LANDSCAPE NOTES

1. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE PLANS, INCLUDING THE DRAINAGE AND UTILITY PLANS AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO SUBMISSION OF BIDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM NEGLECT OR FAILURE TO COMPLY WITH THIS REQUIREMENT.

2. COORDINATE ALL TREE LOCATIONS WITH SITE LIGHTING AND DRAINAGE STRUCTURES. ALL TREE PLANTING TO BE KEPT TWO (2) FEET AWAY FROM ANY DRAINAGE OR SANITARY STRUCTURE OR PIPING.

3. ALL PRECAUTIONS SHALL BE TAKEN IN CARTING, STORING, AND PLANTING OF MATERIALS TO PROTECT ADJACENT PAVEMENT AREAS.

4. DAMAGE TO EXISTING OR NEW WORK BY THE CONTRACTOR AS A RESULT OF THIS WORK SHALL BE REPAIRED AT HIS EXPENSE.

5. THE PLANTING PLAN WILL TAKE PRECEDENCE OVER THE PLANT LIST QUANTITIES IF DISCREPANCIES BETWEEN THE TWO EXIST, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

6. ALL PLANT NAMES AND DESCRIPTIONS SHALL BE AS DEFINED IN HORTUS THIRD, L.H. BAILEY HORTORIUM, 1976.

7. PLANT MATERIALS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED, NURSERY-GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES OF THE AMERICAN NURSEYMEN ASSOC. ALL PLANTS SHALL BE OF SPECIMEN QUALITY, SYM-METRICAL, FREE OF DISEASE AND INSECTS, EGGS, OR LARVAE, AND SHALL HAVE A HEALTHY, WELL-DEVELOPED ROOT SYSTEM. THE OWNER OR HIS REPRESENTATIVE RESERVES THE RIGHT TO TAG AND INSPECT ALL PLANT MATERIALS AND REJECT ANY PLANTS FOUND TO BE UNACCEPTABLE EITHER AT THE NURSERY, AT THE SITE UPON DELIVERY, OR UPON INSTALLATION.

8. ALL PLANTS SHALL BE LABELED BY PLANT NAME. LABELS SHALL BE ATTACHED SECURELY TO ALL PLANTS, BUNDLES, AND CONTAINERS OF PLANT MATERIALS WHEN DELIVERED. PLANT LABELS SHALL BE DURABLE AND LEGIBLE.

9. SUBSTITUTIONS OF PLANT MATERIAL WILL NOT BE PERMITTED UNLESS AUTHORIZED BY THE TOWNSHIP OF CHERRY HILL AND PSE&G.

10. TOPSOIL SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
    - 10.1. LOAM WITH THE ADDITION OF COMPOST OR HUMUS
    - 10.2. ORGANIC MATTER CONTENT SHALL BE BETWEEN 5%-12%
    - 10.3. THE pH SHALL BE IN THE RANGE OF 6.0 TO 7.0 INCLUSIVE, UNLESS OTHERWISE APPROVED OR SPECIFIED BY THE TOWNSHIP OF CHERRY HILL FORESTER.
    - 10.4. SOIL TEXTURAL ANALYSIS: TOPSOIL SHALL CONSIST OF THE FOLLOWING PERCENTAGES OF SAND, SILT, AND CLAY. ANY SOIL THAT DOES NOT MEET THE REQUIREMENTS BELOW WILL BE REJECTED AND REMOVED FROM THE SITE:

ROCKS, STONE, AND GRAVEL > 2.0 mm	< 5%
SAND (0.05-2.0 mm)	40-60%
SILT (0.002-0.05 mm)	20-50%
CLAY (< 0.002 mm)	20% MAXIMUM

11. TOPSOIL SHALL COMPLY WITH ANY AND ALL ENVIRONMENTAL AND CLEAN FILL REQUIREMENTS, TO THE SATISFACTION OF THE ENVIRONMENTAL CONSULTANT.

12. LOCATE GUY WIRES SO THAT THEY WILL NOT PULL CROTCH APART.

13. UPON COMPLETION OF THE FIRST YEAR OF THE TWO (2) YEAR PLANT GUARANTEE PERIOD, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING OR REMOVING ALL STAKES. THIS SHALL BE DONE IN CONSULTATION WITH THE CITY REPRESENTATIVE. ALL STAKES REMAINING SHALL THEN BECOME THE RESPONSIBILITY OF THE OWNER.

14. ALL PLANT MATERIAL IS TO BE LOCATED PER THE PLANTING PLAN. IF OBSTRUCTIONS (ROCK, TREE ROOTS, UTILITIES, ETC.) ARE ENCOUNTERED DURING THE EXCAVATION OF TREE PITS AND PLANTING BEDS, THE LANDSCAPE ARCHITECT IS TO BE NOTIFIED IMMEDIATELY OF ALTERNATE LOCATIONS FOR ANY PLANTING SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

15. IF THE CONTRACTOR DETERMINES THE SUB-GRADE SOIL CONDITIONS ARE DELETERIOUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIAL.

16. ROOT BALLS SHALL BE FIRMLY WRAPPED WITH NONSYNTHETIC, ROTTABLE BURLAP AND SECURED WITH HEAVY NONSYNTHETIC OR ROTTABLE TWINE. THE ROOT COLLAR SHALL BE APPARENT AT THE SOIL SURFACE. ROOT BALLS BROKEN, LOOSE OR CRACKED SHALL BE REJECTED. THE ROOT BALL AND BURLAP ARE TO BE INTACT. ALL PLANTS SHALL BE DELIVERED TO THE SITE COVERED WITH A TARPAULINE. THE TOWNSHIP OF CHERRY HILL WILL REJECT ANY PLANT MATERIAL NOT MEETING THE ABOVE CONDITIONS. ALL PLANTS THAT CANNOT BE PLANTED IMMEDIATELY UPON DELIVERY SHALL BE KEPT IN THE SHADE, COVERED WITH SOIL, WET MULCH, OR OTHER ACCEPTABLE MATERIAL, AND KEPT WELL WATERED. ALL BURLAP, TWINE AND DEBRIS ARE TO BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.

17. ALL PLANT MATERIALS ARE TO BE INSTALLED AS PER THE PLANTING DETAILS. SCARIFY THE BOTTOM OF THE PLANTING PIT TO A DEPTH OF 6".

18. PLANT TREES PER TOWNSHIP OF CHERRY HILL STANDARDS.

19. PLANT PERENNIALS AND GROUNDCOVER IN 8" DEEP TOPSOIL BED CONSISTING OF 2/3 TOPSOIL AND 1/3 HUMUS.

20. ALL EXISTING SOIL SHALL BE REMOVED AND BACKFILLED WITH NEW TOPSOIL MEETING PARKS AND FORESTRY SPECIFICATION.

21. REMOVE ALL TWINE, ROPE, WIRE, AND BURLAP FROM THE TOP 2/3 OF THE ROOT BALL. ALL METAL CAGES ARE TO BE ENTIRELY REMOVED. SEE PLANTING DETAIL.

22. TREES IN LAWN AREA ARE TO BE MULCHED WITH 3 INCHES CLEAN, FRESH, SHREDDED HARDWOOD BARK, FREE OF STICKS, LEAVES AND OTHER FOREIGN MATTER. MULCH IS NOT TO BE PLACED WITHIN 3 INCHES OF THE TRUNKS OF TREES AND SHRUBS. SEE PLANTING DETAIL.

23. KEEP MULCH 1/2" BELOW TOP OF PAVEMENTS AND CURBS

24. ALL NEWLY INSTALLED LANDSCAPING SHALL BE SET PLUMB IN THE PLANTING PIT AND BACKFILLED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES. IN PLANTING BEDS BACKFILL SHALL CONSIST OF THREE (3) PARTS NATIVE TOPSOIL, THREE (3) PARTS SCREENED TOPSOIL AND THREE (3) PARTS PEAT. A MOISTURE ABSORBENT POLYMER SHALL BE INCLUDED IN THE AMENDED BACKFILL ON WELL AND EXCESSIVELY DRAINED SOILS AND ON EARTHEN BERMS TO ENSURE SOIL MOISTURE AVAILABILITY. ALL LANDSCAPE BEDS SHALL BE UNDERLAYED WITH A SUITABLE WATER PERMEABLE WEED FABRIC AND SHALL RECEIVE A MINIMUM THREE (3) INCH APPLICATION OF SHREDDED HARDWOOD MULCH. UNTREATED WOOD CHIPS SHALL NOT BE USED. PLANT MATERIAL ARRANGED IN GROUPINGS SHALL BE CONTAINED IN ONE (1) CONTINUOUS MULCHED BED TO REDUCE POSSIBLE PLANT DAMAGE CAUSED BY MAINTENANCE EQUIP. THE LANDSCAPE BED SHALL EXTEND TO THE BRANCH LIMITS OF THE NEWLY INSTALLED PLANTINGS.

25. REFER TO SOIL EROSION AND SEDIMENT CONTROL DETAILS SHEET FOR SEED MIXES.

26. PLANTS SHALL BE SET AT THE SAME RELATIONSHIP TO FINISHED GRADE AND ORIENTATION AS THEY WERE AT THE NURSERY UNLESS OTHERWISE NOTED ON THE DRAWINGS. THE ROOT FLARE IS TO BE PLANTED AT FINISHED GRADE OR 1" ABOVE. SEE PLANTING DETAIL.

27. GRADE ALL NEW PLANTING AREAS TO MAINTAIN POSITIVE DRAINAGE, SEE GRADING PLAN.

28. PROVIDE 8 INCH DEPTH OF TOPSOIL FOR PERENNIALS AND 14 INCH DEPTH MIN. OF TOPSOIL FOR SHRUBS IN ALL PROPOSED PLANTING BEDS.

29. GENERAL TURFGRASS: TOPSOIL AND SEED ALL DISTURBED AREAS NOT BUILT UPON, PAVED, OR LANDSCAPED AS A RESULT OF ANY AND ALL CONSTRUCTION OR STORAGE OF EQUIPMENT, WHETHER AREAS ARE SHOWN ON THE PLAN OR NOT - CONTRACTOR TO FIELD VERIFY AREAS TO BE SEEDED. SEE SEEDING NOTES PER SOIL EROSION AND SEDIMENT CONTROL PLAN.

30. ALL EXISTING DISTURBED LAWN AREAS ARE TO BE SEEDED WITHIN 18" OF FOUNDATION OF BUILDING.

31. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF TWO YEARS FROM THE DATE OF ACCEPTANCE. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, ALL PLANTS DETERMINED BY THE TOWN TO BE DEAD OR IN AN UNACCEPTABLE CONDITION DURING AND AT THE END OF THE GUARANTEE PERIOD IN A TIMELY FASHION. REPLACEMENTS SHALL CLOSELY MATCH ADJACENT SPECIMENS OF THE SAME SPECIES. THE GUARANTEE OF ALL REPLACEMENT PLANTS SHALL EXTEND FOR A PERIOD OF TWO YEARS FROM THE DATE OF THEIR ACCEPTANCE AFTER REPLACEMENT.

32. FALL DIGGING HAZARDS:

    TREES THAT ARE NOT TO BE TRANSPLANTED IN THE FALL.

BETULA VARIETIES	HALSEIA VARIETIES
OSTRYA	CARPINUS VARIETIES
ILEX OPACA VARIETIES	PRUNUS - ALL STONE FRUITS
CELTIS VARIETIES	KOELREUTERIA PANICULATA
PYRUS VARIETIES	CERCIDIPHYLLUM VARIETIES
LIQUIDAMBAR VARIETIES	QUERCUS - ALL OAKS EXCEPT Q.PALUSTRIS
CORNUS FLORIDA & VARS.	LIRIODENDRON VARIETIES
SALIX - WEEPING VARIETIES	CRATAEGUS VARIETIES
MALUS - IN LEAF	SORBUS VARIETIES
FAGUS VARIETIES	NYSSA SYLVATICA
TILIA TOMENTOSA VARIETIES	ZELKOVA VARIETIES

    THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR PLANT SURVIVAL OF THE ABOVE MATERIALS IF MOVED DURING THE FALL SEASON.

33. THE LOWER BRANCH OF STREET TREES SHALL BE TRIMMED TO 8' FROM GRADE. THE TRUNK SHALL BE STRAIGHT.

34. PLANT MATERIAL HAS BEEN SELECTED TO ACCOMMODATE DEER RESISTANT AND NATIVE SPECIES TO THE BEST EXTENT POSSIBLE. IT IS RECOMMENDED THAT THE LANDSCAPE CONTRACTOR ASSESS THE DEER POPULATION AND DETERMINE WHETHER THE APPLICATION OF DEER REPELLANT IS NECESSARY

35. WATERING MUST TAKE PLACE THROUGHOUT THE 2 YEAR PERIOD, AT LEAST 20 GALLONS AT APPROXIMATELY TWO WEEK INTERVALS FROM MAY 15 TO OCTOBER 31. CONTRACTOR MAY NEED TO INCREASE OR REDUCE THE FREQUENCY OF WATERING BASED ON WEATHER CONDITIONS, RESULTING SOIL WATER CONTENT OR OTHER FACTORS.

LANDSCAPE MAINTENANCE NOTES

1. FOR THE DURATION OF THE TWO (2) YEAR GUARANTEE PERIOD, THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL, IN ACCORDANCE WITH THE LANDSCAPE SPECIFICATIONS AND TO THE SATISFACTION OF THE CITY REPRESENTATIVE. ANY PLANT MATERIAL DETERMINED TO BE DEAD OR DYING AT THE CLOSE OF THE GUARANTEE PERIOD SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

2. AT THE COMPLETION OF THE FIRST YEAR OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL REMOVE ALL STAKES AND GUY WIRES. THIS SHALL BE DONE IN CONSULTATION WITH THE CITY REPRESENTATIVE. ALL STAKES REQUIRED TO REMAIN IN PLACE PAST THE COMPLETION OF THE FIRST YEAR OF THE GUARANTEE PERIOD SHALL BECOME THE RESPONSIBILITY OF THE OWNER.

3. FERTILIZE ALL TREES AND SHRUBS AT LEAST ONCE PER YEAR. MYCORRHIZAL FUNGI INNOCULANT SHALL BE APPLIED TO ALL TREES AND SHRUBS AT THE TIME OF PLANTING.

4. FERTILIZE ALL LAWN AREAS ONCE PER SEASON DURING THE SPRING, SUMMER, AND FALL. FERTILIZER SHALL BE A LOW PHOSPHORUS COMMERCIAL FERTILIZER, WITH A MINIMUM OF 7% NITROGEN BY WEIGHT, AS DESCRIBED IN THE LANDSCAPE SPECIFICATIONS.

5. PLANT MATERIAL SHALL BE INSPECTED FOR PEST DAMAGE AND INFESTATION AT REGULAR INTERVALS. APPLY PEST CONTROL MEASURES ACCORDING TO THE LIFE CYCLE OF THE PESTS. ALL PESTICIDES SHALL BE APPLIED BY A LICENSED PRACTITIONER.

6. SEASONAL MAINTENANCE NECESSARY TO ENSURE HEALTHY AND VIGOROUS GROWTH OF PLANT MATERIAL AND TO MAINTAIN THE APPEARANCE OF THE LANDSCAPED AREAS SHALL BE PERFORMED AS NEEDED.

7. PLANTING BEDS SHALL BE WEEDED AND EDGED AS NEEDED TO MAINTAIN A NEAT APPEARANCE AND TO PREVENT THE ESTABLISHMENT OF WEEDS.

8. ALL MULCHED AREAS SHALL BE RAKED AND MULCH SHALL BE REPLENISHED AS NEEDED EACH SPRING.

9. PRUNING OF DEAD AND DAMAGED BRANCHES SHALL BE PERFORMED EACH FALL, AND AS NEEDED FOLLOWING DAMAGE TO PLANT MATERIAL.

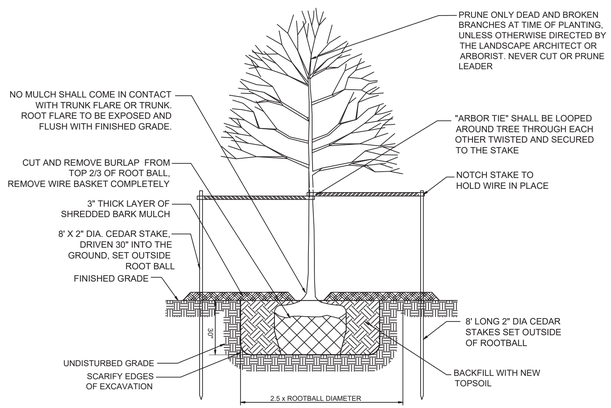
10. DEBRIS AND DEAD LEAVES SHALL BE REMOVED FROM PLANTING BEDS IN THE FALL AND EARLY SPRING.

LAWN SEED MIX

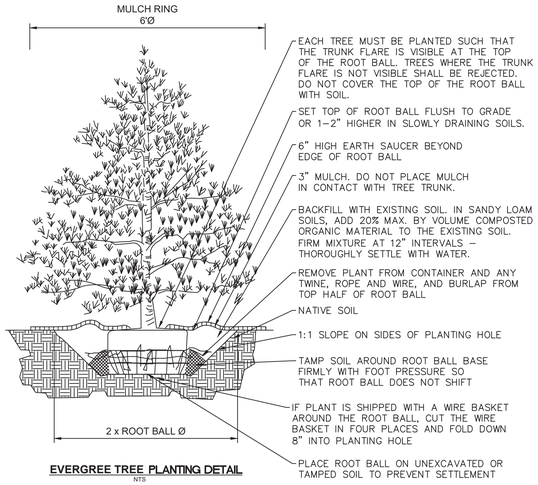
LAWN AREAS - AREAS DESIGNATED AS LAWN, OR DISTURBED AREAS NOT DESIGNATED FOR ANY OTHER PLANTING SHALL BE PERMANENTLY STABILIZED BY SEEDING WITH THE FOLLOWING SEED MIXTURE AT A RATE OF 200 LBS. / ACRE.

10% KENTUCKY BLUEGRASS - BARON MIX
20% PERENNIAL RYEGRASS
70% TURF TYPE TALL FESCUE

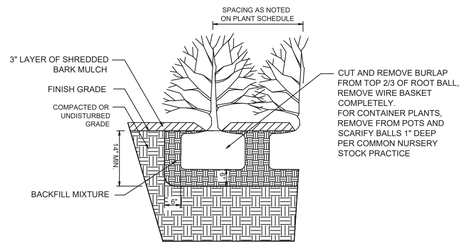
SEEDING DATES FOR THIS MIXTURE SHALL BE APRIL 1 TO JUNE 1 OR SEPTEMBER 1 TO OCTOBER 30.



SINGLE-STEM TREE PLANTING DETAIL
NTS



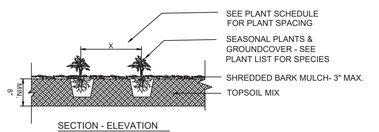
EVERGREE TREE PLANTING DETAIL
NTS



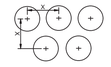
NOTES:

1. DO NOT PRUNE EVERGREEN SHRUBS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES. THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1 RETAINING NORMAL PLANT SHAPE.
2. SHRUBS SHALL BEAR THE SAME RELATIONSHIP TO GRADE AS IT BORE TO PREVIOUS GRADE IN NURSERY
3. INSTALL PHC TREE SAVER MYCORRHIZAL FUNGAL TRANSPLANT INOCULANT. INSTALL ONE 3 OUNCE PACKET PER CALIPER INCH OR PER 1 FOOT OF ROOTBALL DIA.
4. WATER PLANTS THOROUGHLY AFTER PLANTING.

SHRUB PLANTING DETAIL
NTS



SECTION - ELEVATION



PLAN

GROUNDCOVER, PERENNIALS AND ORNAMENTAL GRASSES PLANTING DETAIL
NTS

NOTES:

1. PRUNE ONLY CO–DOMINANT LEADERS, BROKEN OR DEAD BRANCHES.
2. STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
3. THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS GREATER THAN 8 FT. SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

ORIENTATION / KEY PLAN

CLIENT

PSE&G

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
3 MOUNTAINVIEW ROAD
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

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ADAM J. BOWLES, L.L.A, P.P
LICENSED LANDSCAPE ARCHITECT
N.J. LIC. NO. AS000987

SIGNATURE 07.30.2021 DATE

PROJECT

ECHELON SUBSTATION

BLOCK 519.11 , LOT 2
CHERRY HILL, CAMDEN COUNTY, NEW JERSEY

SHEET TITLE

LANDSCAPE NOTES & DETAILS

PROJECT NO.:	01315.0728	DRAWN BY:	HH
SCALE:	AS SHOWN	CHECKED BY:	AB
DATE:	07/15/2021	SHEET	2 OF 2
SHEET NO.	L-02		