

PAVING PLAN QUANTITIES

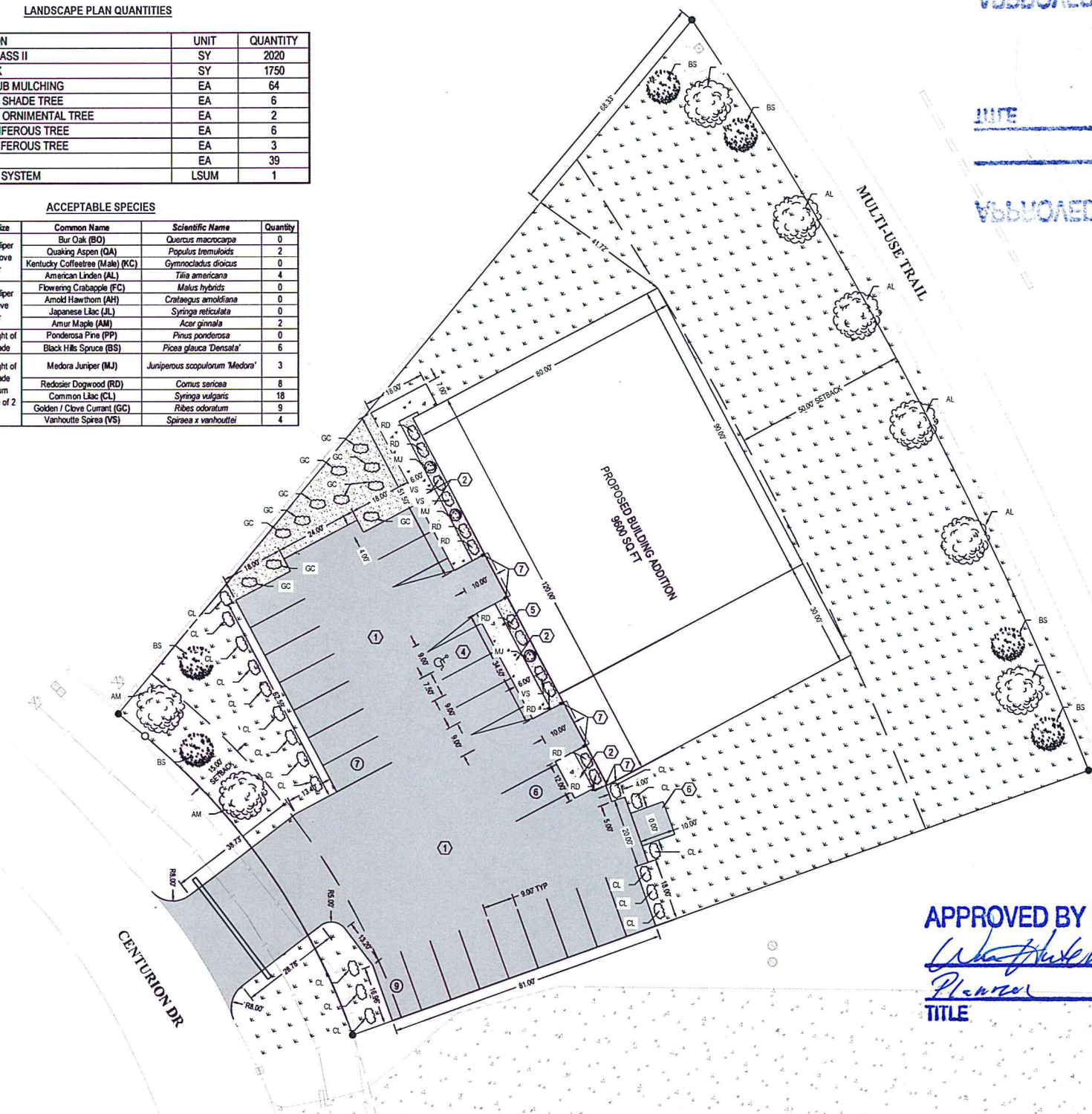
ITEM	DESCRIPTION	UNIT	QUANTITY
1	6-IN CONCRETE	SY	1256
2	4-IN SIDEWALK CONCRETE	SY	75
3	CLASS 5 AGGREGATE BASE COURSE	CY	220
4	12-IN SCARIFY & RECOMPACT SUBGRADE	SY	1331
5	STRIPING & SIGNING	L SUM	1

LANDSCAPE PLAN QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
1	SEEDING CLASS II	SY	2020
2	RIVER ROCK	SY	1750
3	TREE / SHRUB MULCHING	EA	64
4	DECIDUOUS SHADE TREE	EA	6
5	DECIDUOUS ORNAMENTAL TREE	EA	2
6	LARGE CONIFEROUS TREE	EA	6
7	SMALL CONIFEROUS TREE	EA	3
8	SHRUB	EA	39
9	IRRIGATION SYSTEM	LSUM	1

ACCEPTABLE SPECIES

Legend Type	Minimum Size	Common Name	Scientific Name	Quantity
Deciduous Shade Tree	Minimum Caliper 1.5" at 6" above root collar	Bur Oak (BO)	<i>Quercus macrocarpa</i>	0
		Quaking Aspen (QA)	<i>Populus tremuloides</i>	2
		Kentucky Coffeetree (Male) (KC)	<i>Gymnocladia dioica</i>	0
		American Linden (AL)	<i>Tilia americana</i>	4
Deciduous Ornamental Tree	Minimum Caliper 1" at 6" above root collar	Flowering Crabapple (FC)	<i>Malus hybrids</i>	0
		Arnold Hawthorn (AH)	<i>Crataegus arnoldiana</i>	0
		Japanese Lilac (JL)	<i>Syringa reticulata</i>	0
		Amur Maple (AM)	<i>Acer ginnala</i>	2
Lg. Coniferous Tree	Minimum height of 4' above grade	Ponderosa Pine (PP)	<i>Pinus ponderosa</i>	0
		Black Hills Spruce (BS)	<i>Picea glauca 'Densata'</i>	6
Sm. Coniferous Tree	Minimum height of 2' above grade	Medora Juniper (MJ)	<i>Juniperus scopulorum 'Medora'</i>	3
		Redosier Dogwood (RD)	<i>Comus saricaea</i>	8
Shrub	Common size of 2 gallons	Common Lilac (CL)	<i>Syringa vulgaris</i>	18
		Golden / Clove Currant (GC)	<i>Ribes odoratum</i>	9
		Vanhoutte Spirea (VS)	<i>Spiraea x vanhouttei</i>	4



DATE 07/19/2018
 APPROVED BY LOBESILVA
 DATE 07/19/2018
 APPROVED BY BRYANWING
 DATE 07/19/2018

PAVING PLAN LEGEND

- ① 6-IN CONCRETE S D 3-4C40
- ② 4-IN CONCRETE S D 3-5C40
- ③ 6-IN OUTFLOW CURB S D 3-6C40
- ④ ACCESSIBLE PARKING S D 3-1C40
- ⑤ ACCESSIBILITY SIGN S D 3-2C40
- ⑥ GARBAGE ENCLOSURE S D 3-8C40
- ⑦ CONCRETE BOLLARD S D 3-7C40
- ⑧ PARKING COURT
- ⑨ 6-IN CONCRETE
- ⑩ 4-IN CONCRETE SIDEWALK

LANDSCAPE PLAN LEGEND

- SHRUB S D 3-9C40
- DECIDUOUS TREE 3-10C40
- CONIFEROUS TREE 3-11C40
- ▬ CLASS II (SUNNY MIX) GRASS
- ▬ RIVER ROCK

GENERAL NOTES

- ALL ELEVATIONS SHOWN ARE IN NAD83 DATUM UNLESS OTHERWISE NOTED.
- THE USE OF "CONTRACTOR" APPLIES TO THE PARTY RESPONSIBLE FOR THE PORTION OF WORK BEING DESCRIBED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. MOUNTAIN PLANS DOES NOT GUARANTEE THE EXACT LOCATIONS OF THE UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL NORTH DAKOTA ONE CALL BY DIALING 811 OR 800-795-6555. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS AND FEES ASSOCIATED WITH UTILITY LOCATES.
- CONTRACTOR SHALL OBTAIN PROPER PERMITS FROM THE CITY OR COUNTY WHEN WORKING WITHIN THE RIGHT-OF-WAY.
- THE COST OF MOBILIZATION IS TO BE INCLUDED IN THE PRICES BID FOR OTHER PROJECT TASKS AND SHALL INCLUDE ALL ITEMS NECESSARY FOR THE CONTRACTOR TO BE PRESENT ON SITE. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, CONTRACT BOND, EQUIPMENT HAULING, ROADWAY TOLLS AND FARES, LOCAL OR STATE GOVERNMENT PERMITS OR FEES, OR ANY OTHER REQUIREMENT STATED IN THE PROJECT SPECIFICATIONS.
- AREAS WITHIN RIGHT-OF-WAY WHICH ARE UTILIZED BY CONSTRUCTION TRAFFIC ARE TO BE SWEEPED PRIOR TO OPENING TO PUBLIC TRAFFIC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ANY DEBRIS LEFT ON ADJACENT PUBLIC ROADWAYS OR RIGHTS-OF-WAY THAT WERE A DIRECT OR INDIRECT RESULT FROM CONSTRUCTION ACTIVITIES OF THIS PROJECT. THE UTILIZATION OF A VACUUM OR PICKUP TYPE SWEEPER IS REQUIRED TO MINIMIZE AIR CONTAMINATION. THE COST FOR PAVEMENT SWEEPING IS TO BE INCLUDED IN THE PRICES BID FOR OTHER PROJECT TASKS.
- THE CONTRACTOR SHALL PROTECT ALL PROPERTY PINS AND MONUMENTS ASSOCIATED WITH THE SUBJECT PROPERTY. PROPERTY PINS OR MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT ANY DISCREPANCY BETWEEN THE STANDARD SPECIFICATIONS AND THE BID DOCUMENTS ISSUED BY THE GENERAL CONTRACTOR OR PLANS WHICH HAVE BEEN SIGNED AND SEALED BY THE ISSUING ENGINEER EXISTS, THE PLANS SHALL GOVERN.
- THE STANDARD SPECIFICATIONS FOR THIS PROJECT SHALL BE "CONSTRUCTION SPECIFICATIONS FOR MUNICIPAL PUBLIC WORKS IMPROVEMENTS, BISMARCK, NORTH DAKOTA" AS APPROVED AND ISSUED MARCH 2017 BY GABRIEL J. SCHILL. THE STANDARD SPECIFICATIONS CAN BE LOCATED AT <https://www.bismarck.gov/DocumentCenter/View/20973/Construction-Specs-Standard-Details-2017>. IN THE EVENT A DISCREPANCY EXISTS BETWEEN THE PLANS AND STANDARD SPECIFICATIONS, THE PLANS SHALL SUPERCEDE.

SITE PLAN NOTES

- ALL SITE LAYOUT, GRADING, AND STRIPING OF PEDESTRIAN TRAVEL WAYS ARE TO MEET OR EXCEED THE REQUIREMENTS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA) REGULATIONS AS ADOPTED IN THE ACCESSIBILITY STANDARDS CALLED THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (2010 STANDARDS), WHICH CAN BE FOUND HERE: <http://www.a11y.org/2010/08/2010-ada-standards-for-accessible-design/>. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ADA REQUIREMENTS AND GUIDELINES ARE MET PRIOR TO PAVEMENT INSTALLATION. IN THE EVENT THAT ADA REQUIREMENTS AND GUIDELINES ARE NOT MET PER THE DESIGN AS PRESENTED IN THE PLANS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY FOR CORRECTIVE ACTION. ONCE PAVEMENT HAS BEEN INSTALLED, THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL GRADING OF THE PROJECT.

PARKING REQUIREMENTS

- PER CITY OF BISMARCK ZONING ORDINANCE 14-03-10 "OFF-STREET PARKING AND LOADING", OFF-STREET PARKING FOR THE SITE IS CALCULATED AS FOLLOWS:
- SHOP CODED
 - OFFICE & RESTROOM AREA = 290 SF @ 1:250 = 2 PARKING SPACES
 - SHOP STORAGE AREA = 2120 SF @ 1:600 = 4 PARKING SPACES
 - SPORTS AREA
 - OFFICE & COMMON AREA = 1350 SF @ 1:250 = 6 PARKING SPACES
 - SHOP STORAGE AREA = 5842 SF @ 1:600 = 10 PARKING SPACES

TOTALS

- 22 REQUIRED TOTAL PARKING SPACES
- 22 PROVIDED TOTAL PARKING SPACES
- 21 STANDARD VEHICLE SPACES
- 1 ADA COMPLIANT VAN ACCESSIBLE PARKING SPACES

*NOTE: BUILDING AREAS FOR PARKING CALCULATIONS AS PROVIDED BY FRONT STREET MILL WORK BUILDING LAYOUT DATED 3/16/2018

PAVING PLAN NOTES

- MATERIALS AND COSTS ASSOCIATED WITH JOINTING AND REINFORCEMENT REQUIRED FOR CONCRETE PAVEMENT AND CURBING SHALL BE INCLUDED IN THE PRICE BID FOR THEIR ASSOCIATED BID ITEMS.
- EXPANSION JOINTS SHALL BE INSTALLED EVERY 100 LF OF CURB AND 50 LF OF SIDEWALK. SEE THE CONCRETE JOINTING PLAN FOR LOCATIONS.
- THE CONTRACTOR SHALL SUBMIT A CONCRETE MIX DESIGN FOR USE IN BOTH STEEL REINFORCED AND NON-REINFORCED CONCRETE PAVEMENT.
- ALL WATERING REQUIRED FOR SUBGRADE AND BASE COURSE TO ACHIEVE OPTIMUM COMPACTION IS TO BE INCLUDED IN THE PRICE BID OF THE RESPECTIVE MATERIAL.
- PORTLAND CEMENT CONCRETE PAVEMENT WILL MEET CITY STANDARDS. THE CONTRACTOR WILL PROVIDE THIRD PARTY TESTING SERVICES FOR CONCRETE PAVEMENT, SIDEWALK, AND CURB & GUTTER. TESTING SHALL BE PERFORMED FOR EVERY 100 SF OF MATERIAL PLACED. TEST RESULTS SHALL BE PROVIDED TO THE OWNER AND ENGINEER. IN THE EVENT OF A TEST FAILING TO MEET THE MIX DESIGN AS SUBMITTED BY THE CONTRACTOR AS WELL AS STANDARD SPECIFICATIONS, THE CONCRETE PLACED, AS WELL AS THE IMMEDIATELY SURROUNDING PANELS, SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONCRETE PAVEMENT SHALL CONFORM TO THEIR RESPECTIVE DEPTH DETAILS AS OUTLINED IN THE PLANS AND STANDARD SPECIFICATIONS. ALL COSTS FOR SAW-CUTTING AND HOT-SEALING JOINTS SHALL BE INCLUDED IN THE PRICE BID FOR THE RESPECTIVE CONCRETE BID ITEM. ALL REINFORCING STEEL SHALL BE DEFORMED. EPOXY COATED GRADE 60 REBAR. IN THE EVENT REBAR (SHEETS) ARE UTILIZED, THE BASKET SHALL BE CUT JUST PRIOR TO PLACING CONCRETE IN SUCH A FASHION THAT IT PROVIDES NO STRUCTURAL BENEFIT TO THE CONCRETE.
- TOPSOIL TO BE INSTALLED & PREPARED IN LOCATIONS SHOWN.

LANDSCAPE PLAN NOTES

- THE CONTRACTOR SHALL PROVIDE A ONE YEAR GUARANTEE OF ALL PLANTS AND MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE ENGINEER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT MATERIALS SHALL ALSO HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
- ALL PLANTS TO BE INSTALLED ARE TO BE NORTHERN-GROWN, HARDY, AND INSTALLED PER STANDARD AAN PLANTING PRACTICES.
- USE A MINIMUM 6-IN LOAM PLANTING SOIL ON SHRUBS.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO THE INSTALLATION OF PLANTS.
- PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE.
- OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE ONLY AFTER ACCEPTANCE OF THE WORK BY THE ENGINEER.
- PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. TEMPORARILY HEEL-IN MATERIALS IF NECESSARY.
- PLANTING BEDS FOR SHRUBS SHALL HAVE (402 MIN) WEED BARRIER FABRIC AND 4-IN TO 6-IN OF SHREDDED HARDWOOD MULCH.
- SEED MIX SHALL BE CONSIDERED "CLASS II" AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- PRIOR TO SEEDING, A MINIMUM OF 4-INCHES OF TOPSOIL IS TO BE LAID AND SHALL BE FREE OF VEGETATION AND STONES LARGER THAN 1-INCH.
- THE CONTRACTOR SHALL FURNISH THE ENGINEER DUPLICATE SIGNED COPIES OF A STATEMENT BY THE VENDOR CERTIFYING THAT EACH LOT OF SEED HAS BEEN TESTED BY A RECOGNIZED LABORATORY FOR SEED TESTING WITHIN NINE MONTHS OF THE DATE OF DELIVERY.
- DESIGN OF THE IRRIGATION SYSTEM TO BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- SIZES GIVEN FOR TREE AND SHRUB PLANTING ARE MATURE HEIGHT AND SPREAD.

APPROVED BY PLANNING
 [Signature]
 TITLE
 DATE 8-2-18

APPROVED BY FORESTRY
 [Signature]
 LANDSCAPING
 TITLE
 DATE 8-2-18

SP2018-045

NO. 1
 DATE 07/19/2018
 DESCRIPTION FINAL PLANS - VARIANCE ALTERNATIVE
 REVISIONS PER CITY COMMENTS
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THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY REGISTERED PROFESSIONAL ENGINEER PE-10414 MOUNTAIN PLANS, LLC ON 02/28/2018. THE ORIGINAL DOCUMENT IS STORED AT BISMARCK, ND.

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DATE July 31, 2018
 DRAWN BY JME APPD BY BJZ
 PROJECT NO. 001497
 SHEET NO. C3.1
 SHEET TITLE PAVING & LANDSCAPING VARIANCE ALTERNATIVE