CONTEXTUAL DESIGN & ALTERNATIVE ANALYSIS

CENTRAL SIOUX FALLS GREEN INFRASTRUCTURE

This plan, undertaken by ISG in 2021 was prepared exclusively for the City of Sioux Falls, SD.
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EXISTING SITE PHOTOS

W 35TH ST & S DULUTH AVE

W 28TH STREET & SOUTH COVELL ST
EXISTING CONDITIONS - W 28TH S & S COVELL AVE

» 54570 Square Feet
» 125 Acres
EXISTING CONDITIONS - W 35TH ST & S DULUTH AVE

» 28638 Square Feet
» 0.6 Acres
Covell Ave From 28th to 29th:

» Create a large bioswale with the feel of a rain garden.
» Provides as much capacity for infiltration/ percolation in subsurface as possible.
» Create a walkway through the property.

35th and Duluth Avenue:

» Ideal to incorporate grassed swales in combination with infiltration basins.
» Want to create a tree grove on property as well.
PRECEDENT IMAGERY
OPTION ONE

LIMESTONE STEP DOWN AREA
PATHWAY NODE W/LIMESTONE SEATING BLOCK
WETLAND COMMUNITY OVERSTORY TREE (TYP)
TURF GRASS (TYP)
MODIFIED SOIL
6” PERM UNDERDRAIN (TYP)
NATIVE GRASSES
VEGETATION SCREEN
CONNECTION TO LOCAL STORM
OPTION TWO

LIMESTONE STEP DOWN AREA
PATHWAY NODE W/LIMESTONE SEATING BLOCK
WETLAND COMMUNITY OVERSTORY TREE (TYP)
TURF GRASS (TYP)
MODIFIED SOIL
6" PERM UNDERDRAIN (TYP)
NATIVE GRASSES
VEGETATION SCREEN
CONNECTION TO LOCAL STORM
**GYMNOCALYCS DIOICUS**
**KENTUCKY COFFEETREE**
Drought resistant. Tolerant of pollution. Adaptable to a variety of soils. With its reputation as a tough species, the Kentucky coffeetree is an excellent choice for parks, golf courses, and other large areas. It is also widely used as an ornamental or street tree. Reaches 60’ - 75’ tall and 40’-50’ wide at maturity.

**SYCAMORE TREE**
**PLANTACEAE**
The sycamore is a grand, stately shade tree for a larger site. It has broad green leaves but is most recognizable by its peeling bark, with patches of white and gray. Sycamores have very high wildlife value and grow 75’ - 100’ tall and 50’ - 70’ wide.

**POPLUS TREMULOIDES**
**QUAKING ASPEN**
This fast-growing native tree has beautiful silvery fray bark and leaves that ‘tremble’ in windy conditions due to the flat leaf stalk. Reaches 40’ - 50’ tall and 20’ - 30’ wide at maturity.

**PINE STORBUS**
**EASTERN WHITE PINE**
Is a hardy, valuable tree. With clustered soft blue-green needles, ideal screen or windbreak. Eastern white pine likes moist, well-drained soils. Grows to 50’-80’ tall and 20’-40’ at maturity.

**JUNIPERUS VIRGINIA ‘GREY OWL’**
**GREY OWL JUNIPER**
A finely textured shrub with arching branches clothed in soft, silver gray foliage. Very effective planted en masse, as a tall groundcover or low growing hedge. Reaches 3’ tall and 6’ wide at maturity.

**PICEA GLAUCA VAR. DENS**
**BLACK HILLS SPRUCE**
Black hills spruce is a large evergreen with a central trunk and dense, ascending, lateral branches from the ground up that form a broad pyramidal to conical crown. The needles are individually attached, and foliage color varies from deep green to blue green. Black hills spruce reaches 30’ - 60’ tall and 15’ - 25’ width at maturity.

**AESCULUS GLABRA**
**OHIO BUCKEYE**
This is a neatly wounded tree with low branches and dense foliage that provides deep shade. It is one of the first tree to leaf out in the spring. Reaches 20’ - 40’ in height and 20’ - 40’ in width at maturity.

**POA PRATENSIS**
**KENTUCKY BLUEGRASS**
Kentucky bluegrass is a smooth meadow-grass, or common meadow-grass, and spreads all over the cool and humid parts of the United States.

**SPOROBOLUS HETEROLEPIS**
**PRAIRIE DROPSEED**
A fine-textured grass for the landscape with tall, slender stalks that display airy, remarkably fragrant, late summer panicles. Dense, moundeed foliage turns deep copper-gold in fall. Attractive accent, or easy care ground cover, if planted in mass. Long-lived and trouble free. Rarely self-seeds. Deciduous. 2’ - 4’ tall and 2’ wide.

**POA PRATENSIS**
**KENTUCKY BLUEGRASS**
Kentucky bluegrass is a smooth meadow-grass, or common meadow-grass, and spreads all over the cool and humid parts of the United States.
GREEN BULRUSH
Commonly found in moist to wet soils including shallow standing water in full sun to part shade. Prefers some light shade in hot summer climates. In large water gardens, it may be grown in submerged containers. May also be planted in the mud at the summer climates. In large water gardens, it may be grown in water in full sun to part shade. Prefers some light shade in hot summer climates. In large water gardens, it may be grown in water in full sun to part shade. Prefers some light shade in hot summer climates. In large water gardens, it may be grown in water in full sun to part shade. Prefers some light shade in hot summer climates. In large water gardens, it may be grown in water in full sun to part shade. Prefers some light shade in hot summer climates. In large water gardens, it may be grown in water in full sun to part shade. Prefers some light shade in hot summer climates. In large water gardens, it may be grown in water in full sun to part shade. 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