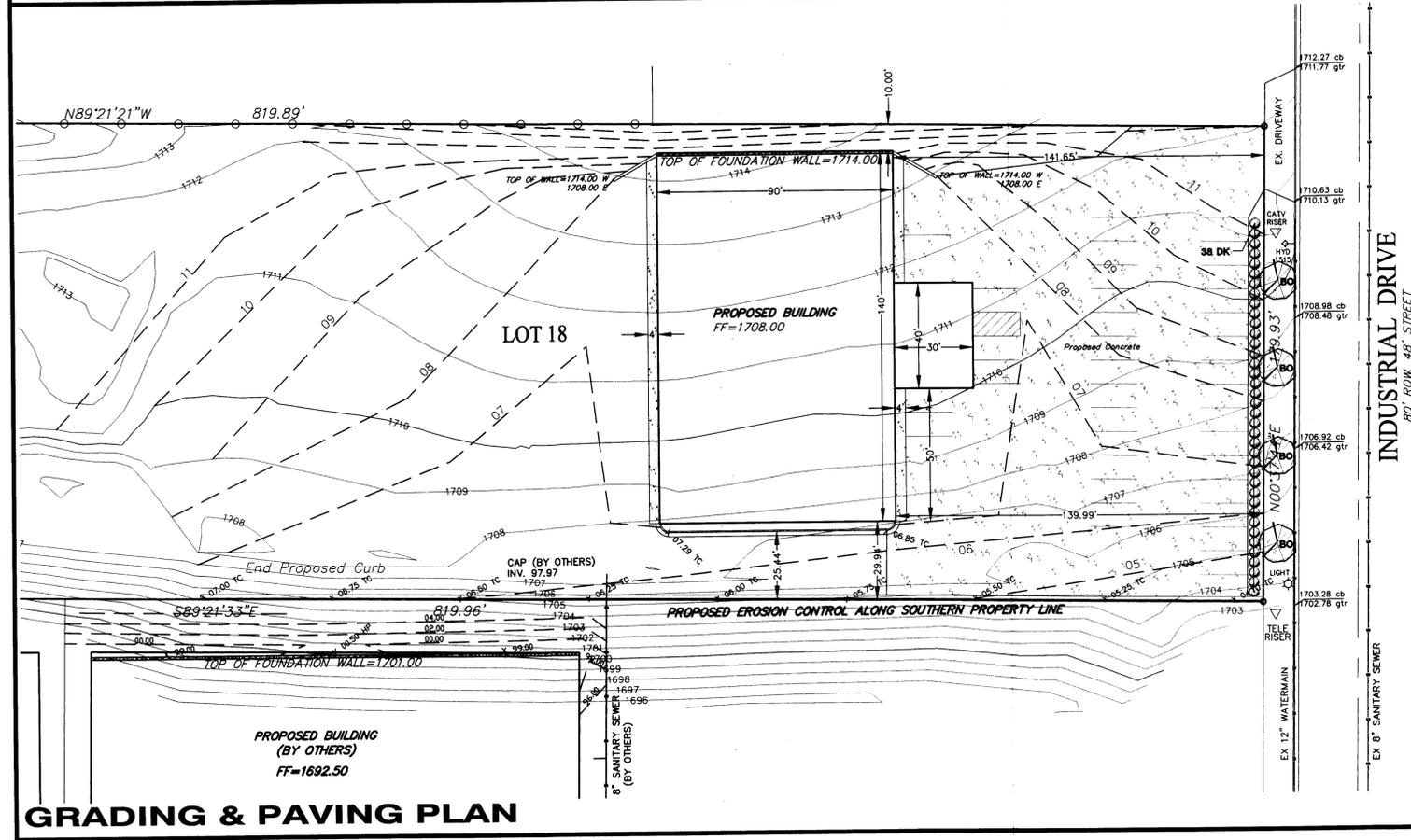


DIMENSION & UTILITY PLAN



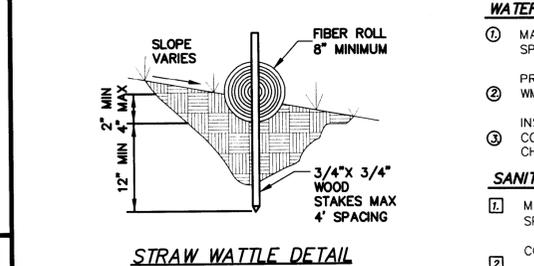
GRADING & PAVING PLAN

CALL BEFORE YOU DIG
NORTH DAKOTA
UTILITIES UNDERGROUND LOCATION SERVICE
1-800-795-0555

UTILITY NOTE
The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agree 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.

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- GENERAL EROSION CONTROL NOTES:**
- E.1 AN N.O.I. AND SWPPP WILL NEED TO BE PREPARED FOR THIS PROJECT BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL SIGN THE DOCUMENTATION AND SUBMIT TO NORTH DAKOTA HEALTH DEPARTMENT. CONTRACTOR SHALL NOT START THE PROJECT UNTIL RECEIVING AN APPROVAL LETTER FROM THE NORTH DAKOTA HEALTH DEPARTMENT.
 - E.2 CONTRACTOR SHALL IMPLEMENT APPROPRIATE EROSION CONTROL BEFORE BEGINNING ANY LAND DISTURBING ACTIVITIES AS DESIGNED. NOTE: EROSION CONTROL ITEMS SHOWN NEED TO BE IMPLEMENTED AT APPROPRIATE STAGES OF CONSTRUCTION ONLY.
 - E.3 CONTRACTOR SHALL HAVE A COPY OF THE SWPPP AND EROSION CONTROL PLAN ON-SITE AT ALL TIMES.
 - E.4 WEEKLY (PLUS WITHIN 24 HOURS OF A STORM WATER EVENT) INSPECTIONS OF THE CONSTRUCTION SITE WILL BE PERFORMED BY PERSONNEL FAMILIAR WITH ALL ASPECTS OF THE SWPPP AND THE IMPLEMENTED CONTROL PRACTICES. INSPECTIONS WILL INCLUDE THE REVIEW OF ALL DISTURBED AREAS, STRUCTURAL AND NON-STRUCTURAL CONTROL MEASURES, MATERIAL STORAGE AREAS AND VEHICULAR ACCESS POINTS.
 - E.5 INSPECTIONS WILL BE PERFORMED AT LEAST ONCE EVERY 7 DAYS OR WITHIN 24 HOURS OF A STORM EVENT GREATER THAN 0.5 INCHES OF RAIN WITHIN A 24 HOUR PERIOD.
 - E.6 EROSION CONTROL FOR PROJECT DESIGNATES A MINIMUM EFFORT TO CONTROL AND CONTAIN EROSION SEDIMENTS. CONTRACTOR SHALL USE DUE DILIGENCE TO CONTROL EROSION.
 - E.7 SEDIMENT TRACKING ONTO ADJACENT STREETS WILL BE PROHIBITED. STREETS SHALL BE CLEANED WITHIN 24 HOURS IF SEDIMENT TRACKING OCCURS.
 - E.8 IN GENERAL, STRAW WATTLES OR SILT FENCE SHALL BE PLACED ON LEVEL GROUND 5' TO 10' AWAY FROM DISTURBED AREAS. WHEN FEASIBLE, SILT FENCE SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW.
 - E.9 CONCRETE WASHOUT AREAS WILL BE INDICATED BY A SIGN. WASHOUT AREAS WILL CONSIST OF A HOLE IN THE GROUND A MINIMUM OF 1.5 FEET DEEP. CONCRETE WILL BE ROUTINELY REMOVED AND DISPOSED OF OFF-SITE. WASHOUT AREAS SHALL NOT BE LOCATED IN A CONVEYANCE WATERWAY. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF CONCRETE WASHOUT AREAS AT THE END OF THE PROJECT.
- EROSION CONTROL DURING CONSTRUCTION PROCESS:**
- D.1 PROVIDE STABILIZED ACCESS TO SITE.
 - D.2 INSTALL STRAW WATTLES ALONG DOWNSTREAM PERIMETER OF PROPERTY. INSTALL STRAW WATTLES ALONG THE SOUTHEAST CORNER OF PROPERTY.



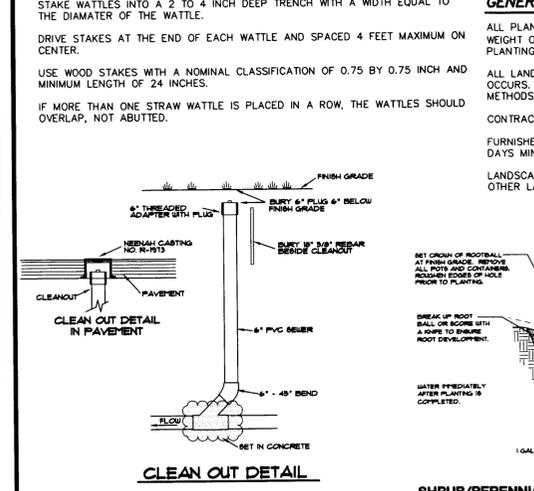
DETAIL OF STRAW WATTLE INSTALLATION

STAKE WATTLES INTO A 2 TO 4 INCH DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE WATTLE.

DRIVE STAKES AT THE END OF EACH WATTLE AND SPACED 4 FEET MAXIMUM ON CENTER.

USE WOOD STAKES WITH A NOMINAL CLASSIFICATION OF 0.75 BY 0.75 INCH AND MINIMUM LENGTH OF 24 INCHES.

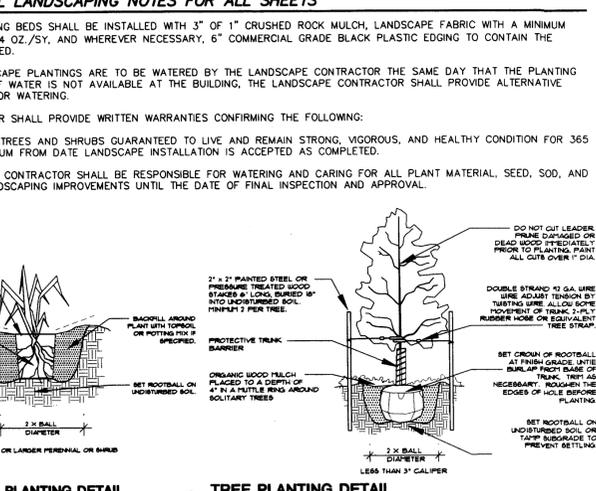
IF MORE THAN ONE STRAW WATTLE IS PLACED IN A ROW, THE WATTLES SHOULD OVERLAP, NOT ABUTTED.



- LEGEND**
- S SANITARY SEWER
 - W WATERMAIN
 - ST STORM SEWER
 - PROPOSED CONCRETE
 - PROPOSED ASPHALT
 - E UNDERGROUND ELECTRIC
 - G UNDERGROUND GAS
 - T UNDERGROUND TELEPHONE
 - IV UNDERGROUND CABLE
 - HYD RYDRANT
 - L LIGHT
 - GATE VALVE
 - PROPOSED SANITARY SEWER
 - PROPOSED WATERMAIN
 - PROPOSED STORM SEWER
 - PROPOSED CONTOUR
 - PROPOSED GRADE
 - PROPOSED EROSION CONTROL

- DESCRIPTION**
- THE SOUTH 180.00 FEET OF LOT 18, BLOCK 1 MIRIAM INDUSTRIAL PARK SECOND ADDITION BISMARCK, NORTH DAKOTA
- BUILDING**
- BUILDING FOOTPRINT 13,800 SF.
BUILDING CONSTRUCTION
BUILDING HAS NO FIRE SUPPRESSION SYSTEM
BUILDING IS 1 STORY
- OWNER**
- S & P PARTNERSHIP
DALE PAHLKE
1727 STATE STREET
BISMARCK NORTH DAKOTA 58501
220-4000
- ZONING**
- ZONED MA
FRONT YARD: 15 FEET
SIDE YARD: 0
REAR YARD: 10 FEET
HEIGHT NOT TO EXCEED 75 FEET
- GENERAL CONSTRUCTION NOTES**
- G1. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY, STATE AND FEDERAL CODES.
 - G2. ALL SITE CONSTRUCTION SHALL CONFORM TO THE MOST RECENT EDITION OF THE CITY OF BISMARCK CONSTRUCTION SPECIFICATIONS FOR MUNICIPAL PUBLIC WORKS IMPROVEMENTS AS MODIFIED BY THE ATTACHED PLANS.
 - G3. CONTRACTOR MUST BE BONDED BY THE CITY OF BISMARCK FOR ALL CONSTRUCTION IN CITY RIGHT OF WAY OR WHICH CONNECTS TO A CITY UTILITY.
 - G4. CONTRACTOR WILL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS.
 - G5. IT WILL BE NECESSARY TO HAVE A PRIVATE ENGINEERING AND/OR TESTING FIRM SET GRADES, DO COMPACTION TESTS AND PREPARE RECORD DRAWINGS FOR THE SEWER & WATER LINES. THE CITY ENGINEERING DEPARTMENT WILL REQUIRE TEST REPORTS AND RECORD DRAWINGS PRIOR TO ACCEPTING THE PROJECT AFTER COMPLETION.
 - G6. CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY SAFEGUARDS SUCH AS WARNING SIGNS, BARRICADES & NIGHT LIGHTS AT HIS OWN EXPENSE.
 - G7. 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.

- WATERMAIN**
- 1 MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATION. BACKFILL SHALL BE CLASS 'A' UNLESS OTHERWISE NOTED.
 - 2 PROVIDE 12"x1 1/2" TAPPING SADDLE AND CORPORATION STOP. CONNECT TO EXISTING 12" WM; INV. 1699.1±.
 - 3 INSTALL 152 LF 1 1/2" WATER SERVICE, INV. 00.5. COORDINATE WITH BUILDING CONTRACTOR TO INSTALL TO FIRST FLANGE INSIDE BUILDING. PRESSURE TEST, FLUSH AND CHLORINATE.
- SANITARY SEWER**
- 1 MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATION. BACKFILL SHALL BE CLASS 'A' UNLESS OTHERWISE NOTED.
 - 2 CONNECT TO EXISTING 8" SANITARY SEWER; INV. 97.97±.
 - 3 INSTALL 10 LF 4" SANITARY SEWER AT 6.00% AND 4" BEND; INV. 98.57. INSTALL 23 LF 4" SANITARY SEWER AT 6.00%, 4" CLEANOUT AND 4" CAP; INV. 99.95.



PLANT PALETTE

SYM.	COMMON NAME	SCIENTIFIC NAME	SIZE	QNTY.
BO	BUR OAK	<i>Quercus macrocarpa</i>	2" Cal.	3
DK	DWARF KOREAN LILAC	<i>Syringa meyeri 'Palibin'</i>	2 Gallon	48

TYPICAL CURB & GUTTER DETAIL

NOTE: ALL CURBS THAT WILL HAVE SIDEWALKS INSTALLED AGAINST IT SHALL HAVE 12" LONG 1/4 REBAR INSTALLED 8" ON CENTER ALONG BACK SIDE OF CURB TO BE USED AS A TIE.

SWENSON HAGEN & CO.
REGISTERED PROFESSIONAL ENGINEER
NORTH DAKOTA

SCALE - 1"=30'
DATUM NGVD 29
JULY 28, 2011

SITE SURVEY & SITE PLAN
SOUTH 180.00 FEET LOT 18
MIRIAM INDUSTRIAL PARK SECOND ADDITION
BISMARCK, NORTH DAKOTA

SWENSON, HAGEN & COMPANY P.C.
909 Basin Avenue
Bismarck, North Dakota 58504
sheng@swensons.com
Phone (701) 223-2600
Fax (701) 223-2606

Swenson
Hydrology
Land Planning
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SHEET
C1.0

PAHLKE SHOPS SP 33-11