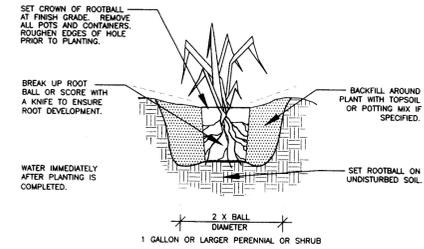
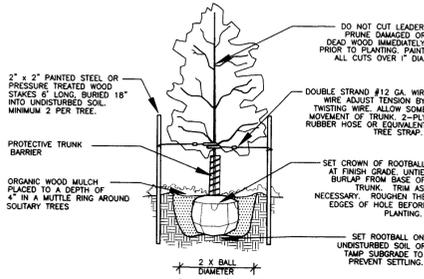


**TYPICAL CURB & GUTTER**  
DOWEL CURB AT EXPANSION AND CONSTRUCTION JOINTS ONLY



**SHRUB/PERENNIAL PLANTING DETAIL**  
TYPICAL FOR ALL SHRUBS AND PERENNIALS



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

- GENERAL LANDSCAPING**
- 11 ALL CONTRACTORS WORKING TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
  - 12 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.
  - 13 DAMAGE THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
  - 14 ALL LANDSCAPE PLANTINGS ARE TO BE WATERED BY THE LANDSCAPE CONTRACTOR THE SAME DAY THAT THE PLANTING OCCURS. IF WATER IS NOT AVAILABLE AT THE BUILDING, THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALTERNATIVE METHODS FOR WATERING.
  - 15 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:
  - 16 FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.
  - 17 LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND CARING FOR ALL PLANT MATERIAL AND OTHER LANDSCAPING IMPROVEMENTS UNTIL THE DATE OF FINAL INSPECTION AND APPROVAL.

- SEEDING NOTES**
- 51 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.
  - 52 ALL PORTIONS OF THE SITE NOT RECEIVING OTHER IMPROVEMENTS SHALL BE SEEDED. SEED SHALL CONFORM TO THE CITY OF BISMARCK SPECIFICATIONS FOR TYPE II SEED AND TYPE IV SEED SHALL BE INSTALLED AS FOLLOWS:
  - 53 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.
  - 54 SEED SHALL BE DRILL SEEDED 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.
  - 55 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.
  - 56 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.
  - 57 CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY EROSION SCARS OR WASHOUTS UNTIL THE DATE THAT FINAL SEED STAND IS ACCEPTED. SEE EROSION CONTROL PLAN FOR EROSION CONTROL METHODS.

- PAVEMENT**
- 21 ON SITE EXTERIOR CONCRETE MATERIALS AND CONSTRUCTION MATERIALS SHALL CONFORM TO CITY OF BISMARCK SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. AIR CONTENT SHALL BE 5% TO 7% STRENGTH AT 28 DAYS SHALL BE 4000 PSI.
  - 22 ALL CURB SHALL BE STANDARD VERTICAL FACE CURB AND GUTTER. SEE DETAIL THIS SHEET.
  - 23 CITY SIDEWALK PER CITY OF BISMARCK SPECIFICATIONS - THICKEN SIDEWALK AT DRIVEWAYS TO 8" PER CITY SPECIFICATIONS.
  - 24 5" FULL DEPTH ASPHALT OR 6" CONCRETE WITH FIBERMESH ALTERNATE. SEE DETAIL THIS SHEET.
  - 25 6" CONCRETE WITH FIBERMESH. SEE DETAIL THIS SHEET.
  - 26 ISOLATION JOINTS WILL BE REQUIRED ALONG THE BUILDING, STOODS AND ALL FIXED ITEMS. LEAVE JOINT 1/2" LOW AND SEAL. ISOLATION JOINTS SHALL BE SEALED USING A ONE PART POLYURETHANE TYPE SEALANT.
  - 27 CONSTRUCTION JOINTS WILL BE PLACED TO COINCIDE WITH CONSTRUCTION JOINT SPACING. CONSTRUCTION JOINT FOR UNREINFORCED CONCRETE SHALL HAVE A MINIMUM 1/2" DIAMETER HALF ROUND KEYWAY OR APPROVED EQUAL. CONSTRUCTION JOINTS FOR REINFORCED CONCRETE SHALL BE 1/2" X 12" DOWELS AT 12 O/C.
  - 28 JOINT SPACING SHALL TYPICALLY BE SPACED AT 1-1/2 TIMES THE THICKNESS OF THE PAVEMENT (MEASURED IN INCHES) IN FEET (4" SWK EQUALS 6 FOOT SPACING). IN NO CASE SHALL THE JOINT SPACING EXCEED TWO TIMES THE THICKNESS.
  - 29 SUBGRADE PREPARATION UNDER AREAS TO BE PAVED SHALL BE 6" THICK AND SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATIONS EXCEPT DENSITY SHALL BE 95% OF ASTM D 698.
  - 30 ASPHALT MATERIAL SHALL CONFORM TO CLASS B PAVING AS SPECIFIED BY CITY OF BISMARCK CONSTRUCTION SPECIFICATIONS.
  - 31 THE CONTRACTOR SHALL PROVIDE AND INSTALL CLASS V GRAVEL, BLENDED BASE OR APPROVED EQUAL ON ALL YARD AREAS AS INDICATED ON THE PLANS. ALL AREAS TO RECEIVE GRAVEL SHALL RECEIVE A GEOTEXTILE FABRIC SEPARATION LAYER. SEE DETAIL THIS SHEET.

- TOPSOIL NOTES**
- 11 TOPSOIL IS STOCKPILED ON SITE AND WILL BE PLACED FOR THE LANDSCAPE CONTRACTOR TO SPREAD AND FINISH GRADE. ALL PORTIONS OF THE SITE NOT RECEIVING CONCRETE, CURB & GUTTER OR OTHER IMPROVEMENTS SHALL BE COVERED WITH A MINIMUM OF 6" OF TOPSOIL AND SEEDED ACCORDING TO SPECIFICATIONS.
  - 12 TOPSOIL SHALL BE PLACED AND SEEDED AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILL BEHIND CURB AND GUTTERS AND SIDEWALK AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

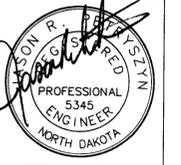
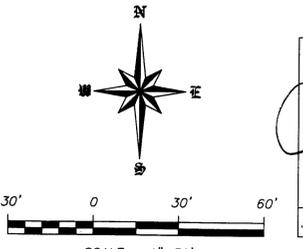
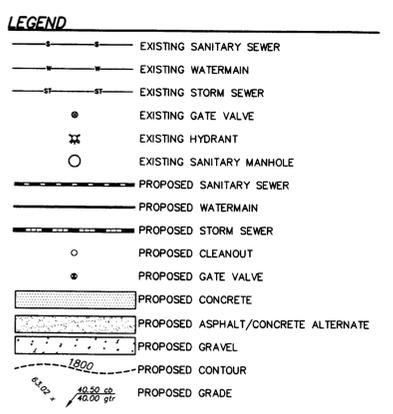
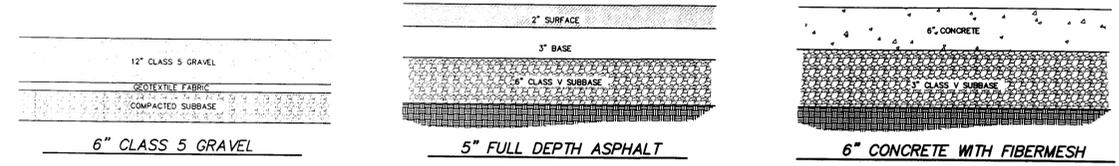
- SIGNAGE & PAVEMENT STRIPING**
- 581 ALL NON-ADA STRIPING SHALL BE 4" WIDE NON REFLECTORIZED PAINT MEETING THE REQUIREMENTS OF AASHTO M28 APPLIED AT A RATE OF 110 SQUARE FEET PER GALLON. COLOR SHALL BE YELLOW. TYPICAL FOR ALL STRIPING UNLESS OTHERWISE NOTED.
  - 582 ADA STRIPING FOR LANES AND SYMBOLS SHALL BE BLUE PAINT MEETING THE REQUIREMENT OF AASHTO M28 APPLIED AT A RATE OF 110 SQUARE FEET PER GALLON.
  - 583 PROVIDE AND INSTALL ADA SIGNS SECURED TO BUILDING.
  - 584 PROVIDE AND INSTALL SIGN SECURED TO BUILDING THAT INDICATES "VAN ACCESSIBLE". SIGNS MUST INDICATE "\$100 FINE".

APPROVED BY FORESTRY  
*[Signature]*  
DATE 5-22-14

APPROVED BY PLANNING  
*[Signature]*  
DATE 05-22-14

**PLANT PALETTE**

| SYM. | COMMON NAME     | SCIENTIFIC NAME         | SIZE        | QNTY. |
|------|-----------------|-------------------------|-------------|-------|
| BO   | BUR OAK         | Quercus macrocarpa      | 1 1/2" Cal. | 4     |
| AL   | AMERICAN LINDEN | Tilia americana         | 2" Cal.     | 11    |
| SM   | SILVER MAPLE    | Acer saccharinum        | 1 1/2" Cal. | 10    |
| ID   | ISARNTI DOGWOOD | Cornus sericea 'Isanti' | 2 Gallon    | 84    |
| AK   | ALPINE CURRANT  | Ribes alpinum           | 2 Gallon    | 85    |
| FS   | FRITSCH SPIREA  | Spiraea fitchiana       | 2 Gallon    | 10    |



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The designs indicated in these plans are in accordance with established practices of civil engineering. However, neither Swenson, Hagen & Co. nor its personnel can or do warrant, represent, or agree to be held responsible for any or all damages which might be occasioned by the Contractor's failure to exactly locate and preserve any and all underground utilities.

**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.

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

DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

**GRADING, PAVING, & LANDSCAPING PLAN**  
TRILLIUM FOURTH ADDITION  
LOT 1, BLOCK 4  
BISMARCK, NORTH DAKOTA

**SWENSON, HAGEN & COMPANY P.C.**  
990 Bison Avenue  
Bismarck, North Dakota 58504  
Phone (701) 223-2600  
Fax (701) 223-2606  
Swenson, Hagen & Co.  
Surveying  
Planning  
Landscaping  
Civil Engineering  
Landscape & Site Design  
Construction Management

DRAWN BY: LN  
CHECK BY: JP  
DATE: 5-6-14  
FILE DESC: \_\_\_\_\_  
COMPUTER FILE: \_\_\_\_\_  
PLOT: BISMARCK/TRILLIUM ADD/  
TRILLIUM 4TH/LOT 1 BK 4 FRANK  
WAGNER SITE PLAN  
SURVEY FILE: \_\_\_\_\_

SHEET  
C3.0