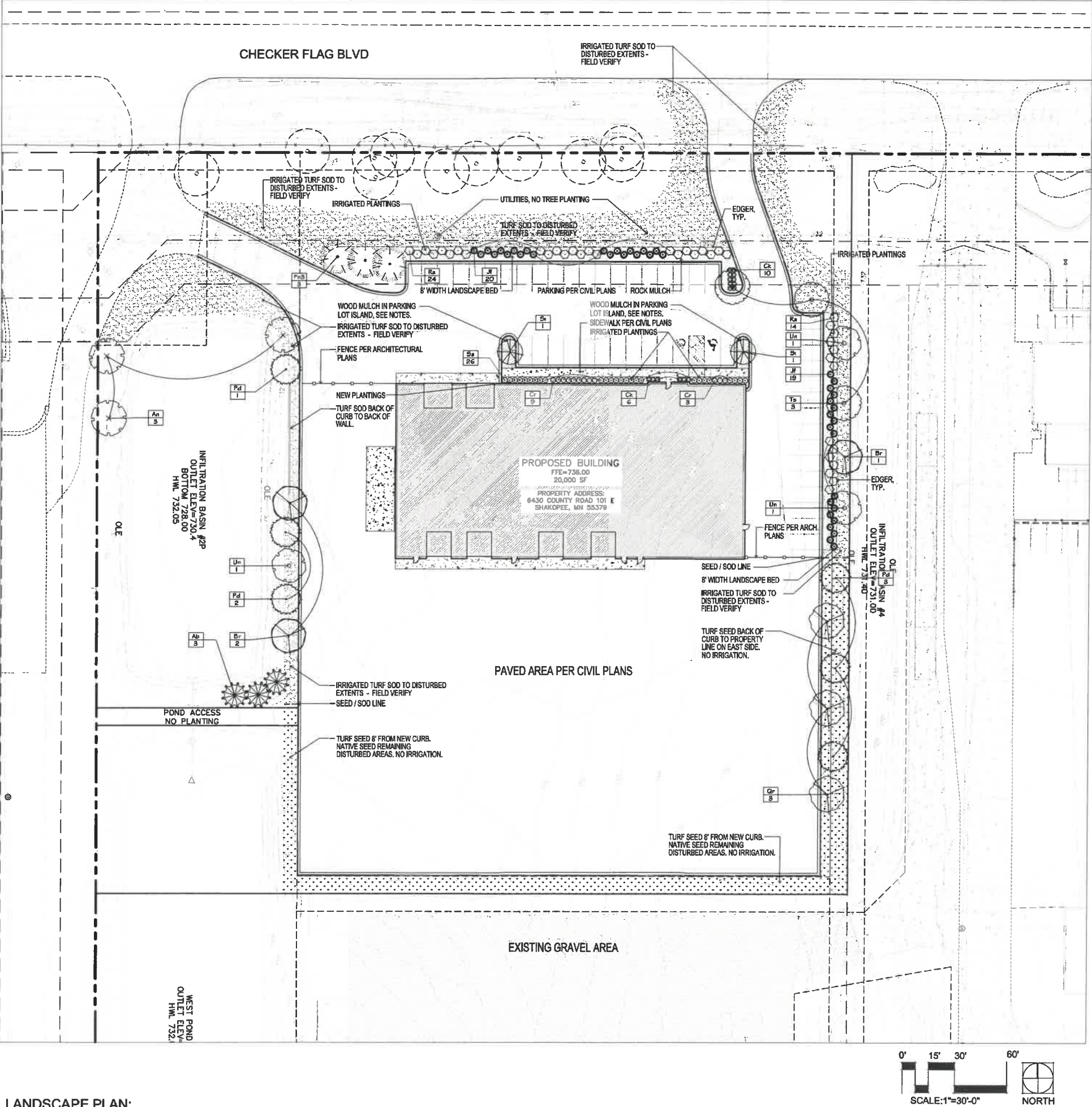




Municipal Landscape Requirements:

Number of Landscape Trees Required:	
Building Footprint Area 20,000 SF Building: 2 + (10 X 1.5)	17
Parking Spaces 1 Tree Per 10 Park Spaces: 35 / 10	4
Total Impervious 84,196 / 4,000	21
Total Trees	42
Preserved Tree Credit	
81 Tree Credits; 30% Less Requirement (42 * .30)	13
Total New Trees Required	29
Total New Trees Proposed	29

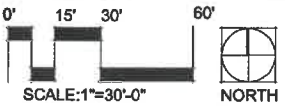
Symbols Legend:

	EXISTING TREE TO REMAIN		ROCK MULCH
	TURF SOD (IRRIGATED)		WOOD MULCH
	TURF SEED (NO IRRIGATION)		

PRELIMINARY



- General Notes:**
- See Sheet L1.0 for Tree Preservation Plan and Sheet L3.0 for Landscape Details & Notes.
 - See Civil Engineer's plans for grading layout and requirements
 - Contractor to coordinate any work in the right-of-way with City of Shakopee Public Works Department.
 - Sod all disturbed areas except plant beds and areas noted to receive turf sod.
 - Place a minimum of 6" imported topsoil on all areas disturbed by construction, including right-of-way boulevards, unless specified otherwise.
 - Trim existing trees to remain that have branches over-hanging the work zone. Engage a certified arborist to perform tree trimming.
 - See Civil Engineer's plans for seeding and erosion control requirements.



LANDSCAPE PLAN:

See Sheet L3.0 for Planting Details, Notes, and Requirements

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EMULSION ESTATES LLC

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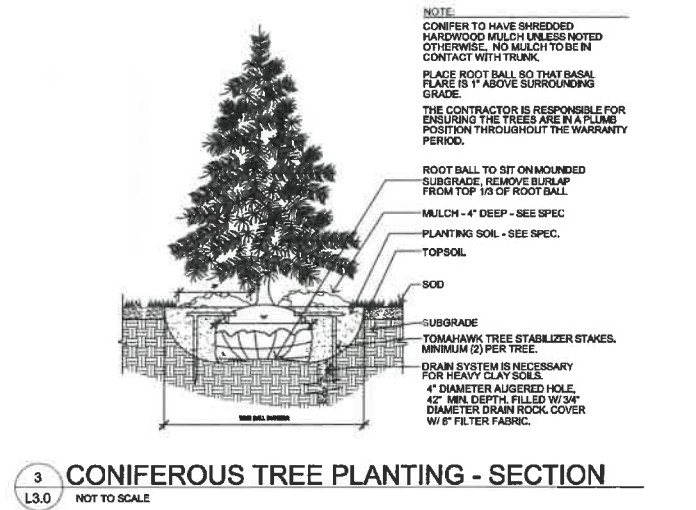
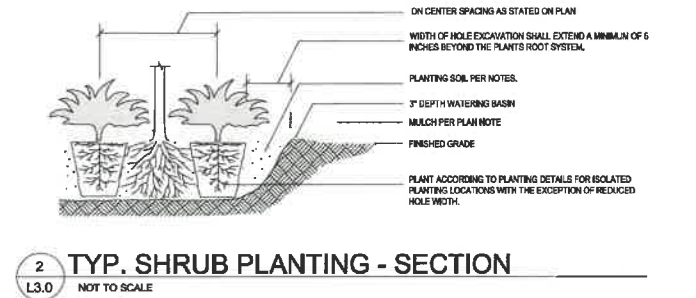
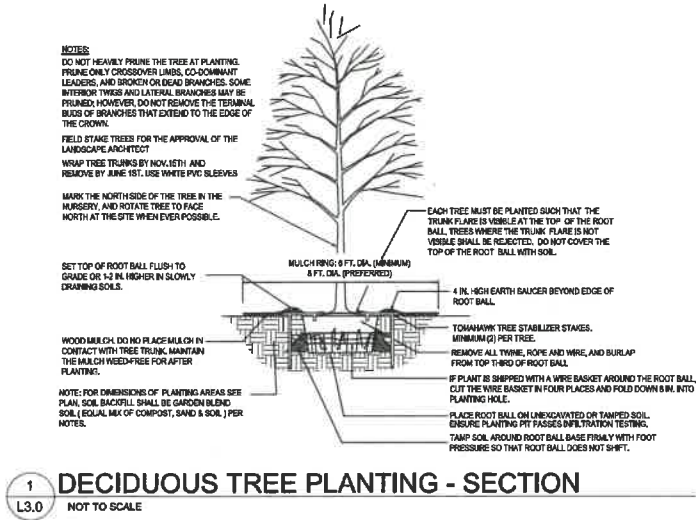
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed LANDSCAPE ARCHITECT under the laws of the State of MINNESOTA.

Date: _____ Reg. No. _____

REVIEW SET	5-7-19
CITY SUBMITTAL	5-14-19
REVIEW SET	6-25-19
REVIEW SET	7-01-19
JOB#	19-134
DATE	6-25-19
DRAWN	BH
CHECKED	MF

LANDSCAPE PLAN L2.0



General Notes:

- See Sheet L1.0 for Tree Preservation Plan and Sheet L2.0 for Landscape Plan.
- See Civil Engineer's plans for grading layout and requirements
- Contractor to coordinate any work in the right-of-way with City of Shakopee Public Works Department.
- Sod all disturbed areas except plant beds and areas noted to receive turf sod.
- Place a minimum of 6" imported topsoil on all areas disturbed by construction, including right-of-way boulevards, unless specified otherwise.
- Trim existing trees to remain that have branches over-hanging the work zone. Engage a certified arborist to perform tree trimming.
- See Civil Engineer's plans for seeding and erosion control requirements.

Landscape Notes:

- Tree saucer mulch to be four inches (4") depth natural single-shred hardwood mulch for trees outside of a plant bed. Install per tree planting detail.
- Refer to civil plan sheets for grading, drainage, site dimensions, survey, tree removal, proposed utilities & erosion control.
- All plant material shall comply with the latest edition of the American Standard for Nursery Stock, American Association of Nurserymen. Unless noted otherwise, deciduous shrubs shall have at least 5 canes at the specified shrub height. Plant material shall be delivered as specified.
- Plan takes precedence over plant schedule if discrepancies in quantities exist.
- All proposed plants shall be located and staked as shown.
- Adjustment in location of proposed plant material may be needed in field. Should an adjustment be required, the client will provide field approval. Significant changes may require city review and approval.
- The project landscape contractor shall be held responsible for watering and properly handling all plant materials brought on the site both before and after installation. Schedule plant deliveries to coincide with expected installation time within 36 hours.
- All plant materials shall be fertilized upon installation as specified.

9. The landscape contractor shall provide the owner with a watering schedule appropriate to the project site conditions and to plant material growth requirements.

10. If the landscape contractor is concerned or perceives any deficiencies in the plant selections, soil conditions, drainage or any other site condition that might negatively affect plant establishment, survival or guarantee, they must bring these deficiencies to the attention of the landscape architect & client prior to bid submission. Plant bed drainage concerns during plant installation shall be brought to the attention of the Owner and General Contractor immediately.

11. Contractor shall establish to his/ her satisfaction that soil and compaction conditions are adequate to allow for proper drainage at and around the building site.

12. Contractor is responsible for ongoing maintenance of all newly installed material until time of owner acceptance. Any acts of vandalism or damage which may occur prior to owner acceptance shall be the responsibility of the contractor. Contractor shall provide the owner with a maintenance program including, but not limited to, pruning, fertilization and disease/pest control.

13. The contractor shall guarantee newly planted material through one calendar year from the date of written owner acceptance. Plants that exhibit more than 10% die-back damage shall be replaced at no additional cost to the owner. The contractor shall also provide adequate watering, tree trunk wrap, and deer/rodent protection measures for the plantings during the warranty period.

14. This layout plan constitutes our understanding of the landscape requirements listed in the ordinance. Changes and modifications may be requested by the city based on applicant information, public input, council decisions, etc.

15. The landscape contractor shall be responsible for obtaining any permits and coordinating inspections as required throughout the work process.

16. Plant size & species substitutions must be approved in writing prior to acceptance in the field.

17. Landscape contractor to bid irrigation into new landscape areas identified on landscape plan. Coordinate sleeving under paved areas with paving and earthwork sub-contractors. New turf seed areas are not to be irrigated. New turf sod areas are to be irrigated.

18. All edger shall be 5.5" depth, 1" bullnose, professional grade black polyvinyl. Valley View or similar. Anchor every 24" on-center. Submit sample.

19. Landscape Contractor is responsible for coordination with the General Contractor, to protect the new improvements on and off-site during landscape work activities. Report any damage to the General Contractor immediately.

20. Wood mulch (where identified on landscape plan) shall receive 4" depth single-shred hardwood mulch over fabric weed mat, per detail. Submit mulch sample for Owner approval. Do not install weed mat under perennials, with the exception of ornamental grasses. Install mulch 1" below back of curbs or walks to prevent spill-over. Coordinate finish grade with earthwork contractor.

21. Rock mulch (where identified on landscape plan) to be 3/4-1 dia. inch river rock, locally available. Install over free-draining weed mat. Submit mulch samples for approval.

22. All planting and sodded areas shall be prepared prior to installation activities with a harley power box rake or equal to provide a firm planting bed free of stones, sticks, construction debris, etc.

23. Turf sod/seed installation activity shall conform to all rules and regulations as established in the MnDOT Seeding Manual, 2014 edition, for turf bed preparation, installation, maintenance, and warranty.

24. The Landscape Contractor shall furnish samples of all landscape materials for approval prior to installation.

25. The Landscape Contractor shall clear and grub the underbrush from within the work limits to remove dead branches, leaves, trash, weeds and foreign materials. Remove trees where noted on the plan, including the stump to 30" below grade.

26. The landscape contractor shall contact Gopher State One Call no less than 48 hours before digging for field utility locations.

27. The landscape contractor shall be responsible for the removal of erosion control measures once vegetation has been established to the satisfaction of the municipal staff. This includes silt curtain fencing and sediment logs placed in the landscape.

28. The landscape contractor shall be responsible for visiting the site to become familiar with the conditions prior to bidding and installation. Coordinate with the general contractors on matters such as fine grading, landscaped area conditions, staging areas, irrigation connection to building, etc.

29. See Site and Civil plans for grading, utilities, and additional information regarding the project.

30. Topsoil Requirements: All graded areas of the site that are designated on the plans set for turf sod or seed shall have no less than 6" of imported top soil. Areas designated for shrubs, trees, and perennials shall have no less than 12" of imported top soil, meeting MnDOT classifications for planting soil for trees, shrubs, and turf. Slope away from building.

31. Landscape contractor must prove the open sub-grade of all planting areas after their excavation is capable of infiltrating a minimum requirement of 1/4-inch of water per hour prior to installation of plant materials, topsoil, irrigation, weed mat, and mulch. Planting areas not capable of meeting this requirement shall have 4" diameter X 48" depth holes augured every 36" on-center and filled with MnDOT Free-Draining Coarse Filter Aggregate. Re-test sub-grade percolation for compliance to infiltration minimum requirement.

32. Fencing per Architect's Plans and Specifications.

33. Landscape contractor shall coordinate tree removal activities and ensure all trees designated for removal are gone before start of landscape installation. Grind stump to 30" below grade and back-fill with compacted topsoil.

34. All disturbed areas are to receive turf sod or seed to establish final vegetation.

35. No planting or irrigation work in the MnDOT Right-Of-Way.

36. Unless otherwise noted on civil engineer's plans, new retaining walls to be County Materials 'County Block' in Traditional Split Face Gray. Structural engineering by modular block manufacturer. Wall permit by General Contractor. Submit engineered wall drawings for Civil Engineer and Landscape Architect's review.

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
	Ab	Abies balsamea	Balsam Fir	6' Hgt.	B&B	3
	An	Acer rubrum 'Northwood'	Northwood Maple	2.5" Cal.	B&B	3
	Br	Betula nigra Clump Form	River Birch	6' Hgt.	B&B	3
	Pd	Picea glauca 'Densata'	Black Hills Spruce	6' Hgt.	B&B	6
	Pn3	Pinus nigra	Austrian Pine	6' Hgt.	B&B	3
	Qr	Quercus rubra Spring Dug	Northern Red Oak	2.5" Cal.	B&B	3
	Sl	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2.5" Cal.	B&B	2
	Ts	Tilia americana 'Sentry'	Sentry Linden	2.5" Cal.	B&B	3
	Un	Ulmus	New Horizon Elm	2.5" Cal.	B&B	3
SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
	Ck	Calamagrostis x acutiflora 'Karl Foerster'	Feather Reed Grass	2 gal.	Pot	16
	Cr	Cornus alba 'Regnum'	Red Gnome Dogwood	3 gal.	Pot	12
	Jf	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal.	Pot	39
	Ra	Ribes alpinum	Alpine Currant	5 gal.	Pot	38
	Sa	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spiraea	3 gal.	Pot	26
GROUND COVERS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
	Pa	Poa pratensis 'Admiral'	Kentucky Bluegrass	sod		15,639 sf

Areas designated as Turf Seed (unless otherwise noted on civil plans), shall be: MnDOT #25-151 seed mixture, drilled into the topsoil layer at 120 lbs per acre. Submit seed mix for approval. Grading and Erosion Control per Civil Plans and Specifications.

25-151		High Maintenance Turf			
Common Name	Scientific Name	Rate (lb/ac)	Rate (kg/ha)	% of Mix (by weight)	Seeds/ sq ft
Elite Kentucky bluegrass	<i>Poa pratensis Elite</i>	30.00	33.63	25.00%	957.30
Low Maintenance Kentucky bluegrass	<i>Poa pratensis Low Maintenance</i>	30.00	33.63	25.00%	957.30
Park Kentucky bluegrass	<i>Poa pratensis Park</i>	30.00	33.63	25.00%	957.30
Perennial Ryegrass	<i>Lolium perenne</i>	20.40	22.87	17.00%	101.65
red fescue	<i>Festuca rubra</i>	9.60	10.76	8.00%	100.10
Total		120.00	134.50	100.00%	3073.65
Purpose:	Conventional turfgrass. Not salt, shade or drought tolerant. Requires more mowing, fertilizer and water than the low maintenance turf mix.				
Planting Area:	Statewide				
Combine all components when blending this mix.					

Seeding Installation Method:

Seeding Installation Method:

Seeding Methods

Method 1. Drop Seeding Onto Tilled Sites
This is the "standard" method for seeding on prepared sites such as those on construction projects.

- Site Preparation - The site should be prepared by loosening topsoil to a minimum depth of 3 inches.
- Fertilizer - Use a fertilizer analysis based on a soil test or a general recommendation is a 10-10-10 (NPK) commercial grade analysis at 200 lbs/acre.
- Seed Installation - Seed should be installed with a drop seeder that will accurately meter the types of seed to be planted, keep all seeds uniformly mixed during the seeding and contain drop seed tubes for seed placement (Billion-type). The drop seeder should be equipped with a cutpacker assembly to ensure seed-to-soil contact.
- Seeding Rates - Rates are specified in the mixture tabulation for the specified mix.
- Packing - If the drop seeder is not equipped with a cutpacker, the site should be cutpacked following the seeding to ensure seed-to-soil contact.
- Mulch - The site should be mulched and disc-anchored following cutpacking. The standard mulch is MnDOT Type 1 at a rate of 2.0 tons/acre. Also see temporary erosion control for additional information.

PROJECT:

EMULSION ESTATES LLC



ARCHITECT:



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LANDSCAPE DETAILS L3.0

See Sheet L2.0 for Landscape Plan

