GENERAL LANDSCAPE NOTES

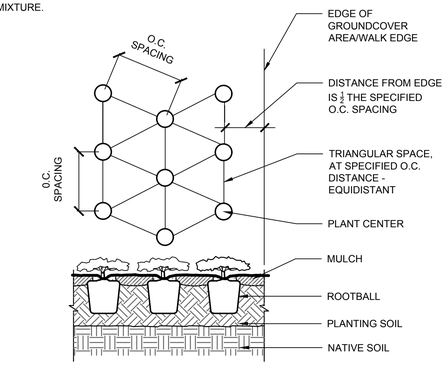
1. LANDSCAPE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID TO BECOME COMPLETELY FAMILIAR WITH SITE CONDITIONS.
2. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN IMMEDIATE AREA.
3. IT IS THE RESPONSIBILITY OF THE OWNER & CONTRACTOR TO IDENTIFY ALL UNDERGROUND CABLES, CONDUITS, WIRES, ETC., ON THE PROPERTY.
4. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETE MAINTENANCE OF THE PLANT MATERIAL (WATERING, SPRAYING, FERTILIZING, MOWING, ETC.) UNTIL THE WORK HAS BEEN ACCEPTED, BY THE OWNER.
5. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER OF PLANTS SHOWN IN THE PLANT SCHEDULE, THE NUMBER OF PLANTS SHOWN ON THE PLAN WILL TAKE PRECEDENCE.
6. ALL CONTAINER MATERIAL TO BE GROWN IN CONTAINER A MINIMUM OF 6 MONTHS.
7. ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN.
8. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
9. GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR. DECIDUOUS TREES WILL BE GUARANTEED FOR TWO CALENDAR YEARS FROM TIME OF PROVISIONAL ACCEPTANCE.
10. ALL PROPOSED PLANTS SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLANS AND SHALL BE APPROVED BY OWNERS REPRESENTATIVE BEFORE THEY ARE INSTALLED.
11. CONTRACTOR CAN SUBSTITUTE MACHINE MOVED MATERIAL USING APPROPRIATE SIZE TREE SPADE FOR B & B WITH OWNERS REPRESENTATIVE APPROVAL.
12. LANDSCAPE CONTRACTOR SHALL ENSURE THAT NEW TREES MOVED ONTO THE SITE ARE DUG FROM SIMILAR SITES WITH SIMILAR SOILS TO THE SOILS OF THIS PROJECT (HEAVY TO HEAVY, LIGHT TO LIGHT. HEAVY TO LIGHT SOILS).
13. LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE OWNER WITH MAINTENANCE INFORMATION DURING GUARANTEE PERIOD RELATING TO WATERING, FEEDING, PRUNING, PEST CONTROL, AND RELATED ITEMS. THIS WILL BE PREPARED AND DELIVERED TO OWNER AFTER PROVISIONAL INSPECTION APPROVAL HAS BEEN GIVEN BY OWNERS REPRESENTATIVE.
14. BREATHABLE SYNTHETIC FABRIC TREE WRAP: WHITE IN COLOR, IN 3 INCH WIDE ROLLS. MATERIAL SHALL BE SPECIFICALLY MANUFACTURED FOR TREE WRAPPING. TREE WRAP SHALL BE SECURED TO THE TRUNK USING BIO-DEGRADABLE TAPE SUITABLE FOR NURSERY USE AND WHICH IS EXPECTED TO DEGRADE IN SUNLIGHT IN LESS THAN 2 YEARS AFTER INSTALLATION. WRAP ALL TREES, EXCEPT HACKBERRY TREE SHALL BE PROTECTED PRIOR TO 12/1.
15. POLY EDGER UNLESS SPECIFIED OTHERWISE, SHALL BE BLACK VINYL STYLE EDGER.
16. LANDSCAPE FABRIC (FILTER MAT) TO HAVE A COMBINED WEIGHT OF 4.5-5.5 OZ. PER S.Y. FABRIC SHOULD BE U.V. STABILIZED LAND HAVE A FIVE YEAR MINIMUM WEATHERABILITY FACTOR IN FULL SUNLIGHT. FABRIC TO BE PHILLIPS DUON R OR EQUIVALENT. SAMPLE REQUIRED FOR APPROVAL.
17. ALL PLANTING AREAS SPECIFIED AS ROCK MUCH SHALL BE 1-1/2" RIVER ROCK MULCH ON SITE AND SHALL BE INSTALLED OVER LANDSCAPED FABRIC AS INDICATED ON THE PANS & DETAILS.
18. ALL TREES PLANTED INDEPENDENTLY OF SPECIFIED BEDS SHALL RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITHOUT FABRIC.
19. ALL PLANTINGS SHALL RECEIVE FERTILIZER AND APPLIED AT THE RATE INDICATED BY THE MANUFACTURER. FERTILIZER SHALL BE GENERAL PURPOSE 10-10-10.
20. DECIDUOUS SHRUBS SHALL HAVE MINIMUM OF FIVE (5) CANES AT SPECIFIED HEIGHT NOTED IN PLANT SCHEDULE.
21. IF THE CONTRACTOR FEELS AN ERROR HAS BEEN MADE REGARDING SPACING OR HARDINESS OF A SPECIES OF PLANT MATERIAL INDICATED ON THE PLAN, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
22. ALL NEWLY INSTALLED PLANT MATERIAL SHALL BE PLANTED IN WELL-DRAINED AREAS. CONTRACTOR SHALL AVOID INSTALLING ANY PLANT MATERIAL IN DRAINAGE SWALES OR WET & POORLY DRAINED AREAS.
23. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ALL TREE STAKES, GUYS, STRAPS AND TRUNK PROTECTION MEASURES FOLLOWING THE COMPLETION OF THE WARRANTEE PERIOD OR AS DIRECTED BY THE OWNER.
24. THE PRACTICE OF STAKING SHOULD NOT ALLOW NAILS, SCREWS, WIRES, ETC. TO PENETRATE THE OUTER SURFACE OF THE TREES.
25. THE CONTRACTOR SHALL MEET WITH THE OWNER ON SITE WHEN THEY FEEL THE PROJECT IS COMPLETE ACCORDING TO THE CONTRACT DOCUMENTS. IF ALL WORK IS SATISFACTORY AND COMPLETE ACCORDING TO THE CONDITIONS OF THE CONTRACT DOCUMENTS, THEN THE OWNER MUST DECLARE THE PROJECT COMPLETE. THIS DECLARATION WILL CONSTITUTE AS THE BEGINNING OF THE WARRANTEE PERIOD FOR ALL PLANT MATERIAL. THE OWNER SHALL PROVIDE A LETTER WITH SIGNATURE STATING THE DATE OF ACCEPTANCE.

IRRIGATION NOTES

1. PRIOR TO CONSTRUCTION, VERIFY WITH THE GENERAL CONTRACTOR AND ALL LOCAL UTILITY COMPANIES TO LOCATE EXACT LOCATIONS OF UNDERGROUND UTILITIES.
2. THE IRRIGATION SHALL BE DESIGN/BUILD SYSTEM BY THE CONTRACTOR. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATIONS AS PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE OWNER PRIOR TO ORDER AND/OR INSTALLATION.
3. VALVE AND CIRCUITS SHALL BE SEPARATED BASED ON WATER USE, SO THAT TURF AREAS ARE WATERED SEPARATELY FROM SHRUB AND GROUND COVER AREAS. IRRIGATION HEADS IN TURF AREAS SHALL BE VALVED SPEARATELY FROM SHRUB AMD GROUND COVER AREAS. IT IS RECOMMENDED THAT FULL SUN AND SHADY AREAS TO BE VALVED SEPARATELY AS WELL AS HIGH RUN-OFF AND LOW RUN-OFF AREAS TO BE VALVED SEPARATELY.
4. CONFIRM LIMITS OF IRRIGATION, EXISTING AND FUTURE HARDSCAPE AND BUILDING LOCATIONS PRIOR TO THE DESIGN OF THE IRRIGATION SYSTEM.
5. CONTRACTOR SHALL VERIFY WATER SOURCE LOCATION AND PRESSURE AND SUPPLY A SYSTEM THAT PROVIDES FULL AND COMPLETE COVERAGE TO ALL AREAS TO BE IRRIGATED.
6. SYSTEM SHOULD BE DESIGNED TO COMPLETE WATER SCHEDULES WITHIN 12-HOURS MAXIMUM.
7. RAIN SENSORS AND OTHER WATER SAVING TECHNOLOGIES SHALL BE INCLUDED WITHIN THE IRRIGATION DESIGN.
8. PROVIDE THE OWNER WITH AN OPERATING SCHEDULE THAT WORKS WITH THE APPROVED LAYOUT PLAN AND IDENTIFY ANY FIELD ADJUSTMENTS PRIOR TO PROJECT COMPLETION.
9. AVOID OVER-SPRAY ONTO ROADS, SIDEWALKS, SIGNS AND PARKING AREAS. SPRINKLER ARCS SHALL BE DETERMINED ON SITE BY THE IRRIGATION INSTALLER TO PROVIDE THE MAXIMUM COVERAGE POSSIBLE. CAREFULLY ADJUST THE ARCS AND RADIUS OF EACH SPRINKLER TO PROVIDE HEAD-TO-HEAD COVERAGE.
10. WITHIN EXTREME SLOPED AREAS:
    - 10.1. INSTALL STATIONS SEPARATELY FOR TOP AND BOTTOM OF SLOPED AREAS
    - 10.2. INSTALL LATERAL PIPES PARALLEL TO SLOPE
    - 10.3. IF SLOPE IS TOO EXTREME FOR MACHINERY, INSTALL LATERAL PIPES SAFELY AND TEE-FEED INDIVIDUAL SPRINKLERS VIA DOWNHILL PIPING PERPENDICULAR TO FEED LINE
11. LOCATE VALVE BOXES AWAY FROM ROAD/CURB SO THEY ARE LESS VISUAL WHERE APPLICABLE.
12. DO NOT TRENCH THROUGH THE ROOT BALLS OF NEW PLANTINGS.
13. MAINLINE PIPING BENEATH TRAFFIC AREAS SHALL BE INSTALLED WITH A MINIMUM EARTH COVER OF 30-INCHES FROM BOTTOM OF ROAD SUB-GRADE AND CONTAIN SLEEVES NOT LESS THAN TWO NOMINAL DIMENSIONS GREATER THAT THE PIPE PASSING THROUGH.
14. IRRIGATION INSTALLER SHALL FURNISH AND INSTALL SLEEVE MATERIAL UNDER ALL ROADWAYS, WALKS AND DRIVEWAYS WHERE NECESSARY.
15. TOP OF MAINLINES SHALL BE AT LEAST 30-INCHES BELOW GRADE IN TURF AREAS.
16. TOP OF LATERAL LINES SHALL BE AT LEAST 18-INCHES BELOW GRADE.
17. MAINLINE PRESSURE PIPE FITTINGS 3-INCHES AND LARGER SHALL BE PUSH ON GASKET JOINED AND SHALL HAVE MECHANICAL JOINT RESTRAINTS. MAINLINE PRESSURE PIPE FITTINGS 2.5-INCHES AND SMALLER SHALL BE GLUED AND SHALL HAVE CONCRETE THRUST BLOCKS AT FITTINGS THAT COMPRISE CHANGE IN DIRECTION.
18. OTHERS SHALL FURNISH, INSTALL AND BRING 24-INCHES ABOVE GRADE A MUNICIPAL POTABLE STUB FOR IRRGATION, COORDINATE WITH GENERAL CONTRACTOR.
19. INSTALLER IS RESPONSIBLE FOR FURNISHING AND INSTALLING THE BACKFLOW PREVENTOR, WATER METER AND BOOSTER PUMP, IF APPLICABLE.
20. IRRIGATION CONTROL WIRE SHALL BE DIGITAL TWO-WIRE, UL LISTED FOR DIRECT BURIAL.
21. CONNECT ALL ELECTRICAL WIRING IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL ELECTRIC UTILITY CODES INCLUDING:
    - 21.1. ALL LOW VOLTAGE IRRIGATION CONTROL WIRE SHALL BE INSTALLED WITH THE MAINLINE PIPE WHERE POSSIBLE
    - 21.2. DO NOT LOOP THE LOW VOLTAGE IRRIGATION CONTROL WIRE PATH.
    - 21.3. SNAKE WIRE AT BOTTOM OF TRENCH BENEATH MAINLINE.
    - 21.4. PROVIDE 18-INCH OF SLACK CONTROL WIRE AT ALL CHANGES IN DIRECTION.
    - 21.5. PROVIDE 24-INCH OF SLACK CONTROL WIRE AT EACH REMOTE CONTROL VALVE COILED INSIDE VALVE BOX.
    - 21.6. ALL WIRE SPLICES SHALL BE WATERTIGHT CONNECTORS AND CONTAINED IN VALVE BOX.
    - 21.7. ALL WIRING BENEATH HARDSCAPES SHALL BE CONTAINED IN SLEEVING, SEPARATE FROM PIPING. ELECTRICAL SLEEVES ARE TO BE SIZED APPROPRIATELY FOR EASE OF WIRE INSTALLATION AND REPAIR.
    - 21.8. ALL WIRING SHALL BE INDENTIFIED AT EACH END TO PROVIDE INDICATION AS TO WHICH LOCATION THE WIRE IS CONNECTED.
    - 21.9. GROUNDING PER MANUFACTURER'S RECOMMENDATION OR LOCAL ELECTRICAL CODE.
22. SCHEDULE AND PROGRAM CONTROLLER AND VALVES FOR APPROPRIATE LANDSCAPE WATER REQUIREMENTS.

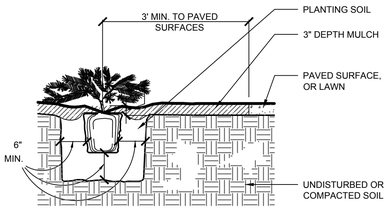
GENERAL SODDING, SEEDING & TOPSOIL NOTES

1. SOD SHALL BE HIGHLAND SOD, 30" X 100' ROLLS PREFERRED WHERE APPLICABLE, TO BE LAID PARALLEL TO THE CONTOURS AND HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR DRAINAGE SWALES, THE SOD SHALL BE STAKED INTO THE GROUND. SCARIFY THE EXISTING GRADES WITH FIELD CULTIVATOR TO A MIN. DEPTH OF 12" PRIOR TO PLACING OF TOPSOIL AND FINISH GRADING FOR SOD. IMMEDIATELY PRIOR TO PLACING SOD, CONTRACTOR SHALL APPLY 10-6-4 FERTILIZER AT THE RATE OF 10 POUNDS PER 1000 SQ. FT.
2. PLANTING SOIL REQUIRED: MIXTURE TO INCLUDE 45% TOPSOIL, 45% PEAT OR MANURE AND 10% SAND. ALL TREE, SHRUB AND PERENNIAL PLANTINGS SHALL RECEIVE 8" DEPTH OF PLANTING SOIL MIXTURE. ALL SODDED AREAS TO RECEIVE 4" DEPTH OF PLANTING SOIL MIXTURE. ALL SEEDED AREAS TO RECEIVE 2" DEPTH OF PLANTING SOIL MIXTURE.
3. ALL AREAS SPECIFIED AS "MNDOT 25-131" TO BE SEEDED PER MNDOT RECOMMENDED APPLICATION RATES AND METHODS. "MNDOT 25-131" OR APPROVED EQUAL IS A BASIS OF DESIGN. CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL NEEDS TO ESTABLISH VIGOROUS GROWTH PER MNDOT 2014 SEEDING MANUAL STANDARDS.



NOTE:
- KEEP MULCH APPX. 2" OFF PLANT TRUNK OR STEM
- SEE PLANT SCHEDULE FOR EACH PLANT'S APPROPRIATE O.C. SPACING

1 SHRUB BED SPACING (TYP.)
SCALE: N.T.S.



2 EVERGREEN SHRUB PLANTING (TYP.)
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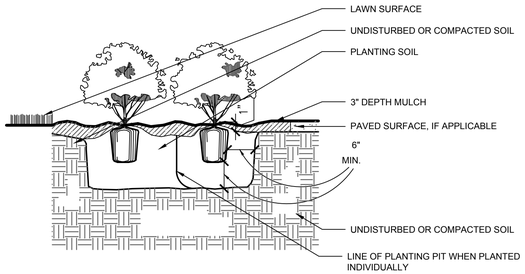

3 DECIDUOUS SHRUB PLANTING (TYP.)
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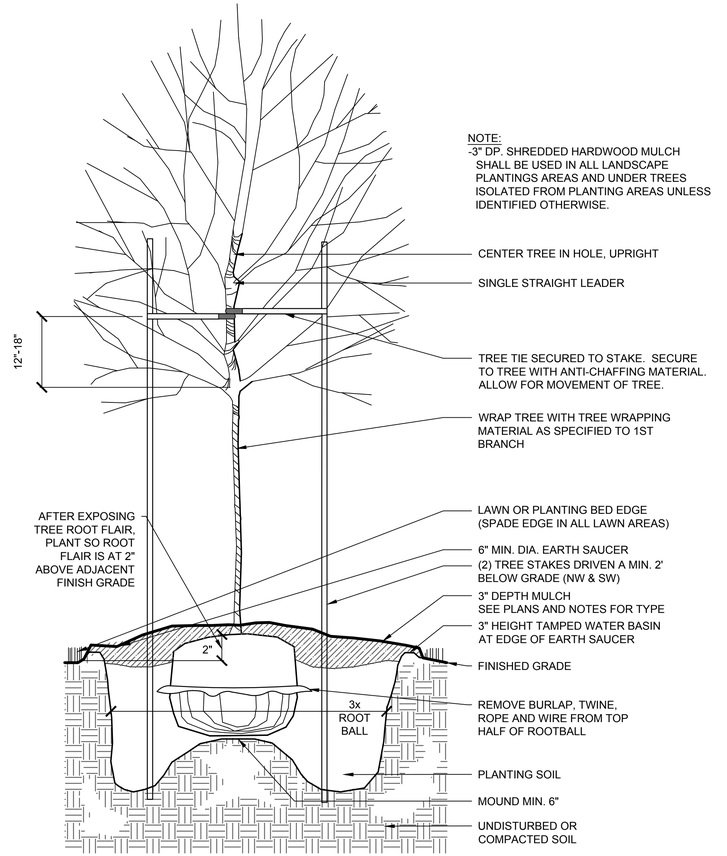
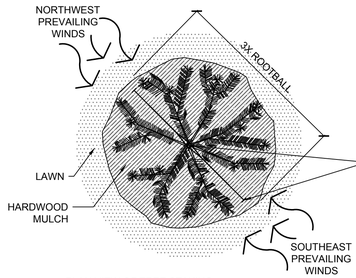
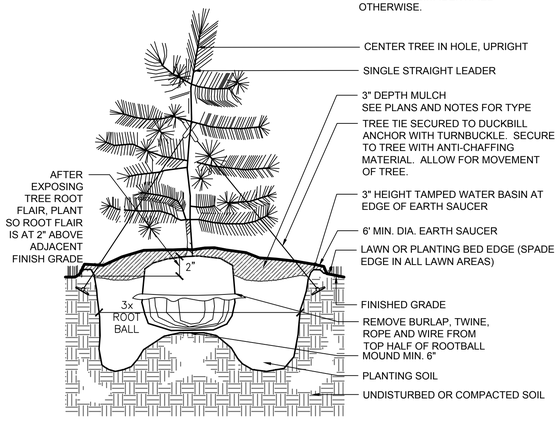


4 DECIDUOUS TREE PLANTING (TYP.)
SCALE: N.T.S.



PLAN VIEW OF TREE STAKING
NOT TO SCALE

NOTE:
-3" DP. SHREDDED HARDWOOD MULCH SHALL BE USED IN ALL LANDSCAPE PLANTINGS AREAS AND UNDER TREES ISOLATED FROM PLANTING AREAS UNLESS IDENTIFIED OTHERWISE.



5 EVERGREEN TREE PLANTING (TYP.)
SCALE: N.T.S.

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DELTA MODTECH

NEW BUILDING
RAMSEY, MINNESOTA

KINGHORN

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DEREK J. SEIFERT, PLA

SIGNATURE: NOT FOR CONSTRUCTION

DATE: 05/02/2019 LICENSE NO. 56013

REVISION LOG

NO.	DATE	DESCRIPTION OF REVISIONS

PRELIMINARY PLAT
MAY 2, 2019

DESIGNED:	DRAWN:	CHECKED BY:
DS	JF	DS

DRAWING TITLE

PLANTING NOTES & DETAILS

DRAWING NO.

L3

PLOTTED:	COMM. NO.
----	15358

May 02, 2019 - 11:53am dseifert Y:\15300\15358 KINGHORN CONSTR - DELTA MOD TECH - RAMSEY MN_07 Civil_01 CAD files_01 SHEETS\L_LANDSCAPE.dwg
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