



**LANDSCAPING REQUIREMENTS**

**STREET TREES**  
3 DECIDUOUS TREES ARE REQUIRED FOR EVERY 100 LINEAL FEET OF STREET FRONTAGE.  
WEST: N/A-LESS THAN 20% OF EXISTING PARKING BEING ALTERED.  
NORTH: N/A-LESS THAN 20% OF EXISTING PARKING BEING ALTERED.

**PERIMETER PARKING LOT LANDSCAPING**  
LESS THAN 100 PARKING LOT SPACES: 1 SHADE OR ORNAMENTAL TREES AND 5 SHRUBS FOR EVERY 25 LINEAL FEET OF STREET FRONTAGE.  
WEST ADDITION: N/A - THE GRADE DIFFERENTIAL OF THE WEST PARKING LOT IS APPROXIMATELY 11" ON THE NORTH EDGE AND 20" ON THE SOUTH EDGE BELOW 19TH STREET.  
SOUTH ADDITION: N/A  
- EXISTING EVERGREEN TREES = 24  
- PROPOSED EVERGREEN TREES (PICEA GLAUCA VAR. DENSATA) = 6  
- GRADE DIFFERENTIAL OF THE SOUTH EDGE OF PARKING LOT IS APPROXIMATELY 3' BELOW RIGHT-OF-WAY

**INTERIOR PARKING LOT LANDSCAPING**  
TEN (10) SQUARE FEET OF LANDSCAPED AREA PER PARKING SPACE. FOR PARKING LOTS WITH 100 TO 400 PARKING SPACES, AT LEAST 50% OF LANDSCAPE AREAS SHALL BE NO LESS THAN 800 SQUARE FEET WITH A MINIMUM DIMENSION OF 10 FEET. AT LEAST ONE (1) SHADE TREE AND THREE (3) SHRUBS SHALL BE PROVIDED FOR EVERY TWENTY (20) PARKING SPACES.  
NORTHWEST: N/A-LESS THAN 20% OF EXISTING PARKING BEING ALTERED.  
SOUTHWEST: 128 PARKING STALLS X 10 SF = 1,280 SF  
NEW ISLANDS : 680+343 = 1023 SF  
EXISTING ISLAND: 3036 SF  
TOTAL  
TREES: 128/20=6.4 (6) TREES  
SHRUBS: 128/20=6.4 (19) SHRUBS

**BUFFER YARD LANDSCAPING**  
N/A

**REFERENCE NOTES SCHEDULE - THIS SHEET ONLY**

CODE	DESCRIPTION
1	INSTALL 12" CONCRETE EDGER. SEE DETAIL D/L1.2.
2	INSTALL 1" WASHED LANDSCAPE ROCK OVER LANDSCAPE FABRIC.
3	INSTALL EQUAL MIXTURE OF 1" CRUSHED WASHED LANDSCAPE ROCK AND 4" TO 10" WASHED LANDSCAPE ROCK OVER LANDSCAPE FABRIC.
4	SODDING: CONTRACTOR SHALL PROVIDE AND INSTALL SOD AS FOLLOWS: ASPA CERTIFIED GRADE: CULTIVATED GRASS SOD; 100 PERCENT KENTUCKY BLUE GRASS OR A MIXTURE OF KENTUCKY BLUE GRASS AND CREEPING RED FESCUE WITH THE CREEPING RED FESCUE NOT EXCEEDING 40 PERCENT. STRONG FIBROUS ROOT SYSTEM, FREE OF STONES, BURNED OR BARE SPOTS; CONTAINING NO MORE THAN 5 WEEDS PER 100 SQUARE FEET. PEAT SOD WILL NOT BE ALLOWED. SEE SPECIFICATIONS FOR FERTILIZING AND INSTALLATION PROCEDURES.
5	SEED TYPE I: CONTRACTOR SHALL PROVIDE AND INSTALL SEED MIX AS FOLLOWS: DIMENSION PERENNIAL RYE 9 PERCENT ADELPHI KENT BLUE 22 PERCENT MERIT KENT BLUE 8 PERCENT GERONIMO KENT BLUE 14 PERCENT BONANZA TALL FESCUE 24 PERCENT PARADE BLUEGRASS 8 PERCENT ANNUAL RYEGRASS 15 PERCENT CONTRACTOR SHALL APPLY SEED AT A DRILLED RATE OF 20 POUNDS/10,000 SQUARE FEET WITHIN A MINIMUM COVERAGE OF 95 PERCENT. SEED AND SEEDING MIXTURE SHALL BE FREE OF ALL PROHIBITED NOXIOUS WEED SEED AND WILL NOT CONTAIN MORE THAN 1/2 OF 1 PERCENT BY WEIGHT OR RESTRICTED NOXIOUS WEED SEEDS.
6	SEED TYPE II: CONTRACTOR SHALL PROVIDE AND INSTALL SEED MIX AS FOLLOWS: WESTERN WHEATGRASS 20 PERCENT CRESTED WHEATGRASS 20 PERCENT PUBESCENT WHEATGRASS 20 PERCENT PERENNIAL RYE GRASS 20 PERCENT BROME GRASS 20 PERCENT CONTRACTOR SHALL APPLY SEED AT A DRILLED RATE OF 15 POUNDS/10,000 SQUARE FEET WITHIN A MINIMUM COVERAGE OF 95 PERCENT. SEED AND SEEDING MIXTURE SHALL BE FREE OF ALL PROHIBITED NOXIOUS WEED SEED AND WILL NOT CONTAIN MORE THAN 1/2 OF 1 PERCENT BY WEIGHT OR RESTRICTED NOXIOUS WEED SEEDS.

**PLANT SCHEDULE - THIS SHEET ONLY**

SYM	QTY	COMMON NAME	BOTANICAL NAME	SIZE	TYPE	COMMENTS
TB	5	Frontyard Linden	Tilia americana 'Ballyard' TM	2" CAL	B & B	
CA	1	Pagoda Dogwood	Cornus alternifolia	1.5" CAL	B & B	
SI	1	Ivory Silk Japanese Tree Lilac	Syringa reticulata 'Ivory Silk'	1.5" CAL	B & B	
PD2	6	Black Hills Spruce	Picea glauca 'Densata'	5'-6"	B & B	

**GENERAL NOTE:**  
1) ALL WORK NOTED AS PHASE 1 IS NOT PART OF THIS PROJECT.

APPROVED BY FORESTRY  
9/1/2014  
SM  
TITLE DATE

APPROVED BY PLANNING  
4/17/14  
PLANNING  
TITLE DATE

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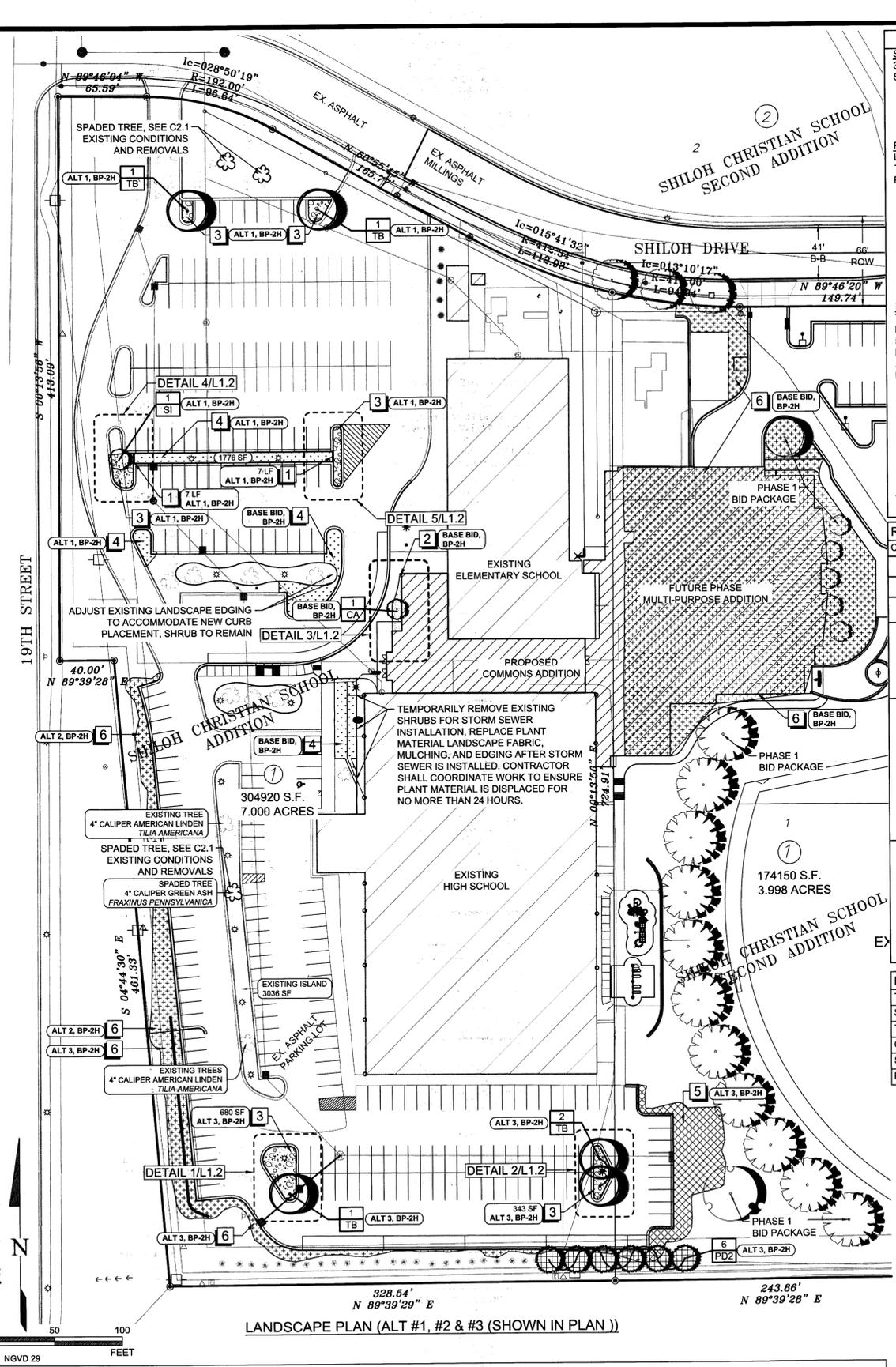
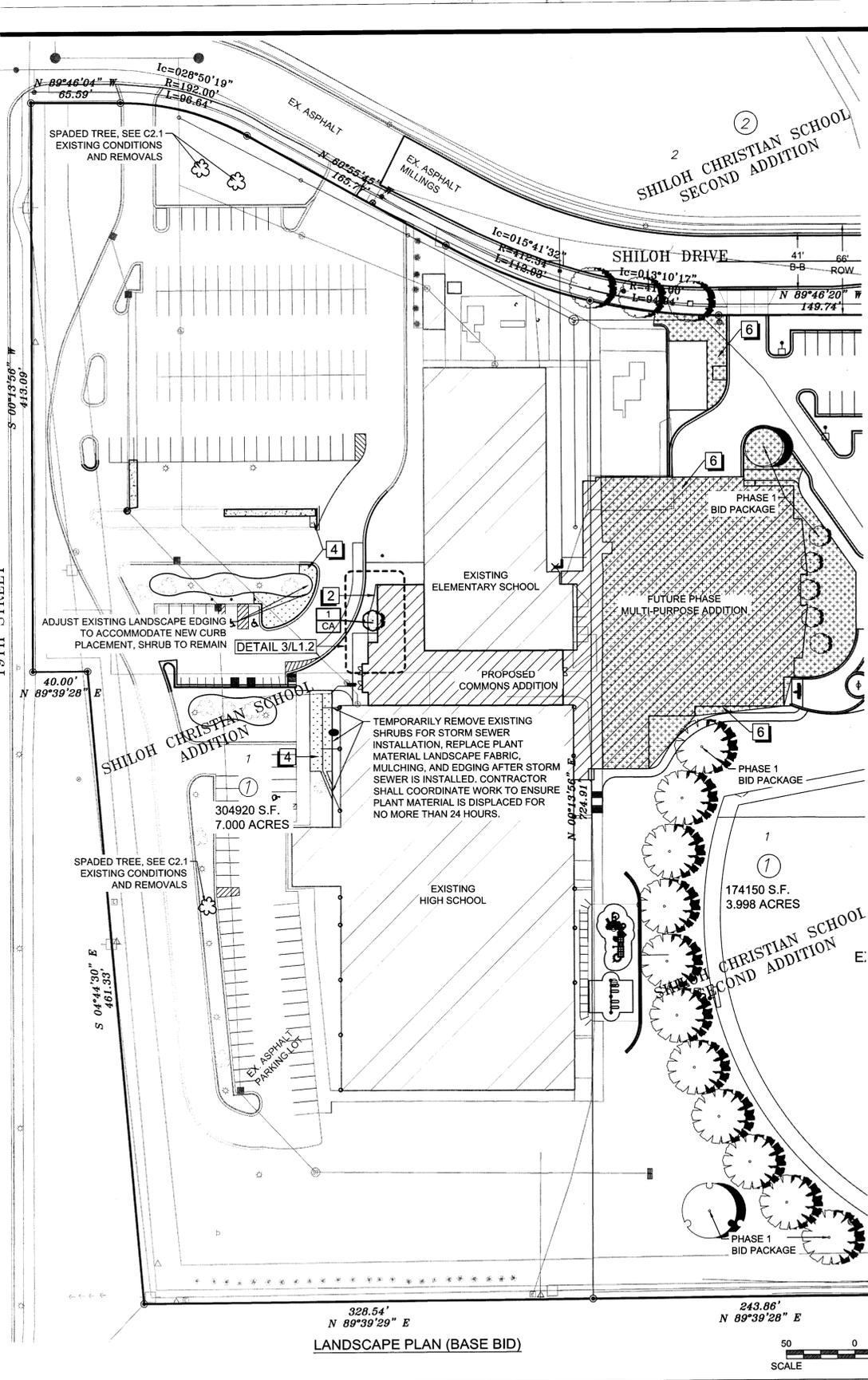


SHILOH CHRISTIAN SCHOOL ADDITION AND REMODEL BISMARCK, NORTH DAKOTA

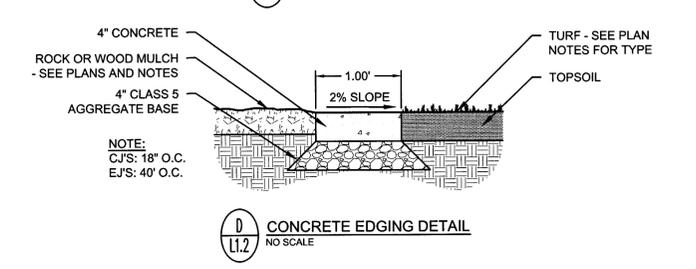
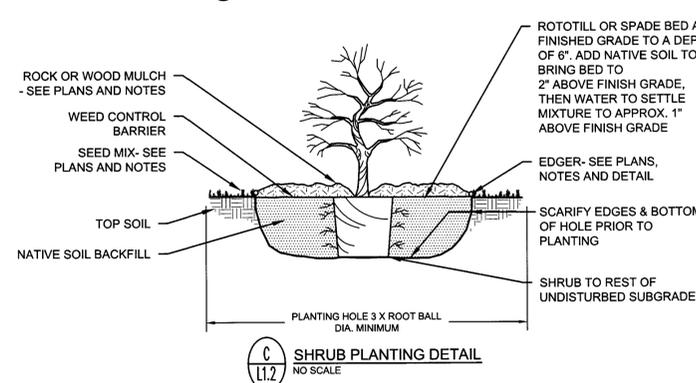
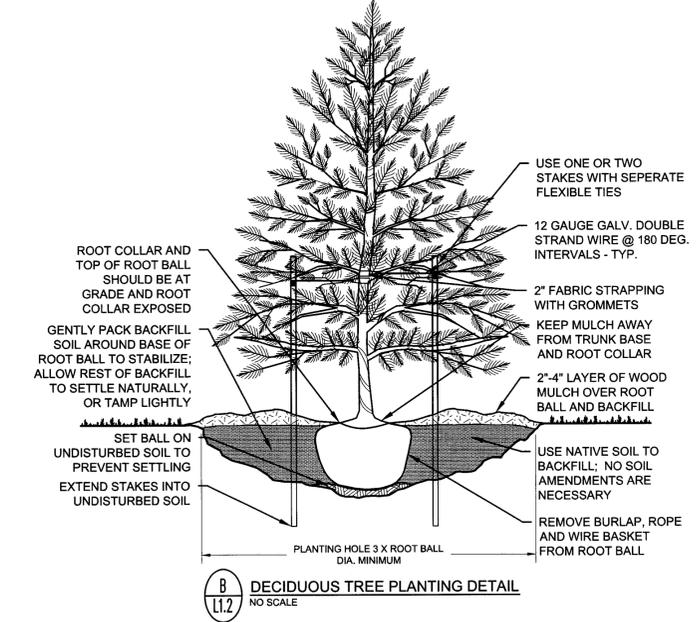
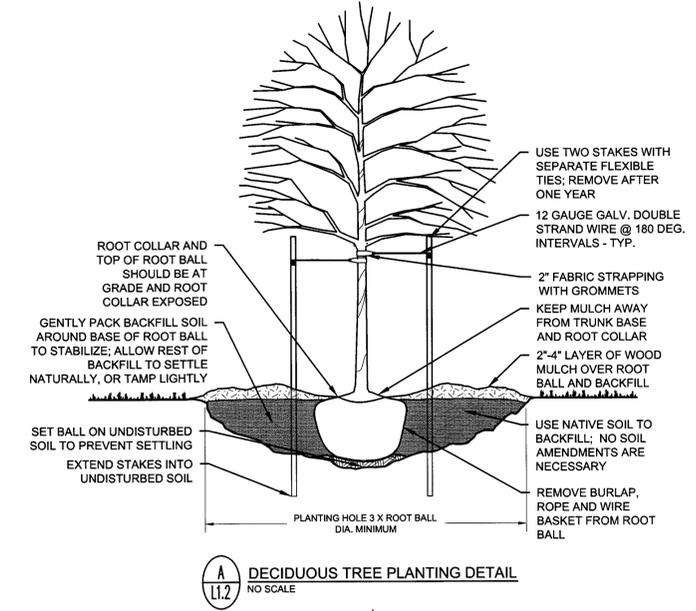
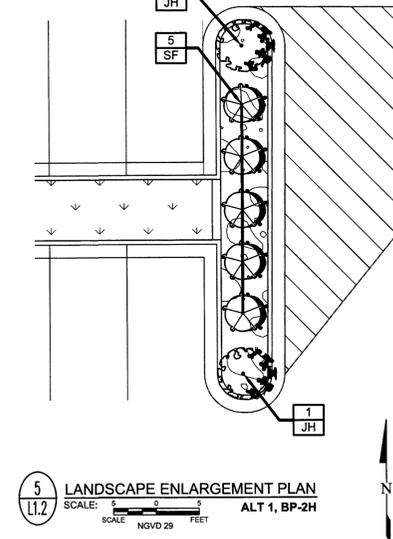
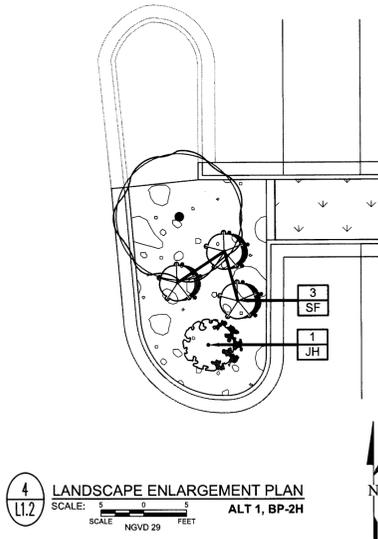
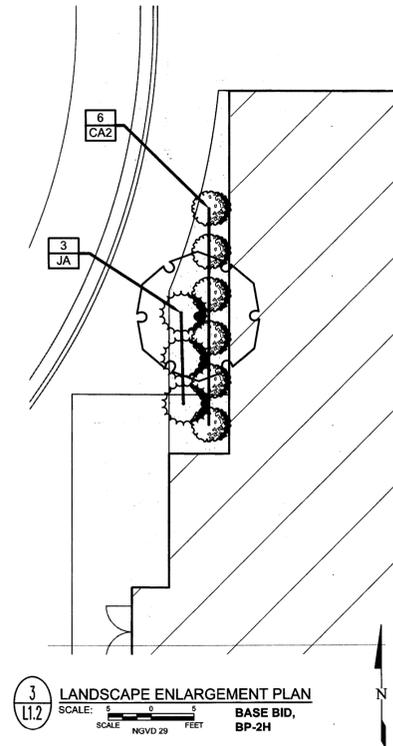
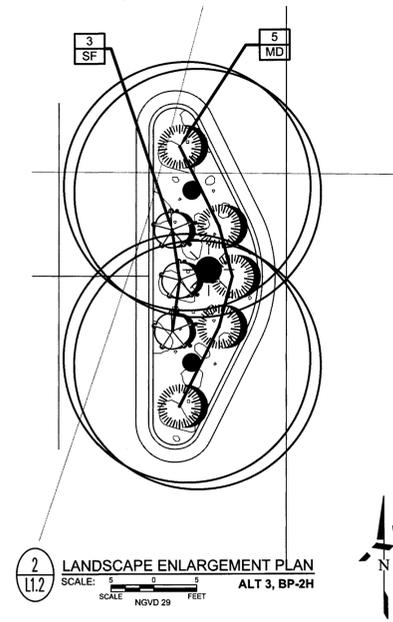
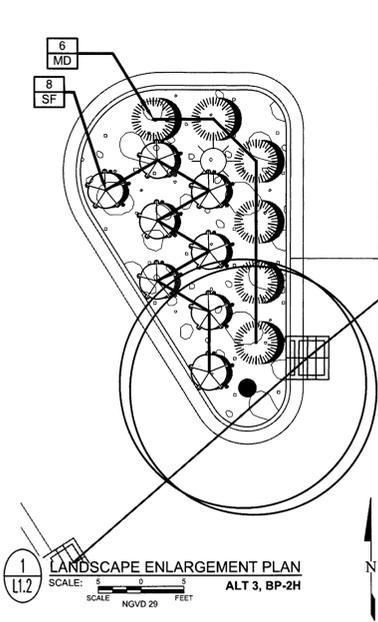
LANDSCAPE LAYOUT BP-2H

Project No: 13-062  
Date: MARCH 31, 2014

L1.1



- PLANTING NOTES**
- FINE GRADING SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING OPERATIONS.
  - CONTRACTOR SHALL LAY OUT PLANT MATERIAL PER PLAN AND FACE TO GIVE BEST APPEARANCE OR RELATION TO ADJACENT PLANTS, STRUCTURES OR VIEWS. CONSULT WITH LANDSCAPE ARCHITECT TO OBTAIN APPROVAL PRIOR TO INSTALLATION.
  - PLANT MATERIAL SHALL NOT BE INSTALLED IN AREAS WHICH WILL CAUSE HARM TO ADJACENT STRUCTURES OR OBSTRUCT IRRIGATION SPRAY PATTERN (IF APPLICABLE). NOTIFY THE OWNER SHOULD CONFLICTS ARISE.
  - PLANT LOCATIONS ARE DIAGRAMMATIC AND MAY BE ADJUSTED IN THE FIELD AT THE LANDSCAPE ARCHITECT'S REQUEST PRIOR TO INSTALLATION.
  - FINISH GRADE OF PLANTING AREAS SHALL BE 2" BELOW ADJACENT PAVING. TAPER 4" DEPTH MULCH TOP DRESSING TO 1 1/2" DEPTH AT ADJACENT PAVING.
  - ALL NEWLY PLANTED MATERIAL SHALL BE THOROUGHLY SOAKED WITH WATER WITHIN 3 HOURS OF PLANTING. THOROUGHLY RE-SOAK ALL NEW PLANT MATERIALS ONE WEEK AFTER PLANTING COMPLETION.
  - THIRTY DAYS AFTER PLANTING, CONTRACTOR SHALL RE-STAKE AND STRAIGHTEN TREES AS REQUIRED.
  - CONTRACTOR SHALL THOROUGHLY LOOSEN ANY COMPACTED SUBGRADES PRIOR TO PLACING TOPSOIL, TO A MINIMUM DEPTH OF 4".
  - CONTRACTOR SHALL IMPORT CLEAN TOPSOIL FREE OF WEEDS, RHIZOMES, ROCKS, STICKS, AND OTHER DELETERIOUS MATERIAL. ENGINEER IS TO APPROVE TOPSOIL PRIOR TO INSTALLATION. CONTRACTOR SHALL BRING TO FINISH GRADE WITH 12" MIN. OF TOPSOIL IN ALL LAWN AREAS AND PLANTING BEDS.
  - CONTRACTOR SHALL REMOVE WEEDS, CONTAMINATED SOILS, MISC. WASTE MATERIALS FROM AREA TO BE PLANTED AND SEEDED/SODDED. CONTRACTOR SHALL LOOSEN COMPACTED SUBSOILS BY TILLING AND IMPORTING NEW TOPSOIL AS REQUIRED RESTORING GRADES AND MAINTAINING POSITIVE DRAINAGE AWAY FROM STRUCTURES.
  - DO NOT INSTALL PLANT MATERIAL WHEN AMBIENT TEMPERATURES MAY DROP BELOW 35 DEGREES F OR RISE ABOVE 90 DEGREES F. DO NOT INSTALL PLANT MATERIAL WHEN WIND VELOCITY EXCEEDS 30 MPH. ACCEPTABLE PLANTING DATES SHALL BE AS FOLLOWS:  
SPRING: APRIL 15 - JUNE 15  
FALL: SEPTEMBER 15 - NOVEMBER 1
  - WEED FABRIC (PER SPEC) SHALL BE INCLUDED UNDER ALL AREAS RECEIVING ROCK MULCHING.
  - ALL TREES LOCATED OUTSIDE OF A PLANTING BED TO RECEIVE 4" DEPTH OF SHREDDED HARDWOOD BARK MULCH 3 TIMES THE DIA. OF THE ROOTBALL UNLESS OTHERWISE NOTED. MULCH SHALL BE INCLUDED IN THE PRICE BID FOR EACH TREE.



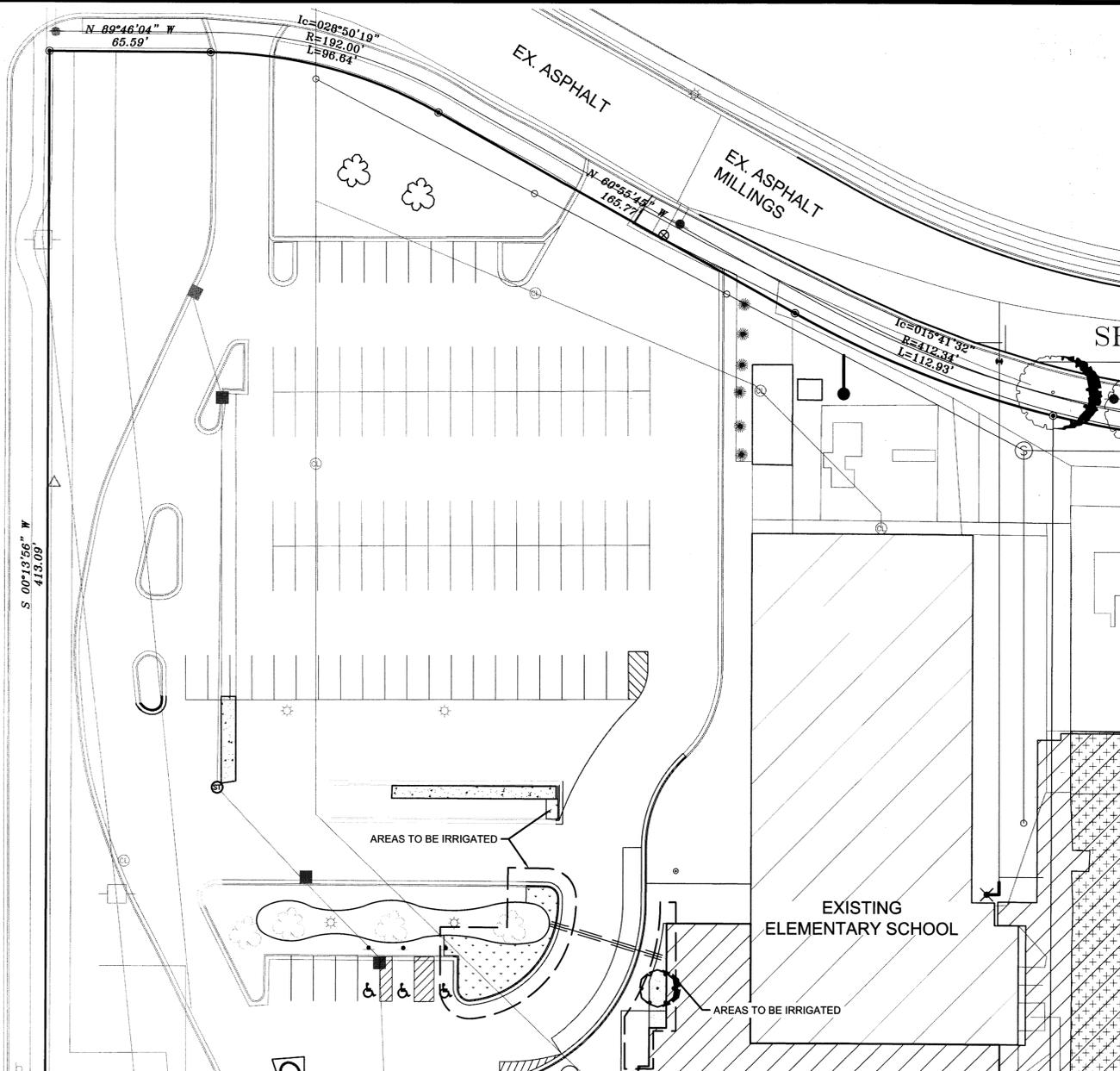
PLANTING SCHEDULE						
SHRUBS						
SYM	QTY	COMMON NAME	BOTANICAL NAME	SIZE	TYPE	COMMENTS
CA2	6	Arctic Fire Dogwood	Cornus stolonifera 'Arctic Fire'	2 GAL	CONT	
JA	3	Blueberry Delight Juniper	Juniperus communis depressa 'AmiDak' TM	2 GAL	CONT	
JH	3	Hughes Juniper	Juniperus horizontalis 'Hughes'	2 GAL	CONT	
MD	11	Russian Cypress	Microbiota decussata	2 GAL	CONT	
SF	19	Fritch Spirea	Spiraea fritschiana	2 GAL	CONT	

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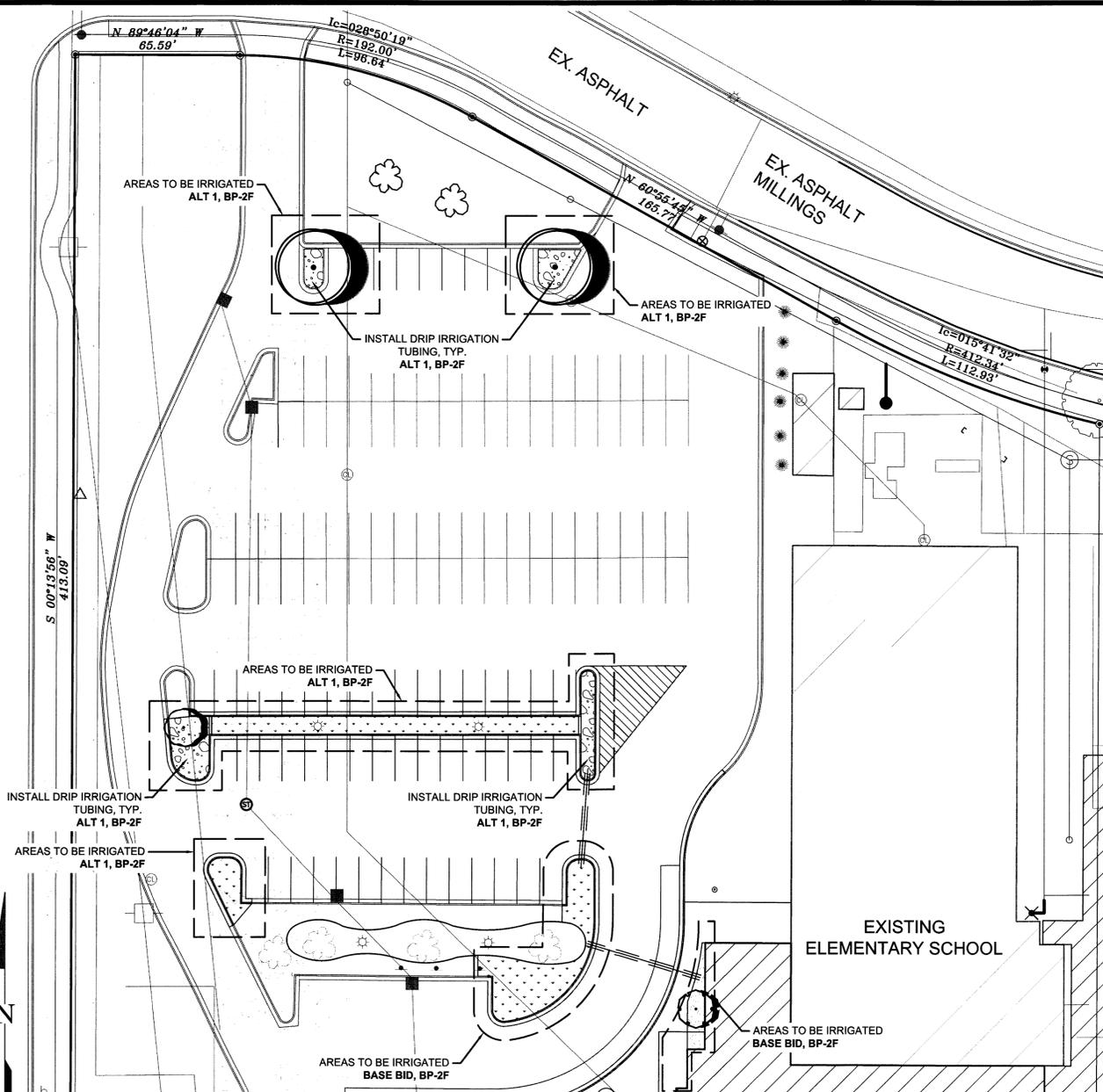


SHILOH CHRISTIAN SCHOOL  
ADDITION  
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BISMARCK, NORTH DAKOTA

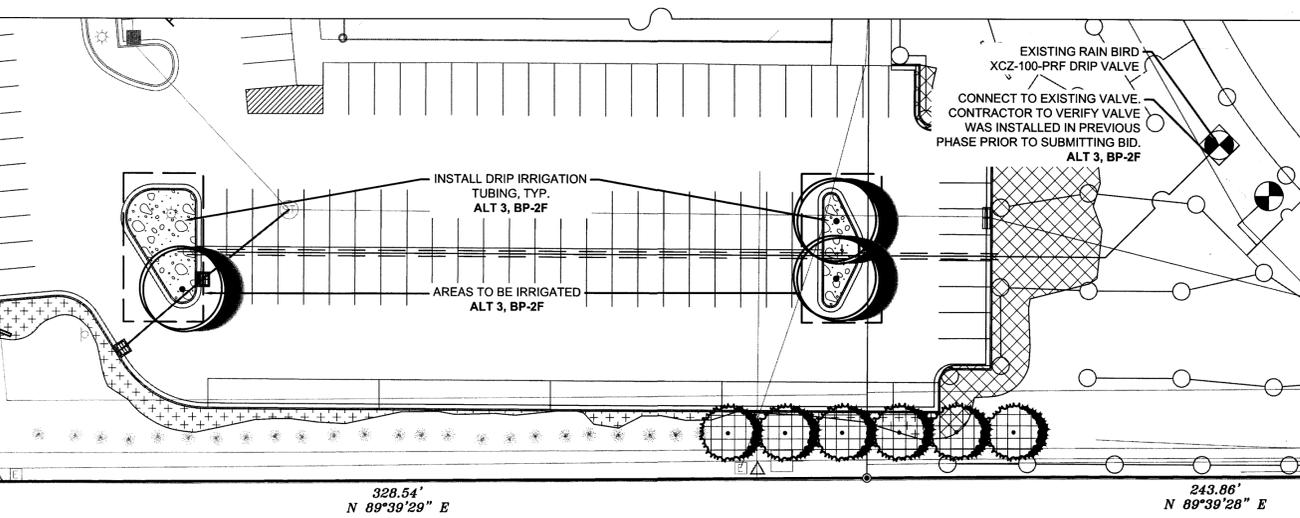
LANDSCAPE ENLARGEMENT PLAN BP-2H



NORTHWEST PARKING LOT IRRIGATION PLAN (BASE BID)



NORTHWEST PARKING LOT IRRIGATION PLAN (ALT #1)



SOUTHWEST PARKING LOT IRRIGATION PLAN (ALT #3)

IRRIGATION LEGEND:

INSTALL CL160 PVC SLEEVE

IRRIGATION NOTES:

- PRIOR TO BID PREPARATION AND SUBMITTAL, CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING IRRIGATION SYSTEM AROUND THE SCHOOL.
- CONTRACTOR SHALL UTILIZE THE EXISTING IRRIGATION SYSTEM AS MUCH AS POSSIBLE WHILE NOT COMPROMISING THE EXISTING IRRIGATION COVERAGE.
- IRRIGATION CONTRACTOR SHALL VERIFY PRESSURE OF SYSTEM PRIOR TO INSTALLATION.
- IRRIGATION CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION MANAGER TO ENSURE ANY AND ALL SLEEVES NEEDED FOR THE NEW IRRIGATION SYSTEM ARE PLACED PRIOR TO INSTALLATION OF ANY SITE HARD SURFACES. SLEEVE UNDER ALL WALKS, DRIVES, ROADS, AND PAVER AREAS. SLEEVES ARE TO BE CL160 PVC. MAINLINE SLEEVES ARE TO BE 4" WITH A MINIMUM 2" SLEEVE FOR WIRES. LATERAL SLEEVES SHALL BE 2X THE PIPE BEING SLEEVED. IF MORE THAN ONE CONTROLLER IS BEING INSTALLED, PROVIDE SEPARATE WIRE SLEEVES FOR EACH CONTROLLER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY THEIR WORK. THEY SHALL COORDINATE THEIR WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS UNDER SIDEWALKS AND PAVING.
- THE CONTRACTOR SHALL, AT THEIR OWN EXPENSE, LOCATE ALL UNDERGROUND UTILITIES, WHICH MAY AFFECT THEIR OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE.
- IF NEW MAINLINE IS REQUIRED, THE CITY ORDINANCE REQUIRES THE INCORPORATION OF A BACKFLOW PREVENTION DEVICE, CONTRACTOR TO PROVIDE.
- PROVIDE BLOW OUT TAPS AND ENCLOSURES BEFORE AND AFTER THE BACK FLOW PREVENTION DEVICE.
- SHOULD A NEW CONTROLLER BE NECESSARY, THE CONTRACTOR SHALL COORDINATE THE LOCATION WITH THE OWNER. CONTROLLER SHALL BE INSTALLED AND GROUNDED PER MANUFACTURER'S SPECIFICATIONS. FINAL CONNECTION OF THE VALVE WIRES TO THE CONTROLLER SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE IRRIGATION CONTROLLER SHALL BE WIRED DIRECTLY TO A 110 VOLT POWER SOURCE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE IRRIGATION CONTROLLER WIRING TO THE POWER SOURCE.
- ALL SPRINKLER HEADS SHALL BE ADJUSTED SO AS TO NEVER SPRAY THE BUILDING OR ANY FENCING AND MINIMIZE OVER-SPRAY ONTO ALL PAVED SURFACES. IRRIGATION CONTRACTOR SHALL PROVIDE 100% HEAD-TO-HEAD IRRIGATION COVERAGE IN ALL LAWN AREAS SEEDED OR SODDED UNLESS OTHERWISE SHOWN IN PLANS.
- PLACE VALVE BOXES WITHIN OR ADJACENT TO PLANTING BEDS FOR EASY ACCESS. ALL IRRIGATION VALVES SHALL BE LOCATED IN PROFESSIONAL GRADE VALVE BOXES. SIZE OF VALVE BOXES SHALL VARY WITH NUMBER OF VALVES LOCATED IN BOX. ALL VALVE BOX LID ELEVATIONS SHALL BE SET FLUSH WITH FINISHED GRADE. PROVIDE BOX SIZE THAT WILL ALLOW 6" CLEARANCE AROUND ALL SIDES OF VALVES. PROVIDE BOLTS PER MANUFACTURER'S RECOMMENDATIONS AND SECURE EACH VALVE BOX.
- THE CONTRACTOR SHALL REPAIR ANY SETTLING IN THE IRRIGATION TRENCHES OR ASSOCIATED IRRIGATION WORK AS A WARRANTY ITEM.
- IRRIGATION CONTRACTOR SHALL PROVIDE TO THE OWNER TWO (2) SETS OF AS-BUILT DRAWINGS TO SCALE, SHOWING ALL COMPONENTS OF THE SYSTEM, REFERENCED FROM A FIXED LOCATION ON THE SITE.
- ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL COMPLETION. IF DURING SUCH GUARANTEE PERIOD, ANY SUCH PRODUCT FAILS DUE TO IMPROPER INSTALLATION OR DEFECTIVE MATERIAL, THE CONTRACTOR WILL REPAIR THE DEFECTIVE COMPONENT(S) FREE OF CHARGE.
- CONTRACTOR SHALL PROVIDE TO THE OWNER, COPIES OF ALL WARRANTIES FROM MANUFACTURER AND OPERATING MANUALS FOR FURNISHED EQUIPMENT. INFORMATION SHEETS SHALL BE BOUND IN STANDARD 3-RING BINDERS LABELED TO SHOW PROJECT NAME, CONTRACTOR'S NAME, ADDRESS, BUSINESS PHONE NUMBER, AND DATE.

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IRRIGATION LAYOUT BP-2F

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