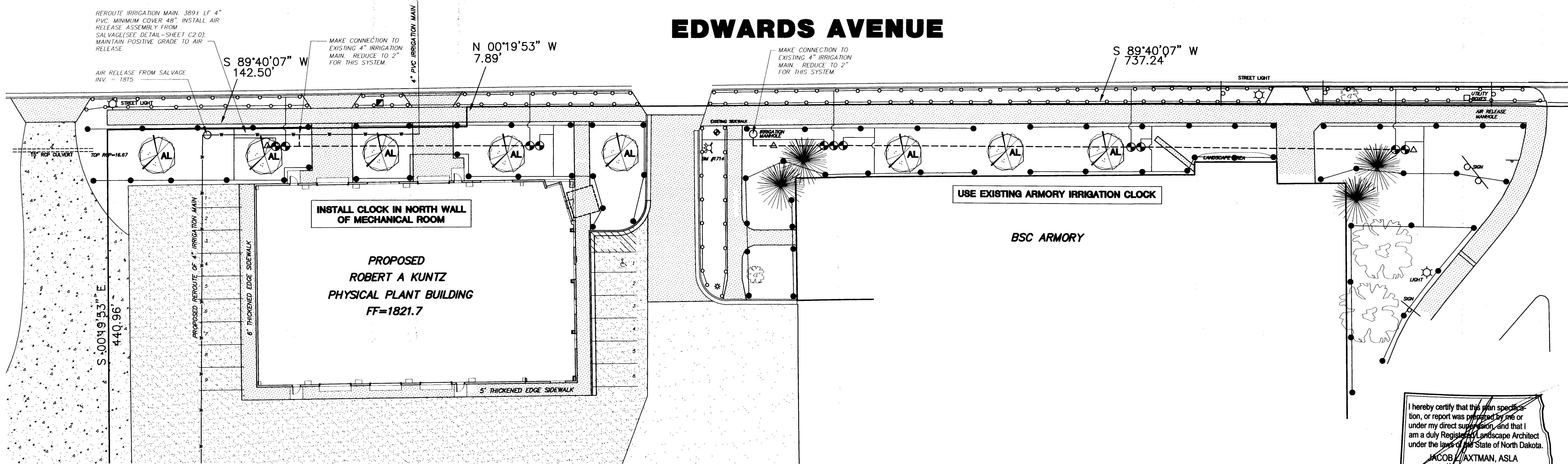


EDWARDS AVENUE



I hereby certify that this plan specification, or report was prepared by me or under my direct supervision, and that I am a duly Registered Landscape Architect under the laws of the State of North Dakota.

JACOB AXTMAN, ASLA
Date 11-1-11 Ref. No. 35

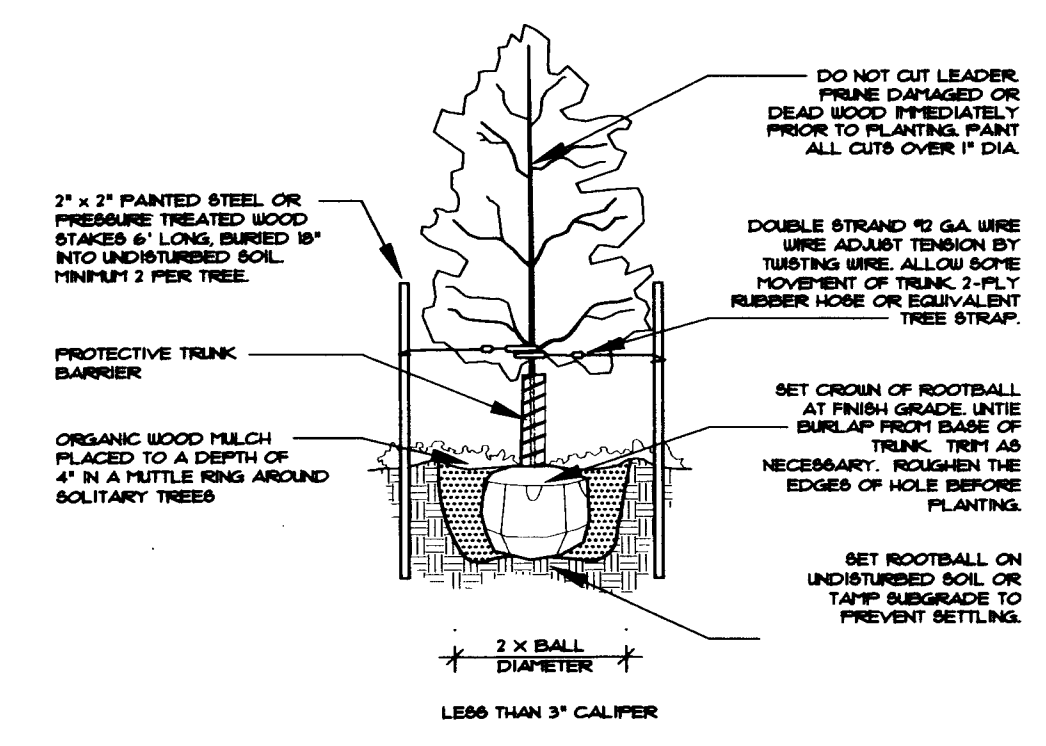
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IRRIGATION NOTES:

- THE EXISTING IRRIGATION SYSTEM IS TO BE REMOVED AND DISPOSED OF OFF SITE. REMOVE AS MUCH PIPING AS POSSIBLE DURING EARTHWORK OPERATIONS. ALL HEADS ARE TO BE REMOVED, SALVAGED, AND RETURNED TO THE OWNER. TO ENSURE EACH HEAD IS LOCATED AND REMOVED, THE EXISTING SYSTEM SHALL BE ENERGIZED AND EACH HEAD MARKED WITH A PAINT DOT OR FLAG WHILE IT IS ACTIVE.
- THIS DRAWING IS FOR DIAGRAMMATICAL PURPOSES ONLY. IRRIGATION COMPONENTS OR LINES MAY HAVE BEEN LOCATED FOR GRAPHIC CLARITY ON THIS DRAWING. IRRIGATION CONTRACTOR SHALL FIELD LOCATE IRRIGATION SYSTEM AND COMPONENTS IN THE MOST EFFICIENT AND PRACTICAL LOCATIONS THAT OFFER THE MOST CONVENIENCE FOR MAINTENANCE OFFICIALS.
- SPRAY ANGLES AND NOZZLES HAVE NOT BEEN DEPICTED ON THE IRRIGATION PLANS. IRRIGATION CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE BEST NOZZLES AND SPRAY ANGLES TO USE WHEN INSTALLING THE SYSTEM.
- IRRIGATION CONTRACTOR WILL BE RESPONSIBLE FOR TRAINING MAINTENANCE OFFICIALS ON THE CORRECT OPERATION AND OPERATION TIMES OF THE IRRIGATION CONTROL CLOCK, QUICK COUPLING VALVES FOR WINTER SYSTEM PREPARATION, AND ANY OTHER COMPONENTS OF THE SYSTEM THAT WILL REQUIRE MAINTENANCE. ZONE RUN TIMES SHALL BE SET TO PROVIDE APPROXIMATELY 1.5" OF WATER FOR EACH 7 DAY IRRIGATION CYCLE.
- ENSURE 100% COVERAGE OF PLANT AND TURF AREAS DURING INSTALLATION AND TEST RUNS.
- EACH ZONE VALVE OR OTHER IRRIGATION CONNECTION COMPONENT SHALL BE INSTALLED IN AN APPROPRIATELY SIZED ZONE VALVE BOX AS MANUFACTURED BY RAINBIRD OR APPROVED EQUAL. VALVE BOXES FOR EACH ZONE VALVE SHALL BE RECTANGULAR MODEL VB-STD. THE QUICK COUPLER VALVE SHALL BE INSTALLED WITH A VALVE BOX MODEL VB-10RND WITH A TAN LID. ALL VALVE BOXES SHALL BE CONSOLIDATED IN LOCATION AS MUCH AS POSSIBLE AND INSTALLED IN PLANTING BEDS WHENEVER POSSIBLE.
- EACH ZONE VALVE SHALL BE LABELED WITH ITS ASSOCIATED ZONE NUMBER AND ZONE DESCRIPTION THAT MATCHES THE LABELS ON THE IRRIGATION CLOCK. THIS LABEL SHALL BE PERMANENT AND WATERPROOF AND SHALL BE ATTACHED TO THE VALVE ITSELF OR SOMEHOW ATTACHED INSIDE THE VALVE BOX SO THAT IT CAN BE EASILY READ WHILE KNEELING NEXT TO THE BOX.
- THE IRRIGATION LIMITS SHALL BE THE LOT LINES, BUILDINGS, AND PARKING LOTS.
- PROVIDE AND INSTALL CLASS 35 PVC SLEEVES THAT ARE TWICE THE DIAMETER OF THE IRRIGATION PIPE FOR ALL IRRIGATION LINES THAT ARE TO BE INSTALLED UNDER SIDEWALKS AND DRIVEWAYS. EXTEND CONDUIT A MINIMUM OF 6" BEYOND EACH SIDE OF THE SIDEWALK.
- UTILITIES HAVE NOT BEEN SHOWN ON THESE PLANS FOR GRAPHIC CLARITY. ALL CONTRACTORS SHALL REFER TO SITE SURVEY & SITE PLAN DRAWINGS FOR UTILITY LOCATIONS. UTILITY LOCATES IN THE FIELD WILL BE REQUIRED BEFORE COMMENCING WORK.
- INCLUDE WINTERIZING FOR THE FIRST YEAR IN YOUR ESTIMATE FOR THE IRRIGATION SYSTEM.
- NOTE THE LOCATION OF THE PROPOSED STREET LIGHTS. IRRIGATION CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE LIGHTING WIRES IN THE BOULEVARD.

IRRIGATION LEGEND

SYMBOL	IRRIGATION EQUIPMENT
---	LATERAL LINE - 100% POLYETHYLENE TUBING (SIZED AS DEPICTED)
---	MAIN LINE - 2" CLASS 160 PVC PIPE
○	PROPOSED ZONE VALVES (RAINBIRD PEB OR APPROVED EQUAL)
○	PROPOSED HUNTER PGJ OR APPROVED EQUAL
○	PROPOSED RAINBIRD 1804 OR APPROVED EQUAL
○	ISOLATION GATE VALVE (RAINBIRD BV SERIES)
○	PROPOSED RAINBIRD QCV VALVE (MODEL NO. 5-LRC)
○	PROPOSED RAINBIRD CONTROLLER (ESP-24MC)



TREE PLANTING DETAIL
TYPICAL FOR ALL DECIDUOUS, SINGLE-TRUNK TREES

GENERAL LANDSCAPING NOTES FOR ALL SHEETS

- ALL CONTRACTORS WISHING TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
- PROTECT THE IMPROVEMENTS ON SITE AND ON THE ADJOINING PROPERTIES. PROVIDE BARRICADES, COVERINGS OR OTHER TYPE OF PROTECTION AS NECESSARY TO PREVENT DAMAGE AND TO SAFEGUARD AGAINST INJURY TO EXISTING UTILITIES.
- DAMAGE THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- ALL LANDSCAPE PLANTINGS ARE TO BE WATERED BY THE LANDSCAPE CONTRACTOR THE SAME DAY THAT THE PLANTING OCCURS. THE OWNER WILL BE RESPONSIBLE FOR PROVIDING WATER FOR THIS TASK. IF WATER IS NOT AVAILABLE AT THE BUILDING, THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALTERNATIVE METHODS FOR WATERING.
- SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MUTILLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS.
- CONTRACTOR SHALL PROVIDE WRITTEN WARRANTIES CONFIRMING THE FOLLOWING: FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED & COMPLETED.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND CARING FOR ALL PLANT MATERIAL, SEED, AND OTHER LANDSCAPING IMPROVEMENTS UNTIL THE DATE OF FINAL INSPECTION AND APPROVAL.

SYM.	COMMON NAME	SCIENTIFIC NAME	SIZE	QTY.
AL	AMERICAN LINDEE	Tilia americana	2" Cal.	8

TOPSOIL NOTES

- ALL PORTIONS OF THE SITE DISTURBED DURING CONSTRUCTION AND NOT RECEIVING OTHER IMPROVEMENTS SHALL HAVE THE SOILS STRIPPED AND REPLACED WITH 6" OF NEW TOPSOIL.
- ALL IMPORTED TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE, SANDY-LOAM TOPSOIL. IT SHALL BE FREE FROM SUBSOIL, NOXIOUS WEEDS, STONES, LIME, CEMENT, ASHES, SLAG, OR OTHER DELETERIOUS MATTER.
- TOPSOIL SHALL BE PLACED AND REEDED AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILLING CURB AND CUTTERS AND SIDEWALK AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

SEEDING NOTES

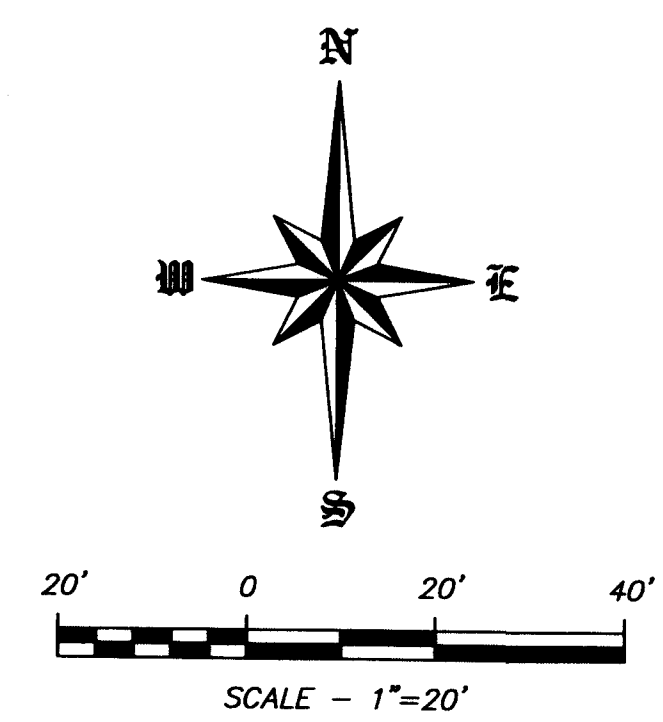
- ALL LAWN AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED & HYDROMULCHED.
- CLEAR AND GRUB SITE BEFORE SEEDING ENSURING THAT THE SITE IS IN A SMOOTH CONDITION WITH NO DEBRIS OR ROCKS LARGER THAN 2" IN DIAMETER.
- SEED SHALL BE APPLIED AT 5 LBS/100 SQ. YD. SEED VARIETY SHALL BE 85% "PARM" KENTUCKY BLUE GRASS AND 15% "ARCTAR" CREEPING RED FESCUE OR "DURAR" HARD FESCUE OR APPROVED EQUAL. PERCENT LIVE SEED SHALL BE 85% FOR BOTH VARIETIES. IF SEED WITH THE SPECIFIED PERCENTAGE OF PURE LIVE SEED CANNOT BE OBTAINED, ADDITIONAL SEED MAY BE USED TO BRING THE AMOUNT OF LIVE SEED UP TO THE AMOUNT SPECIFIED. ALL SEED AND SEEDING MIXTURES SHALL BE FREE OF ALL PROHIBITED NOXIOUS WEED SEED AND SHALL NOT CONTAIN MORE THAN 0.5% BY WEIGHT OF RESTRICTED NOXIOUS WEED SEEDS. PROHIBITED AND RESTRICTED NOXIOUS WEEDS SHALL BE THOSE CLASSIFIED BY THE STATE SEED DEPARTMENT. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE.
- FERTILIZE SOIL DURING THE SEEDING PROCESS USING AN APPROPRIATE APPLICATION PROCESS. FERTILIZER SHALL BE 10-10-10 AND APPLIED AT A RATE OF 4 LBS. PER 1000 SQUARE FEET.
- SEED SHALL BE DRILL SEED TO A DEPTH OF 1/4" TO 1/2" AND SHALL BE EVENLY SPREAD. AFTER SEED HAS BEEN SOWN, THE SOIL SHALL BE REPAKED IMMEDIATELY AFTER THE SEED IS APPLIED TO FIRM THE SOIL AROUND THE SEED. NO SEED SHALL BE PLACED ON DAYS WHERE THE WIND IS STRONG ENOUGH TO PREVENT IT FROM BEING PROPERLY IMBEDDED INTO THE SOIL.
- THE SEEDING CONTRACTOR SHALL WATER THE NEWLY SEEDED AREAS ON THE SAME DAY THAT SEEDING OCCURS. IF AN IRRIGATION SYSTEM IS PRESENT AND FUNCTIONING, THE SEEDING CONTRACTOR SHALL ENERGIZE THIS SYSTEM AND ENSURE THAT A WATERING SCHEDULE HAS BEEN ESTABLISHED BEFORE LEAVING THE SITE.
- SEED MUST SHOW A DENSITY OF 20 TO 30 SEEDLINGS PER SQUARE FOOT BEFORE ACCEPTANCE WILL OCCUR. THE CONTRACTOR SHALL FURNISH AND REPLACE WITHOUT ADDITIONAL COMPENSATION THEREFOR, ANY SEED FOR AREAS THAT HAVE NOT GERMINATED, HAVE DIED, OR ARE DAMAGED TO THE EXTENT THAT REPLACEMENT IS REQUIRED TO CONFORM TO THE REQUIREMENTS OUTLINED ABOVE. THE CONTRACT WARRANTY PERIOD SHALL ALSO APPLY TO THIS ITEM.
- CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY EROSION SCARS OR WASHOUTS UNTIL THE DATE THAT FINAL SEED STAND IS ACCEPTED.
- ALL PORTIONS OF THE SITE THAT ARE TO BE SEEDED SHALL BE HYDROMULCHED. HYDROMULCH SHALL BE A WOOD CELLULOSE FIBER MULCH. MULCH SHALL BE FREE OF GERMINATION OR GROWTH INHIBITIVE SUBSTANCES, AS WELL AS ANY NOXIOUS WEED SEED. MULCH SHALL BE TREATED WITH A TACK AND FIBER TO ENHANCE SEED AND MULCH PLACEMENT AND ADHERENCE TO THE SOIL. THE HYDROMULCH SHALL BE APPLIED AT A RATE OF 2000 LBS/ACRE USING HYDRAULIC SPRAY EQUIPMENT.

BENCH MARKS NGVD 1929

TOP OF HYDRANT #1714
EDWARDS AVE. @ NW CORNER OF ARMORY BLDG
ELEVATION 1823.88

TOP OF HYDRANT #427
EDWARDS AVE. 1ST WEST OF SCHAFER STREET
ELEVATION 1823.30

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SAFETY NOTICE TO CONTRACTOR

In accordance with generally accepted construction practices the contractor will be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal business hours.

NOTICE TO CONTRACTOR

The location of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representatives. The Contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the Contractor's failure to exactly locate and preserve any and all underground utilities.

APPROVED BY PLANNING
JAN LINDL
PLANNER 12-21-11
TITLE DATE

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Surveying
Hydrology
Land Planning
Civil Engineering
Landscape & Site Design
Construction Management

PROJECT NO. 1113
DRAWN BY JA
CHECKED BY JA
DATE NOV. 01, 2011
REVISION

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LANDSCAPING & IRRIGATION PLAN

ROBERT A. KUNTZ PHYSICAL PLANT BUILDING
BISMARCK STATE COLLEGE
BISMARCK, NORTH DAKOTA

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