

"BUILDING RELATIONSHIPS WITH A COMMITMENT TO CLIENT SATISFACTION THROUGH TRUST, QUALITY AND EXPERIENCE"

- CIVIL ENGINEERING
- SURVEYING & MAPPING
- CONSTRUCTION SERVICES
- WATER RESOURCES
- PLANNING & DEVELOPMENT
- TRANSPORTATION ENGINEERING
- LANDSCAPE ARCHITECTURE

MILWAUKEE REGIONAL OFFICE  
 N22 W2591 NANCY'S COURT SUITE 3  
 MILWAUKEE, WISCONSIN 53186  
 262.513.0686 PHONE | 262.513.1232 FAX  
 MADISON | MILWAUKEE  
 KENOSHA | APPLETON  
 www.jsdinc.com

SERVICES PROVIDED TO:



PROJECT:  
**MILWAUKEE RIVER PARK IMPROVEMENTS**

PROJECT LOCATION:  
 VILLAGE OF BROWN DEER  
 MILWAUKEE COUNTY, WI

JSD PROJECT NO.: 13-5875

SEAL/SIGNATURE:

ALTHOUGH EVERY EFFORT HAS BEEN MADE IN PREPARING THESE PLANS AND CHECKING THEM FOR ACCURACY, THE CONTRACTOR AND SUBCONTRACTORS MUST CHECK ALL DETAIL AND DIMENSIONS OF THEIR TRADE AND BE RESPONSIBLE FOR THE SAME.

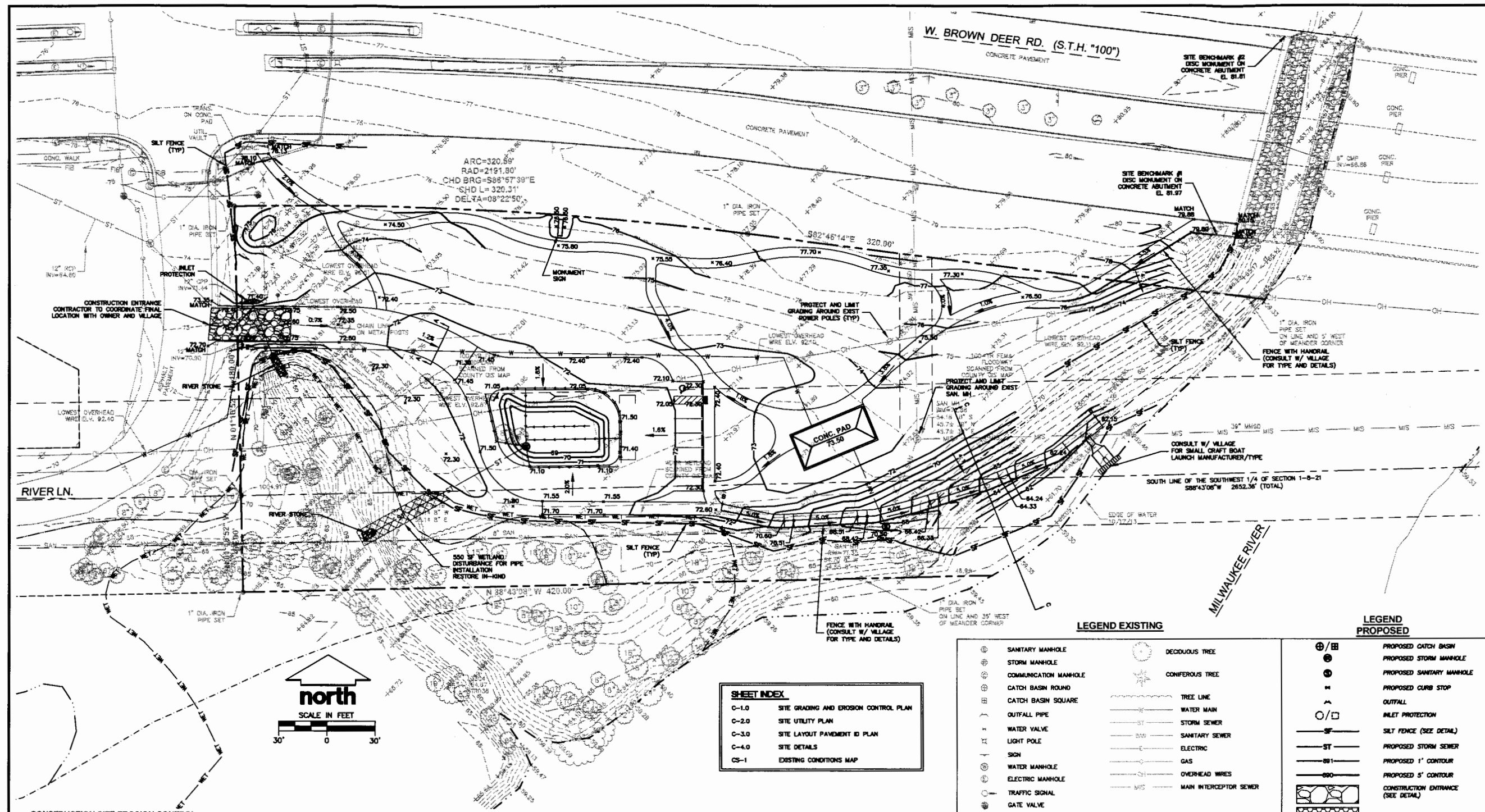
DESIGN BY: RW	03-15-14
DRAWN BY: RW	03-15-14
CHECKED BY: RW	03-15-14
PLAN MODIFICATIONS:	DATE:
VILLAGE COMMENTS	03-31-14
VILLAGE COMMENTS	04-06-14



Call 811 or (800) 242-8511  
 Milwaukee Area (262) 432-7910  
 Hearing Impaired TDD (800) 542-2289  
 www.DiggersHotline.com

SHEET TITLE:  
**SITE GRADING AND EROSION CONTROL PLAN**

SHEET NUMBER:  
**C-1.0**



**SHEET INDEX**

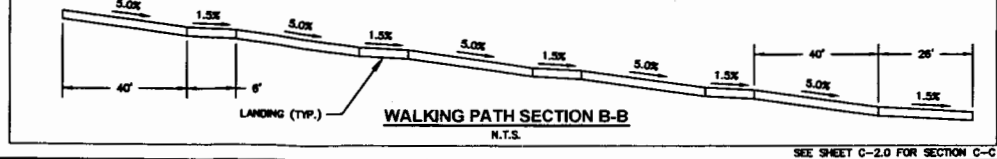
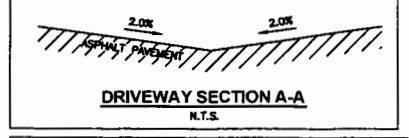
C-1.0	SITE GRADING AND EROSION CONTROL PLAN
C-2.0	SITE UTILITY PLAN
C-3.0	SITE LAYOUT PAVEMENT ID PLAN
C-4.0	SITE DETAILS
CS-1	EXISTING CONDITIONS MAP

LEGEND EXISTING		LEGEND PROPOSED	
⊕	SANITARY MANHOLE	⊕/⊕	PROPOSED CATCH BASIN
⊕	STORM MANHOLE	⊕	PROPOSED STORM MANHOLE
⊕	COMMUNICATION MANHOLE	⊕	PROPOSED SANITARY MANHOLE
⊕	CATCH BASIN ROUND	⊕	PROPOSED CURB STOP
⊕	CATCH BASIN SQUARE	⊕	OUTFALL
⊕	OUTFALL PIPE	⊕	INLET PROTECTION
⊕	WATER VALVE	⊕	SILT FENCE (SEE DETAIL)
⊕	LIGHT POLE	⊕	PROPOSED STORM SEWER
⊕	SIGN	⊕	PROPOSED 1' CONTOUR
⊕	WATER MANHOLE	⊕	PROPOSED 5' CONTOUR
⊕	ELECTRIC MANHOLE	⊕	CONSTRUCTION ENTRANCE (SEE DETAIL)
⊕	GATE VALVE	⊕	RIVER STONE
⊕	GUY WIRE		
⊕	DECIDUOUS TREE		
⊕	CONIFEROUS TREE		
⊕	TREE LINE		
⊕	WATER MAIN		
⊕	STORM SEWER		
⊕	SANITARY SEWER		
⊕	ELECTRIC		
⊕	GAS		
⊕	OVERHEAD WIRES		
⊕	MAIN INTERCEPTOR SEWER		

- CONSTRUCTION SITE EROSION CONTROL:**
- CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER OF RECORD, THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES AND VILLAGE OFFICIALS OF ANY CHANGES TO THE EROSION CONTROL PLAN, ENGINEER OF RECORD AND APPROPRIATE VILLAGE OFFICIALS MUST APPROVE ANY CHANGES PRIOR TO DEVIATION FROM THE APPROVED PLANS.
  - ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND VILLAGE OF BROWN DEER ORDINANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THESE STANDARDS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL EROSION CONTROL MEASURES WHICH MAY BE NECESSARY TO MEET UNFORESEEN FIELD CONDITIONS.
  - MODIFICATIONS TO THE APPROVED EROSION CONTROL DESIGN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS IS ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL DESIGN MODIFICATIONS MUST BE APPROVED BY THE VILLAGE OF BROWN DEER AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES PRIOR TO DEVIATION OF THE APPROVED PLAN.
  - ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED BY STATE INSPECTORS, LOCAL INSPECTORS, COUNTY INSPECTORS AND/OR ENGINEER OF RECORD SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
  - INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
  - CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT LOCATION OF VEHICLE INGRESS/EGRESS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS.
  - INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND AT EXISTING INLETS IN STONE RIDGE DRIVE, STORM INLETS OR INTAKES SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS.

- DITCH CHECKS AND APPLICABLE EROSION NETTING/MATTING SHALL BE INSTALLED IMMEDIATELY AFTER COMPLETION OF GRADING EFFORTS WITHIN DITCHES/SWALES TO PREVENT SOIL TRANSPORTATION. ANY TEMPORARY DIVERSION SWALES SHALL BE TOPSOILED, SEEDED AND STABILIZED WITH EROSION CONTROL MATTING PRIOR TO USE.
- CONTRACTOR SHALL INSTALL SILT FENCING AT DOWNSLOPE SIDE OF ALL STOCKPILES.
- ALL EXPOSED SOIL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 30 DAYS AND REQUIRE VEGETATIVE COVER FOR LESS THAN 1 YEAR, REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH WNR TECHNICAL STANDARD 1009 AND VILLAGE OF BROWN DEER ORDINANCE.
- IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES IS REQUIRED. IF DISTURBANCE OCCURS BETWEEN NOVEMBER 15TH AND MAY 15TH, THE MULCHING SHALL BE PERFORMED BY HYDRO-MULCHING WITH A "TACKLER" STOCKPILES SOILS RESULTING FROM EXCAVATION OF FOOTINGS/BUILDING SHALL BE SEEDING AND MULCHING FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT A RATE OF 2 TO 3 TONS PER ACRE. MULCHING SHALL BE DONE WITHIN 24 HOURS OF STOCKPILING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. SOIL STABILIZER TYPE A OR EROSION CONTROL BLANKETS MAY BE USED IN LIEU OF MULCH.
- ALL DISTURBED SLOPES EXCEEDING 4:1 SHALL BE STABILIZED WITH CLASS I TYPE A EROSION MATTING OR APPLICATION OF A WISCONSIN DEPARTMENT OF TRANSPORTATION (WDOT) APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. ALL DISTURBED SLOPES LESS THAN 4:1 SHALL BE MULCHED AND ANCHORED IN ACCORDANCE WITH WNR TECHNICAL STANDARD 1005. ANCHORING SHALL BE IN ACCORDANCE WITH METHOD 2 OR 3.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE, WHEN NECESSARY OR REQUIRED BY LOCAL INSPECTORS AND/OR ENGINEER OF RECORD.
- EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):  
 A. PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.  
 B. BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.  
 C. DISCHARGE TRENCH WATER INTO ACROSS A STABILIZED VEGETATIVE FILTER IN ACCORDANCE WITH WNR TECHNICAL STANDARD 1081 PRIOR TO RELEASE INTO THE

- STORM SEWER, RECEIVING STREAM OR DRAINAGE DITCH.
- PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEEPED AND/OR SCRAPPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE VILLAGE OF BROWN DEER.
  - INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY.
  - ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSPECTED WITHIN 24 HOURS OF ALL RAIN EVENTS EXCEEDING 0.5 INCHES. IMMEDIATELY REPAIR ANY DAMAGE OBSERVED DURING THE INSPECTION.
  - EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.



- CONSTRUCTION SITE SEQUENCING**
- INSTALL CONSTRUCTION BARRIERS, PERIMETER SILT FENCE, INLET PROTECTION IN EXISTING SWALES, AND TEMPORARY CONSTRUCTION ENTRANCE.
  - STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
  - CONDUCT ROUGH GRADING EFFORTS.
  - INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
  - COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
  - INSTALL LANDSCAPING, PLACE TOPSOIL, AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
  - EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.
  - CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

- GENERAL GRADING NOTES**
- CONTRACTOR SHALL VERIFY ALL GRADES, MAKE SURE ALL AREAS DRAIN PROPERLY AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
  - ALL PROPOSED GRADES SHOWN ARE FINISHED SURFACE GRADES, PARKING LOT AND DRIVEWAY ELEVATIONS ARE PAVEMENT GRADES, SPOT GRADES ALONG CURB REFERENCE FLOWLINE GRADES, NOT TOP OF CURB GRADES, UNLESS OTHERWISE SPECIFICALLY NOTED.
  - CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER OF RECORD, WISCONSIN DEPARTMENT OF NATURAL RESOURCES AND VILLAGE OFFICIALS OF ANY CHANGES TO THE EROSION CONTROL AND STORM WATER MANAGEMENT PLANS, ENGINEER OF RECORD AND VILLAGE MUST APPROVE ANY CHANGES PRIOR TO DEVIATION FROM THE APPROVED PLANS.
  - THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING QUANTITIES. WHILE JSD ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARD OF CARE, THEREFORE NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.
  - CONTRACTOR IS RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY COMPANIES TO DETERMINE IF RELOCATION OF UTILITY POLES, TELEPHONE AND FIBER OPTICS BORES, AND/OR OTHER UTILITIES WILL BE REQUIRED. CONTRACTOR SHALL NOTIFY OWNER FOR APPROVAL PRIOR TO RELOCATION OF SAID UTILITIES.

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF JSD PROFESSIONAL SERVICES, INC.