE	3" BB	NATIVE	MOIST
PLA	3	PLATANUS X ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANETREE	3" BB		URBAN, MOIST
QBI	4	QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	NATIVE	URBAN
QMA	3	QUERCUS MACROCARPA	BUR OAK	3" BB	NATIVE	URBAN
TAX	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" BB		URBAN, MOIST
TAR	6	TILIA AMERICANA 'REDMOND'	REDMOND AMERICAN LINDEN	3" BB	NATIVE	URBAN, MOIST
Evergreen Trees						
JUV	10	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8" BB	NATIVE	
POM	9	PICEA OMORICA	NORWAY SPRUCE	8" BB		URBAN
PSU	11	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	8" BB		
Ornamental Trees						
AC	6	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	6" BB	NATIVE	MOIST SOIL
CK	4	CORNUS KOUSA	KOUSA DOGWOOD	6" BB		
COM	4	CORNUS MAS	CORNELIANCHERRY DOGWOOD	6" BB		URBAN
MO	3	MAGNOLIA X SOULANGIANA	SAUCER MAGNOLIA	6" BB		
MS	3	MALUS SARGENT	SARGENT CRABAPPLE	6" BB		8", GREEN, PINK
Evergreen Shrubs						
TD	30	TAXUS X MEDIA 'DENSII'	DENSE YEW	24" BB		
Deciduous Shrubs						
CA	22	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD CLETHRA	5 GAL		
CS	14	CORNUS SERICEA 'ISANT'	ISANTI RED TWIG DOGWOOD	24" BB	NATIVE	
DL	50	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE	36" BB	NATIVE	
HP	45	HYDRANGEA PANICULATA 'TARDIVA'	TARDIVA HYDRANGEA	36" BB		
RA	21	RHUS ARAMATICA 'GRO LOW'	GRO LOW SUMAC	5 GAL	NATIVE	
RK	13	ROSA 'KNOCKOUT'	KNOCKOUT SHRUB ROSE	2 GAL		DOUBLE PINK
VD	30	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	48" BB	NATIVE	
VJ	6	VIBURNUM X JUDDI	JUDD VIBURNUM	36" BB		
Groundcover						
ef	750	EUONYMUS FORTUNEI 'COLORATUS'	PURPLELEAF WINTERCREEPER	3" POTS		
Perennials						
ss	39	ALLIUM 'SUMMER BEAUTY'	WILD ONION	1 GAL		12" PURP
ge	48	GERANIUM SANGUINEUM 'ANKUMS PRIDE'	BLOODY CRANESBILL	1 GAL		12" PINK
nh	18	HELLEBORES X HYBRIDUS 'SUNSHINE SELECTIONS'	LENTEN ROSE	1 GAL		18" CREAM/ROSE
nf	36	NEPETA X FAASSENII	FAASSEN'S CATMINT	1 GAL		12" LAVENDER
Grasses						
cg	36	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	3 GAL		3'
pv	30	PANICUM VIRGATUM 'NORTH WIND'	SWITCH GRASS	3 GAL		4'



GENERAL CONSTRUCTION NOTES

- REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE STAKED, WRAPPED, WATERED AND MULCHED PER ORDINANCE.
- BEFORE ANY EXCAVATION ON THE SITE, CALL TO LOCATE ANY EXISTING UTILITIES ON THE SITE. THE CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LOCATIONS OF ALL BURIED UTILITIES IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. THE CONTRACTOR SHALL BE LIABLE FOR THE COST OF REPAIRING OR REPLACING ANY BURIED CONDUITS, CABLES OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
- FOUR FOOT HIGH FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIP-LINE OF ALL TREES TO BE SAVED.
- PLANT QUANTITIES ON PLANT LIST INTENDED TO BE A GUIDE. ALL QUANTITIES SHALL BE CHECKED AND VERIFIED ON PLANTING PLAN. ANY DISCREPANCIES SHALL