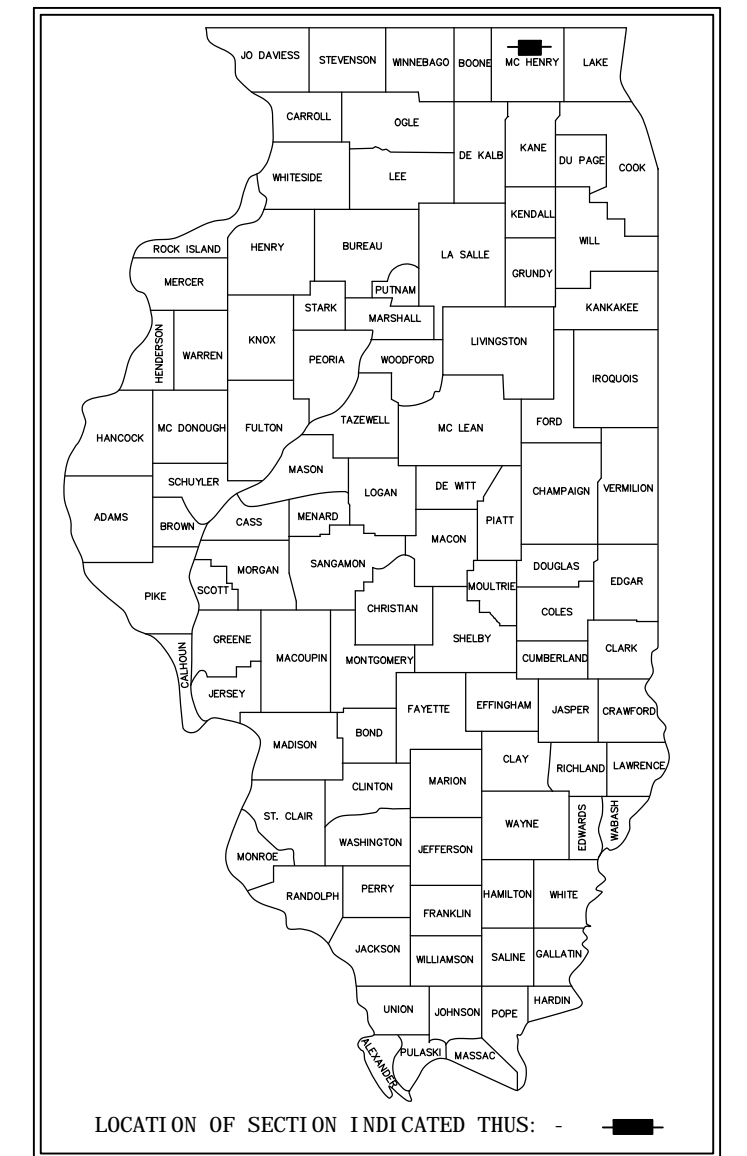
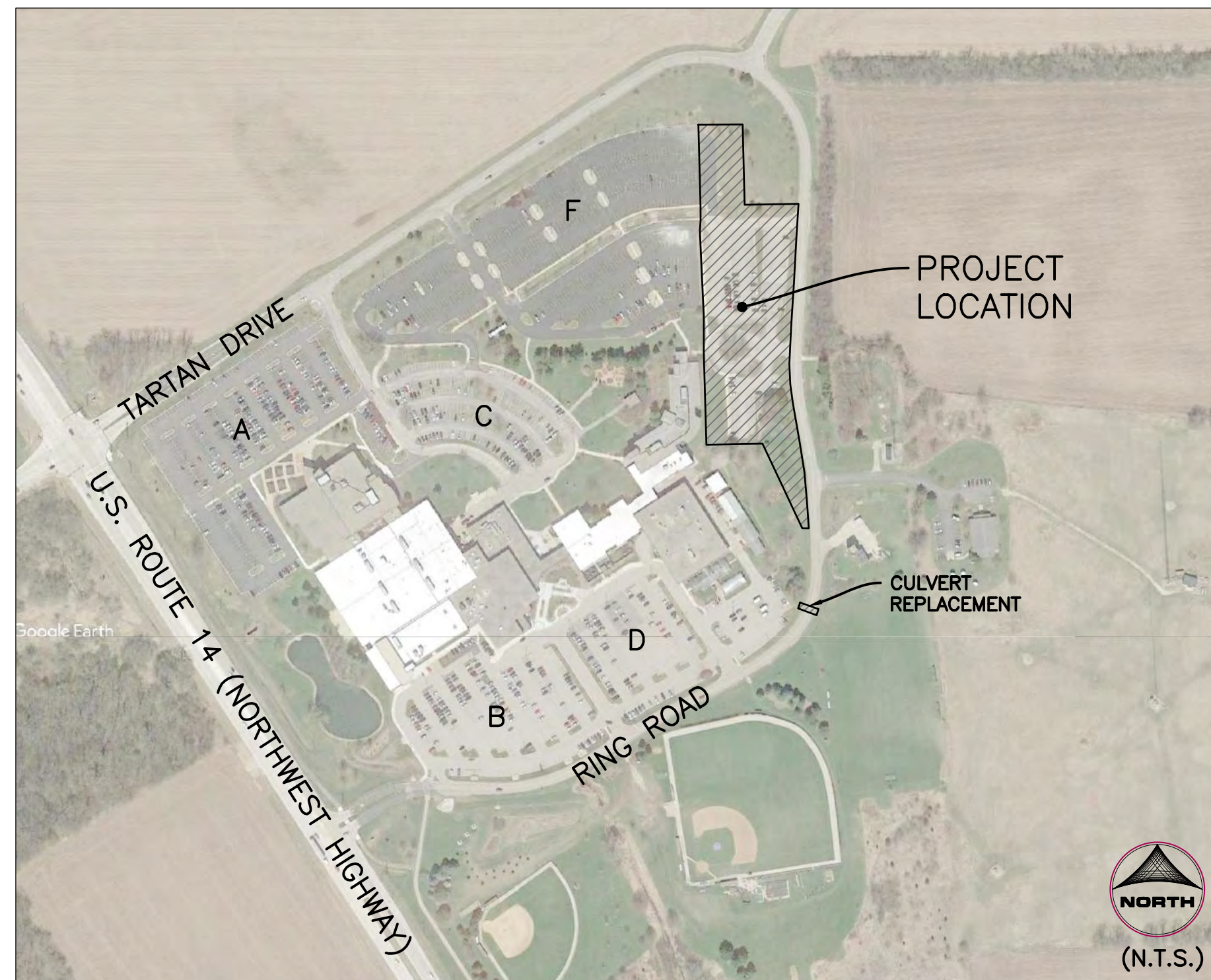


McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS 8900 US Hwy 14



LOCATION MAP



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	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Illinois.	
	JOSEPH F. VAVRINA, P.E.	11/09/18
	DATE	
	License Number: 062-058926 My license renewal date is November 30, 2019. Pages or sheets covered by this seal: ALL "C" SHEETS	

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Landscape Architect under the laws of the State of Illinois.	
	NATHAN R. SEHMER, R.L.A.	11/09/18
	DATE	
	License Number: 157-001589 My license renewal date is August 31, 2019. Pages or sheets covered by this seal: ALL "L" SHEETS	

OWNER: McHENRY COUNTY COLLEGE 8900 U.S. HIGHWAY 14 CRYSTAL LAKE, IL 60012 PHONE: (815) 455-8564 MR. TODD WHEELAND - DIRECTOR OF FACILITY CONTRACTS AND PROJECTS
ENGINEER / SURVEYOR: HR GREEN, INC. 420 NORTH FRONT STREET, SUITE 100 McHENRY, IL 60050 PHONE: (815) 385-1778 JOSEPH F. VAVRINA, P.E. - PROJECT MANAGER DOUG STALKER - PROJECT SURVEYOR
LANDSCAPE ARCHITECT: HR GREEN, INC. 420 NORTH FRONT STREET McHENRY, IL 60050 PHONE: (815) 385-1778 NATHAN SEHMER, PLA
LIGHTING CONSULTANT: IMEC CORP. 1100 WARRENVILLE ROAD, SUITE 400W NAPERVILLE, IL 60563 PHONE: (630) 753-8535 TOM BALA

UTILITY CONFLICTS:		
UTILITY SERVICE	CONTACT	TELEPHONE #
WATER SERVICE:	CITY OF CRYSTAL LAKE, ENGINEERING DIVISION 100 WEST WOODSTOCK STREET CRYSTAL LAKE, IL 60014 MR. MICHAEL MAGNUSON	(815) 356-3614
SANITARY SERVICE:	CITY OF CRYSTAL LAKE, ENGINEERING DIVISION 100 WEST WOODSTOCK STREET CRYSTAL LAKE, IL 60014 MR. MICHAEL MAGNUSON	(815) 356-3614
STORM DRAINAGE:	CITY OF CRYSTAL LAKE, ENGINEERING DIVISION 100 WEST WOODSTOCK STREET CRYSTAL LAKE, IL 60014 MRS. ABIGAIL WILGREEN	(815) 356-3605
ELECTRIC SERVICE:	COMMONWEALTH EDISON 350 S. 2ND STREET ELGIN, IL 60123 MR. JAYVEE ROLDAN	(847) 608-2382
TELEPHONE SERVICE:	AT&T ILLINOIS 222 WEST JACKSON STREET WOODSTOCK, IL 60098 MR. STEVEN JONES	(815) 394-7270
GAS SERVICE:	NICOR 300 WEST TERRA COTTA AVENUE CRYSTAL LAKE, IL 60014 MS. LORA WIELAND	(815) 261-9406
ROADWAY AUTHORITY:	ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196 MR. TOMAS GALLENBACH	(847) 705-4143

Dial 811 or 1-800-892-0123	CALL JULIE 1-800-892-0123
	WITH THE FOLLOWING: COUNTY <u>McHenry</u> CITY-TOWNSHIP <u>Crystal Lake - Dorr</u> SEC. & 1/4 SEC. NO.# <u>SW 1/4 OF SEC-25-T-44N-7E</u>
Know what's below. Call before you dig.	48 hours before you dig (Excluding Sat., Sun. & Holidays)

NOTE:

- HR GREEN, INC. IS TO BE NOTIFIED 3 DAYS PRIOR TO CONSTRUCTION START.
- HR GREEN, INC. SHALL BE INCLUDED IN ALL PRE-CONSTRUCTION MEETINGS.
- PLANS WERE PREPARED WITH THE INTENT THAT HR GREEN, INC. WILL DO ALL CONSTRUCTION STAKING.
- ANY DISCREPANCIES ON THIS PLAN SET MUST BE NOTED AND HR GREEN, INC. NOTIFIED PRIOR TO ACTUAL CONSTRUCTION.



420 N. FRONT STREET, SUITE 100 | McHENRY, IL 60050
Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com

FOR PERMIT/BID

DRAWN BY: ECH	JOB DATE: 8/15/2018	BAR IS ONE INCH ON OFFICIAL DRAWINGS.
APPROVED: JFV	JOB NUMBER: 180186	0" = 1"
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NO.	DATE	BY	REVISION DESCRIPTION
1	11/09/18	ECH	FOR PERMIT/BID

	ILLINOIS DESIGN FIRM # 184-001322 420 N. FRONT STREET, SUITE 100 McHENRY, ILLINOIS 60050 PHONE: 815.385.1778 TOLL FREE: 800.728.7805 FAX: 815.385.1781 HRGreen.com
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McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS
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CIVIL SITEWORK COVER SHEET

SHEET NO. C-00

SPECIFICATIONS & GENERAL NOTES

All items of this project shall be governed by specifications included in the documents listed below:

- "Standard Specifications for Road and Bridge Construction" prepared by the Department of Transportation of the State of Illinois and adopted by said department (latest revision).
- "Supplemental Specifications and Recurring Special Provisions" adopted by the Illinois Department of Transportation (latest revision date).
- "Standards and Specifications for Soil Erosion and Sediment Control" (latest revision).
- "Standard Specifications for Water and Sewer Main Construction in Illinois" (latest revision).

In addition the following special provisions supplement the said specifications, and in case of conflict with any part or parts of said specifications, these special provisions shall take precedence and shall govern.

- SCOPE OF WORK. The proposed improvement consists of supplying all the necessary labor, material and equipment to satisfactorily construct and install all improvements according to the plans designated as "McHENRY COUNTY COLLEGE PARKING LO E & F IMPROVEMENTS."

- CONSTRUCTION OF UNDERGROUND UTILITIES

- Excavation: Where working conditions and right-of-way permit, pipe line trenches with sloping sides may be used.

The slopes shall not extend below the top of the pipe, and trench excavations below this point shall be made with vertical sides with widths not exceeding those specified herein for the various sizes of pipe.

Open-out trenches shall be sheeted and braced as required by the governing State and Federal laws and municipal ordinances, and as may be necessary to protect life, property, or the work.

Where firm foundation is not encountered at the grade established due to unsuitable soil, all such unsuitable material shall be removed and replaced with approved compacted granular material.

- Width of trench: See trench detail.

- Removal of water: Contractors shall, at all times during construction, provide and maintain ample means and devices with which to remove and properly dispose of all water entering the excavations. No sanitary sewer shall be used for disposal of trench water, unless specifically approved by the Engineer and then only if the trench water does not ultimately arrive at existing pumping or sewage treatment facilities.

- Bedding of pipe: All pipe shall be installed on a bed of approved, compacted granular material unless otherwise approved by the City Engineer. The bedding and backfilling of excavated materials shall be cleared with City first and be installed as per typical trench backfill detail.

- Special backfill: Whenever the excavation is in existing or proposed street, parking areas, driveways, or other paved areas, the trench shall be backfilled with approved selected granular material, compacted in place. The top 12" of the backfill shall be filled with road gravel or crushed stone and maintained as a temporary surface for the normal use of the area. Special backfill shall meet the requirements of the detail UG-03 found on Sheet C-16. Note: Excavated materials may be used if approved by the City Engineer.

- Restoration of drainage: As soon as possible after backfilling the trench, all ditching, grading and shaping necessary to restore the original drainage in the area of work shall be performed. Culverts removed during the course of the work shall be replaced as soon as practicable.

Adequate temporary drainage facilities shall be provided during construction.

- Utilities: The Contractor shall notify all utilities prior to the installation of any pipe lines. Where conflict exists between underground utilities and the proposed underground piping requiring a revision to the plans, such construction shall not be undertaken until such changes are approved by the City Engineer in writing.

- The subgrade shall be free of unsuitable material and shall be prepared in accordance with the recommendations noted in the geotechnical report prepared by Midland Standard Engineering and Testing, LLC, dated October 23, 2013 for this project. Testing for compaction shall be the responsibility of the contractor. The City of Crystal Lake will require a proof-roll test if warranted by final soil compaction. This also applies to the parking lot and aisle subgrade and also upon gravel placement. All topsoil and any organic materials must be removed.

- Easements for the existing utilities, both public and private, and utilities within public rights-of-way are shown on the plans according to available records. The Contractor shall be responsible for determining the exact location in the field of these utility lines and their protection from damage due to construction operations. If existing utility lines of any nature are encountered which conflict in location with new construction, the Contractor shall notify the Engineer so that the conflict may be resolved.

- Contractor shall be responsible for securing all Permits including municipal permits.

- INSPECTION. All improvements shall be subject to inspection by a duly authorized and qualified City Inspector both during the course of construction and after construction is complete. The Inspector shall have authority over materials of construction, methods of construction and workmanship to insure compliance with working drawings and specifications. The Contractor shall provide for reasonable tests and proof of quality of materials as requested by the Inspector. Inspector shall have forty-eight (48) hours notice prior to construction.

- Wherever a sewer crosses under a water main, the minimum vertical distance from the top of the sewer to the bottom of the water main shall be 18". Furthermore, a minimum horizontal distance of 10" between sanitary sewers and water mains shall be maintained. If either the vertical or horizontal distances described above cannot be maintained, or the sewer crosses above the water main, the sewer pipe shall be pipe of water main type quality and water main quality joints, or the water main shall be encased in a steel sleeve for a perpendicular distance of 10' on each side of the sewer.

- STORM SEWER MATERIAL

Storm sewers shall be of reinforced concrete pipe conforming to ASTM C76 minimum Class III with O-rings conforming to ASTM C443. All inlet connections shall be concrete sewer pipe. ASTM C14 for extra strength pipe. All Storm Sewers denoted as PVC Storm Sewer shall conform to ASTM D 3034, Type PSM for sizes 10"-15" and ASTM F-679-89 for sizes 18"-36". Minimum acceptable SDR shall be .35. The pipe shall be made of PVC plastic having a minimum cell classification of 12454-C, and shall be have a minimum pipe stiffness of forty-six (46) lbs. per inch per inch (317 kpa). Joints for PVC pipe should be the Integral Bell Gasket type with elastomeric gaskets complying with ASTM F-477 and ASTM D-3212. All inlet connections shall be concrete sewer pipe, ASTM C14 for extra strength pipe.

- Storm Sewer Manholes and Catch Basins

- Manholes and catch basins shall have precast reinforced concrete barrel sections conforming to ASTM C478 with preformed bituminous joints and with integral precast-in-place bottoms. Precast slab bottoms may be used for manholes to be built in existing storm sewerage system lines.

- No more than two precast concrete adjusting rings shall be allowed for a maximum height adjustment of eight inches. All structures shall be wrapped with fabric around the frame, adjusting rings, and down six inches onto the structure.

- Each manhole shall have a poured Class SI concrete bench carefully shaped to drain to the outlet pipe.

- Inlets

- Inlets shall be constructed of precast reinforced concrete conforming to ASTM C478 with "O"-ring or preformed bituminous joints and with precast-in-place bottom. Inlets shall have a wall thickness of no less than four inches.

- No more than two precast concrete adjusting rings shall be allowed for a maximum height adjustment of eight inches. All structures shall be wrapped with fabric around the frame, adjusting rings, and down six inches onto the structure.

- A Class SI concrete bench shall be poured in the bottom of each inlet and shaped to drain to the outlet pipe. The fall across the inlet shall be no less than four inches.

- STORM SEWER FRAMES AND LIDS. All frames not falling in the flow line of the curb and gutter shall be Neenah 2504 or as noted on the plans with a 1" pickhole and the word "Storm" cast in the lid. All curb inlets and catch basins in gutter lines shall be Neenah R-3281 Frame and Grate, or as noted on plans, with ENVIRO logo where Type B-6,12 curb and gutter is specified. All storm sewer grates shall have the ENVIRO Logo on them. All bituminous joining compound for manholes and catch basins shall be RAM-NEK or E-Z STICK.

- PROTECTION OF WATER MAIN AND WATER SERVICE LINES. Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains as follows:

- Water Service Lines

- Horizontal Separation

- Water mains shall be laid at least 10' horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
- Water mains may be laid closer than 10' to a sewer line when:

- Local conditions present a lateral separation of 10';
- The water main invert is at least 18" above the crown of the sewer; and

- The water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer with a minimum vertical separation of 18".

- Both the water main and drain or sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, or PVC pipe meeting the requirements of Section 653.111 when it is impossible to meet (a) or (b), above. The drain or sewer shall be pressure tested to the maximum expected surge head before backfilling.

- Vertical Separation.

- A water main shall be laid so that its invert is 18" above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within 10' horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.

- Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, or PVC pipe meeting requirements of Section 653.111 when:

- It is impossible to obtain the proper vertical separation as described in (a) above; and

- The water main passes under a sewer or drain.

- A vertical separation of 18" between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main.

- Construction shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least 10'.

- Special Conditions. Alternate solutions shall be presented to the Agency when extreme topographical, geological or existing structural conditions make strict compliance with (A) and (B) above technically and economically impractical. Alternate solutions will be approved provided water-tight construction structurally equivalent to approved water main material is provided.

- The Contractor may not remove any material from the site except as directed by the Owner or Engineer in the case of excess material.

- EROSION CONTROL.

It shall be the Contractor's responsibility to properly control erosion on the jobsite. Any siltation of conduits, structures, or ditches shall be cleaned and maintained by the Contractor until the seeding has taken hold. All washouts, gullies, etc. will be regraded and reseeded by the Contractor. The Contractor's responsibility for erosion control shall extend throughout the construction process. The Contractor shall be responsible for clear-up of paved surfaces within and adjacent to the project on a timely basis and/or at the direction of the City Engineer.

- TOPSOIL PLACEMENT.

Contractor shall place stockpiled topsoil or imported material on all disturbed areas with 6" topsoil raked smooth to be ready for landscaping (seeding, sod, etc.).

- BITUMINOUS CONCRETE. Refer to pavement sections on this sheets C-16 and C-19 for type and thickness

- The Engineer and City of Crystal Lake Engineering Department shall be notified if, during construction, any buried field tiles are exposed or disturbed. The Contractor shall reconnect said field tiles if deemed necessary.

- Contractor shall provide insurance coverage as per Article 107.27 of the Standard Specifications. The "Department" shall be taken to mean HR Green, Inc. The policy of insurance shall include HR Green, Inc., the City of Crystal Lake and its Agents as an additional insured or provide separate coverage with an Owner's Protective Policy, as per the amounts stated in the Standard Specifications. No work shall begin until the certificate of insurance is on file with the Engineer. All costs for insurance shall be considered incidental to the contract.

- All handicapped parking signs must have a \$250.00 fine sign attached.

- Lighting shall be constructed as per the electrical plan, done under separate contract by Electrical Consultant. All conduit shall be placed outside of any municipal easements except for authorized 90° crossings.

- The Contractor shall be responsible for the installation and maintenance of adequate signs, traffic control devices, and warning devices to inform and protect the public during all phases of construction. See City/Standard Traffic Control detail for lane closures of public roads.

- The Engineer shall be responsible for the following:

- To visit the construction site in order to better carry out the duties and responsibilities assigned by the Owner and undertaken by the Engineer; and

- The Engineer shall not, during such visits or as a result of such observations of the Contractor's work in progress, supervise, direct, have control over the Contractor's work, nor shall the Engineer have the authority over the responsibility for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor, for safety precautions and programs incidental to the work of the Contractor, or for any failure of the Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to the Contractor furnishing and performing his work. Accordingly, the Engineer can neither guarantee the performance of the construction contracts by the Contractor nor assume responsibility for the Contractor's failure to furnish and perform his work in accordance with the Contract Documents.

- No construction plans shall be used for construction unless specifically marked "For Construction." Prior to commencement of construction, the Contractor shall verify all dimensions and conditions affecting their work with the actual conditions at the job site. In addition, the Contractor must verify the Engineer's line and grade stakes. If there are any discrepancies from what is shown on the construction plans, he must immediately report same to the Engineer before doing any work, otherwise the Contractor assumes full responsibility. In the event of disagreement between the construction plans, standard specifications and/or special details, the Contractor shall secure written instructions from the Engineer prior to proceeding with any part of the work affected by omissions or discrepancies. Failing to secure such instructions, the Contractor will be considered to have proceeded at his own risk and expense.

In the event of any doubt or question arising with respect to the true meaning of the construction plans or specifications, the decision of the Engineer shall be final and conclusive.

- The Contractor shall indemnify and hold harmless the City, City's Engineers their agents and it's employees, HR Green, Inc. and Chick-ill-A, Inc. from and against all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the performance of the Contractor's work. In any and all claims against the City or its employees, by any employee of the Contractor, or anyone directly or indirectly employed by the Contractor, or anyone for whose acts the Contractor may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of damages, waiver of subrogation compensation or benefits payable by or for the Contractor under Workmen's Compensation acts, disability benefit acts or other employee benefit acts.

- Sawing of removal items as noted on the plans, specified in Section 440 of the Standard Specifications, or as required by the engineer, shall be considered incidental to the cost of the item being removed, and no extra compensation will be allowed, unless otherwise specified.

- SIGN PANEL - TYPE 1, METAL POST - TYPE B. This work shall consist of furnishing and installing Type 1 sign panels (U-channel, and break away sign supports as indicated on the plans. Sign assemblies shall meet the requirements of Standard Specifications for Traffic Control Items.

Installation of sign assemblies shall be as specified on the plans, in accordance with the Illinois Manual on Uniform Traffic Control Devices and as directed by the Engineer.

Furnishing, fabricating and installing sign assemblies will be paid for at the contract unit price per square foot for Sign Panel - Type 1, which price will be payment in full for all labor and material necessary to fabricate and install each sign assembly specified on the plans. The posts, including

the break away assembly, shall be paid for at the unit price per foot for Metal Post - Type B.

- PROTECTIVE COAT. This work shall be in accordance with Section 420 of the Standard Specifications insofar as applicable with the following revision.

The protective coat shall be applied to all exposed surfaces of Combination Concrete Curb and Gutter, Concrete Median and Concrete Corrugated Median.

This work will be paid for at the contract unit price per square yard for Protective Coat.

- COMBINATION CONCRETE CURB AND GUTTER. Concrete curb, concrete gutter and combination concrete curb and gutter shall be constructed, measured and paid for in accordance with Section 606 of the Standard Specifications except as follows:

Revise the last sentence of the second paragraph of Article 606.07 to read as follows: "The traverse joints shall be contraction joints spaced on 12-foot centers."

Any City requirements regarding expansion & contraction joints shall govern construction.

- A performance guarantee shall be required (letter of credit) for all public utilities. Also, a two year maintenance bond shall be established upon completion of work.

- All pavement markings on main access drives, approaches and parking lot shall be painted with two (2) coats of WHITE SHERWIN WILLIAMS "PROMAR TRAFFIC MARKING."

Pavement Striping: All proposed pavement striping to be paint.

All Handicap striping shall be yellow.

- All curb & gutter crossings over trench locations shall be reinforced with 2-#4 rebar extended 2' beyond each side of trench

- Where storm sewer is located above the water main, the reinforced concrete pipe shall have O-rings to provide a water tight seal and to create a water quality pipe.

- CURB RAMPS

All sidewalks shall be installed to accommodate the handicapped. A Type "A" Ramp shall be installed in accordance with I.D.O.T. Standard Detail 424001-001, or the detail shown on the plan. Color of truncated domes shall be contrasting with the adjacent surface. Contractor to coordinate color with owner prior to ordering truncated dome panels.

- CONCRETE PAVEMENT. The contractor will need to provide a grid spacing layout for approval by the engineer.

The curing requirements should follow Section 1022.01, (b) with fugitive dye as noted in the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition. Sealers should follow Section 1026 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition.

Joint sealing shall follow Section 1058 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition.

The concrete curb shall be tied to the concrete pavement. Use No. 6, 30" long bar at 48" O.C. Alternatively the curb can be poured monolithically with the concrete pavement.

- SIDEWALKS. Unless otherwise shown on the plans, the proposed sidewalks in front of the site shall be constructed when the site work is substantially complete.

ALL PUBLIC AND PRIVATE SIDEWALKS SHALL BE CONSTRUCTED WITH A MAXIMUM RUNNING SLOPE OF NO GREATER THAN 1:20 (FT/FT) - 5% GRADIENT

All materials shall meet the requirements of the "Standard Specifications for Road and Bridge Construction" of the Illinois Department of Transportation. Concrete shall be at least a six (6) bag mix, 4% to 6% air entrained, and shall have a slump of no less than two (2") inches nor more than four (4") inches. Fiberglass reinforced additives shall be used on all sidewalks extending through driveways. Sidewalks shall be placed on a minimum of four (4") inches of CA-6 crushed stone or Grade 9 compactable crushed stone. Driveway crossings for sidewalks shall be 6" P.C.C. with (4") inches of CA-6 crushed stone or Grade 9 compactable crushed stone.

Pre-molded bituminous expansion joints one-half (1/2") inch thick shall be placed every 50 feet minimum and one-half (1/2") inch thick between the sidewalk and all structures, which extend through the sidewalk. Control joints shall be on five (5') foot centers.

The side edges of the sidewalk shall have rounded edges and the surface shall be "broom" finished.

Protection and Curing: All exposed surfaces of concrete shall be protected against rain. The concrete shall be cured for a minimum period of three days after placing by one of the following methods:

Wet burlap

Impervious paper

Membrane curing compound

When the temperature of the air is expected to drop below 40 degrees F. within 24 hours placing the concrete shall be protected with nine inches of loose, dry straw and a layer of burlap other acceptable material, for a period of at least five days.

- The concrete sealer, in addition to conforming with the referenced Standard Specification section, shall be selected from the current IDOT approved product list for Plural Component Concrete Sealers, or equal. The concrete sealer must dry to a clear finish. All exterior concrete surfaces as well as the segmental block retaining wall shall be sealed. The contractor shall provide documentation from the sealer provider, segmental block wall supplier and concrete pavement supplier noting the sealer is compatible with all exterior concrete surfaces that it is to be applied to. Contractor to also provide cut sheets of the desired sealer to the engineer for approval prior to ordering.

- All surplus soil that will need to be hauled and disposed of offsite will need to be certified that it is not contaminated as defined under 415 ILCS 5/3.180 and any fees, taxes, surcharges charged by or through the operator(s) of clean construction or demolition debris (CCDD) or uncontaminated soil fill operations for the acceptance of uncontaminated soil shall be paid for by the contractor and those fees included in their bid price.

- It is the intent to recycle the bituminous grindings and existing parking lot aggregate base for re-use as structural fill and/or aggregate base course. Contractor to coordinate with on-site geo-technical engineer to verify usability of re-use material as aggregate base course.

SYMBOL LEGEND

EXISTING PROPOSED

SANITARY MANHOLE	⊙	⊙
STORM MANHOLE	⊙	⊙
STORM CATCH BASIN/INLET	○	●
INLET	□	■
FLARED END SECTION	▷	▶
DRY WELL	⊙	⊙
VALVE VAULT	⊙	⊙
FIRE HYDRANT	▽	▽
LIGHT POLE	✱	✱
STREET SIGN	+	+
REGULATORY SIGN	+	+
UTILITY POLE	+	+
UTILITY BOX	⊙	⊙
MAILBOX	⊙	⊙
WELL	⊙	⊙
STORM SEWER	—	—
SANITARY SEWER	—	—
CULVERT	—	—
WATER MAIN	—	—
WATER MAIN ENCASEMENT	—	—
SANITARY FORCE MAIN	—	—
STORM UNDERDRAIN	—	—
ELECTRIC LINE	—	—
TELEPHONE LINE	—	—
GAS LINE	—	—
CABLE TV LINE	—	—
TREE LINE	—	—
TREE	—	—
CONTOURS	—	—
FENCE	—	—
STONE RIP RAP	—	—
EROSION CONTROL FENCE (QUANTITY SPECIFIED PER PLANS)	—	—
DRAINAGE DIRECTION ARROW	—	—
10-100 YEAR OVERFLOW DIRECTION ARROW	—	—

THE SPECIFICATIONS ON THIS SHEET ARE IN CONJUNCTION WITH THE SPECIFICATIONS OUTLINED IN THE PROJECT MANUAL. THE INTENT IS FOR THE SPECIFICATIONS TO WORK TOGETHER AND IF AN DISCREPANCIES ARISE BETWEEN SPECIFICATION THE CONTRACTOR SHALL BRING IT TO THE ATTENTION OF THE ENGINEER. FINAL DETERMINATION AS TO WHICH SPECIFICATION WILL PREVAIL WILL BE DETERMINED BY THE ENGINEER.

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APPROVED: JFV
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JOB NUMBER: 180186
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BAR IS ONE INCH ON OFFICIAL DRAWINGS, 0" = 1"

NO.	DATE	BY	REVISION DESCRIPTION
1	11/09/18	ECH	FOR PERMIT/BID



ILLINOIS DESIGN FIRM # 184.001322
420 N. FRONT STREET, SUITE 100
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McHENRY COUNTY COLLEGE
PARKING LOT E & F IMPROVEMENTS
CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK
GENERAL NOTES, SPECIFICATIONS & LEGEND

SHEET NO.

C-01

PROJECT NOTES:

- NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED, (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.) SEE SHEETS C-04 THRU C-08 FOR EROSION CONTROL MEASURES)
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
- ALL ASPHALT TO BE MILLED AND STOCKPILED AT LOCATION TO BE DETERMINED BY CONTRACTOR AND COLLEGE.
- ALL AGGREGATE TO BE SCRAPED AND STOCKPILED AT LOCATION TO BE DETERMINED BY CONTRACTOR AND COLLEGE.
- ALL TREE, BRUSH AND LANDSCAPE REMOVALS ARE SPECIFIED IN THE LANDSCAPE SHEETS.
- ALL UNDERGROUND ELECTRIC DEMOLITION AND INSTALLATION IS SPECIFIED IN THE ELECTRIC SHEETS.

STAGING NOTE:

(STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

- EROSION CONTROL MEASURES AND STOCKPILE STAGING
- CONSTRUCTION ENTRANCES
- PLAN REMOVALS
- PROPOSED UNDERGROUND
- GRADING
- PAVING
- TOPSOIL RESPREAD/SEED

NOTES:

- MCHENRY COUNTY COLLEGE (MCC) SHALL BE NOTIFIED OF ALL NON IDENTIFIED UNDERGROUND UTILITIES OR CONDUITS DISCOVERED DURING CONSTRUCTION. IF ANY OF THE UTILITY OR CONDUITS NEED TO BE REPAIRED, PLUGGED, REROUTED AND OR ABANDONED IN PLACE, IT SHALL TAKE PLACE PER THE DIRECTION OF THE MCC.
- ALL AREAS SHALL BE RESTORED WITH 4" TOPSOIL AND HYDRO SEEDING, SEE LANDSCAPE PLANS FOR DETAILS
- TEMPORARY STOCKPILE AREA LOCATION AND SIZE SHALL BE COORDINATED BY SITE CONTRACTOR AND MCHENRY COUNTY COLLEGE (SEE SHEET C-08 FOR DETAIL)

LEGEND

- INDICATES HMA PAVEMENT REMOVAL (FULL DEPTH)
- INDICATES CONCRETE REMOVAL (FULL DEPTH)
- INDICATES RETAINING WALL REMOVAL
- INDICATES AGGREGATE REMOVAL
- INDICATES EROSION CONTROL MEASURES (LIMITS OF GRADING)
- INDICATES STORM SEWER REMOVAL
- INDICATES MISC. REMOVAL ITEMS
- DENOTES CONCRETE CURB & GUTTER REMOVAL
- DENOTES TREE REMOVAL

Dial 811 or 1-800-892-0123



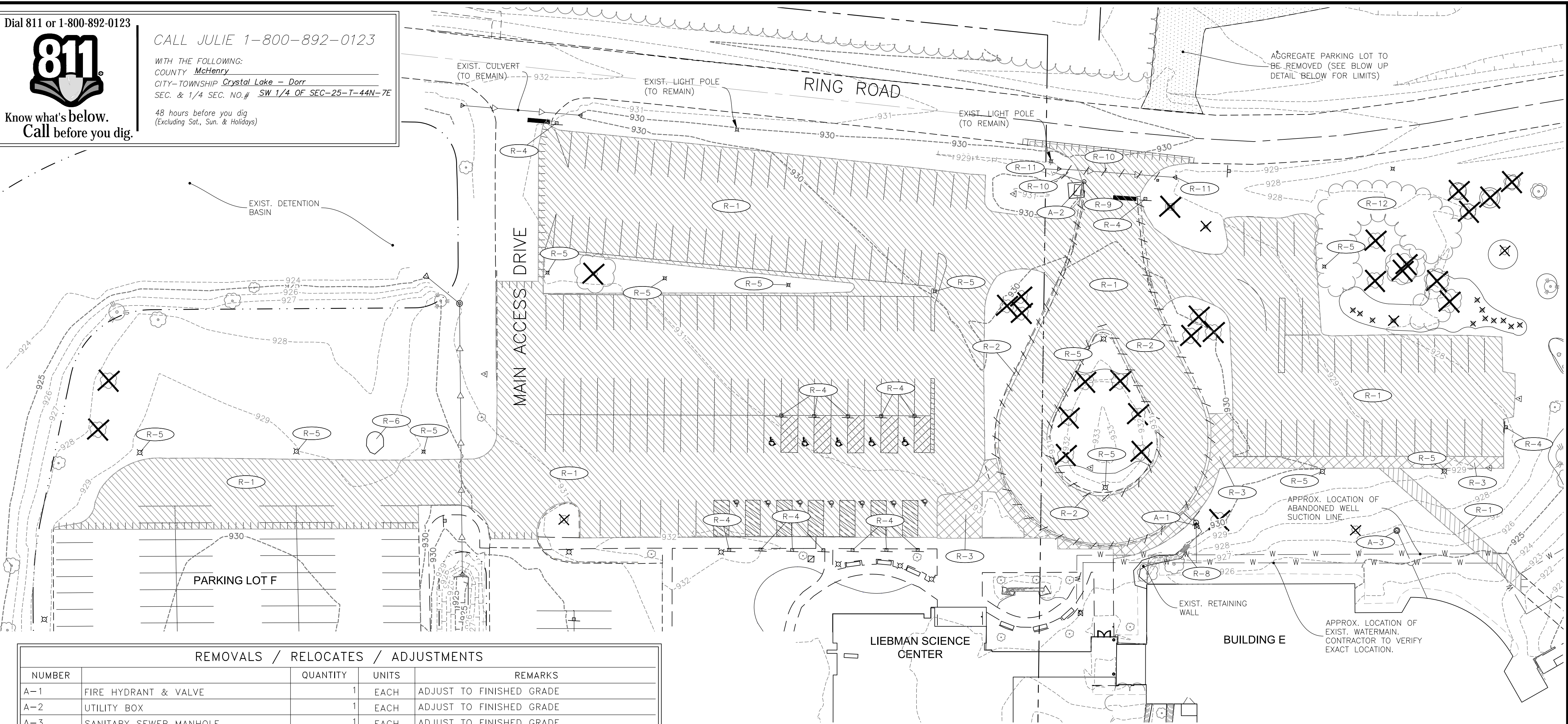
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CITY-TOWNSHIP Crystal Lake - Dorr
SEC. & 1/4 SEC. NO.# SW 1/4 OF SEC-25-T-44N-7E

48 hours before you dig
(Excluding Sat., Sun. & Holidays)



REMOVALS / RELOCATES / ADJUSTMENTS

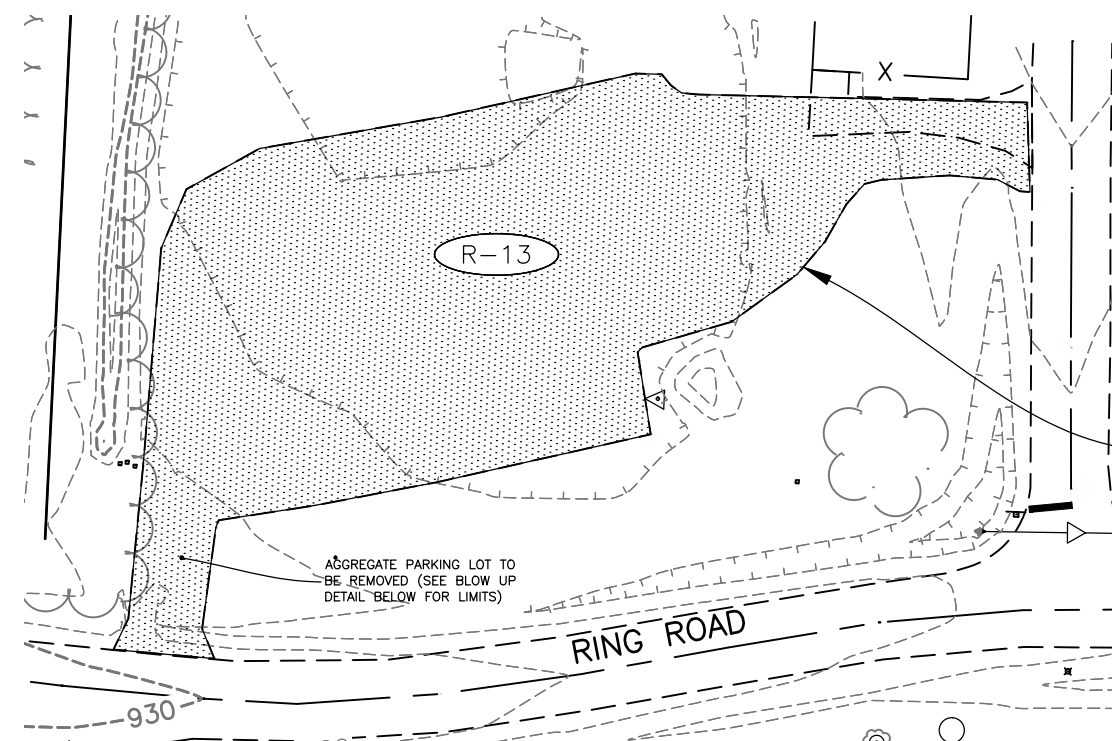
NUMBER		QUANTITY	UNITS	REMARKS
A-1	FIRE HYDRANT & VALVE	1	EACH	ADJUST TO FINISHED GRADE
A-2	UTILITY BOX	1	EACH	ADJUST TO FINISHED GRADE
A-3	SANITARY SEWER MANHOLE	1	EACH	ADJUST TO FINISHED GRADE
R-1	BIT / ASPHALT	8479	SQ. YD.	REMOVE FULL DEPTH
R-2	CONCRETE CURB AND GUTTER	655	LIN. FT.	REMOVE
R-3	CONCRETE SIDEWALK	2574	SQ. YD.	REMOVE
R-4	SIGNS	15	EACH	REMOVE / RELOCATE
R-5	LIGHTPOLE AND FOUNDATION	12	EACH	REMOVE / RELOCATE
R-6	RIP-RAP	76	SQ. FT.	REMOVE
R-7	TREES	32	EACH	REMOVE (REFER TO LANDSCAPE PLANS)
R-8	RETAINING WALL	20	SFF	REMOVE
R-9	CATCH BASIN	1	EACH	REMOVE
R-10	STORM SEWER	116	LIN. FT.	REMOVE
R-11	FLARED END SECTION	4	EACH	REMOVE
R-12	BRUSH	1	LSUM	REMOVE
R-13	AGGREGATE	294	CU. YD.	REMOVE & REUSE

RING ROAD

EXIST. 12" CMP CULVERT TO BE REMOVED & REPLACED. CONTRACTOR TO COORDINATE RING ROAD CLOSURE W/ COLLEGE

1 CULVERT REMOVAL DETAIL

SCALE: 1" = 30'



2 AGGREGATE LOT DEMOLITION DETAIL

SCALE: 1" = 60'



0 15 30

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APPROVED: JFV JOB NUMBER: 180186
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CAD FILE: J:\2018\180186\CAD\Drawings\C\180186_Demo_Plan.dwg

BAR IS ONE INCH ON
OFFICIAL DRAWINGS.
0" = 1"
IF NOT ONE INCH,
ADJUST SCALE ACCORDINGLY.

NO. DATE BY REVISION DESCRIPTION
1 11/09/18 ECH FOR PERMIT/BID



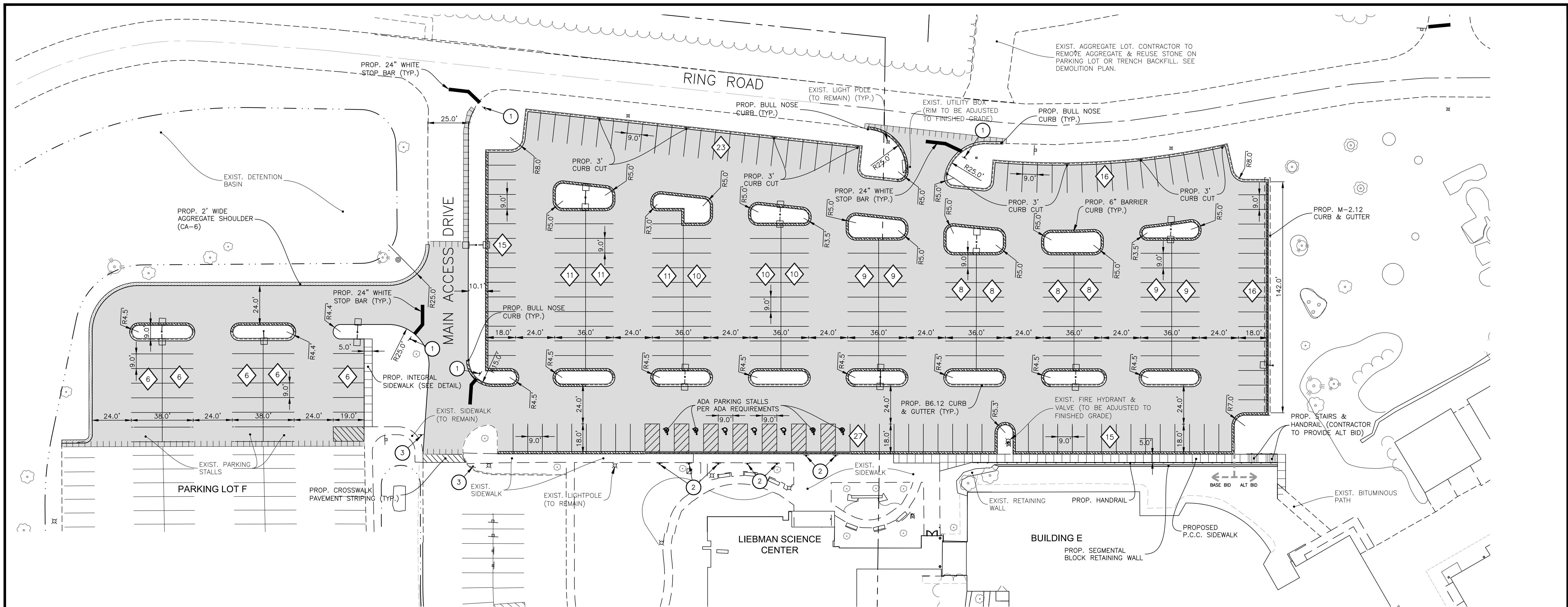
ILLINOIS DESIGN FIRM # 184-001322
420 N. FRONT STREET, SUITE 100
MCHENRY, ILLINOIS 60050
PHONE: 815.385.1778 | TOLL FREE: 800.728.7805
FAX: 815.385.1781 | HRGreen.com



MCHENRY COUNTY COLLEGE
PARKING LOT E & F IMPROVEMENTS
CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK
DEMOLITION PLAN

SHEET NO.
C-02

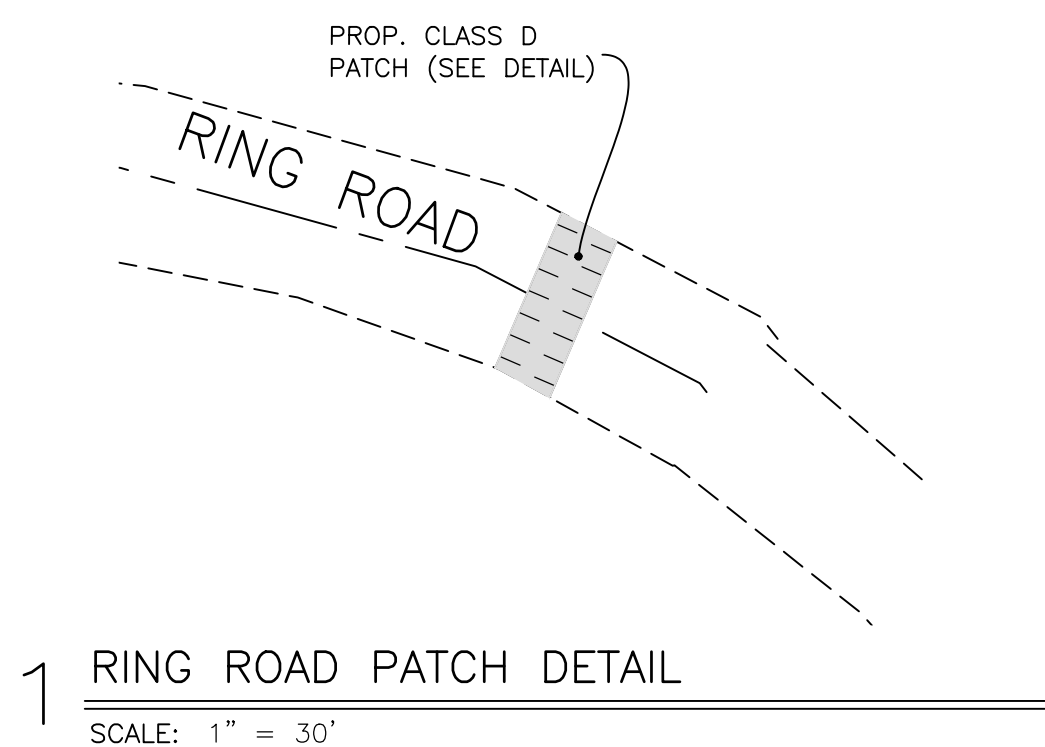


HATCH LEGEND	
	DENOTES NEW STANDARD PAVEMENT SECTION
	DENOTES REVERSE (SPILLING) CURB & GUTTER
	DENOTES CONCRETE CURB & GUTTER (CATCHING)
	DENOTES AREA OF DEPRESSED CURB AND GUTTER.
	DENOTES PROP. SIDEWALK
	DENOTES PROP. SIDEWALK RAMP
	DENOTES AREA TO UTILIZE TRUNCATED DOMES

PROJECT NOTES:	
* CONTRACTOR TO COORDINATE W/ COLLEGE PRIOR TO CLOSING ANY PORTIONS OF THE PARKING LOT.	
* ALL CONSTRUCTION FOR UTILITIES AND STREET/PARKING LOTS SHOULD BE DONE IN ACCORDANCE WITH CITY OF CRYSTAL LAKE STANDARD SPECIFICATION.	
* ALL CONCRETE CURB SHALL BE B-6.12 CURB AND GUTTER UNLESS OTHERWISE NOTED ON THE PLANS.	
* ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.	
* ALL PAVEMENT RADI ARE 5.0' RADIUS MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.	
* ALL CURB ADJOINING SIDEWALKS SHALL BE DOWELED INTO THE CURB.	

PARKING DATA:	
PARKING LOT E	
* NUMBER OF REGULAR PARKING STALLS: 236	
* NUMBER OF ADA STALLS: 7	
* TOTAL NUMBER OF STALLS: 243	
PARKING LOT F	
* NUMBER OF NEW REGULAR PARKING STALLS: 30	
* NUMBER OF EXISTING PARKING STALLS:	
* TOTAL NUMBER OF STALLS:	
* TYPICAL PARKING WIDTH: 9.0'	
* TYPICAL PARKING LENGTH: 18.0'	
* TYPICAL ISLE WIDTH: 24'	

SIGN LEGEND:	
SIGN LOCATION AS NOTED ON PLAN	
1	DENOTES "STOP" R1-1, 30" X 30" (TYP.)
2	DENOTES "HANDICAPPED PARKING" R7-8, 12" X 18" (TYP.)
3	DENOTES "STOP FOR PEDESTRIAN CROSSING" R1-6a, 12" X 36"



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CITY-TOWNSHIP Crystal Lake - Dorr
SEC. & 1/4 SEC. NO.# SW 1/4 OF SEC-25-T-44N-7E

48 hours before you dig
(Excluding Sat., Sun. & Holidays)

GRADING NOTES:

- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES. TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT.
- ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
- PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE, UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% LONGITUDINAL GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
- IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- SEE EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES AND NOTES.
- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. NO ON SITE BURNING WILL BE ALLOWED
- ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
- GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
- NO PART OF THE PROPOSED PROJECT IS LOCATED WITHIN A FLOOD HAZARD AREA
- SPOT ELEVATIONS SHOWN ARE @ EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.
- SEE PLANS FOR EXACT LOCATION OF CONCRETE CURB & GUTTER SHALL BE TYPE B-6.12 CURB UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL STORM SEWER JOINTS SHALL HAVE O-RING GASKETS.
- ALL STORM SEWER PIPE CONNECTIONS TO MANHOLES OR OTHER STRUCTURES SHALL BE CONNECTED THROUGH THE USE OF RUBBER BOOTS.
- MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
- BACKFILL TO THE TOP OF CURBS.
- SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS
- ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 2%. CROSS SLOPE
- DESIGNATED HANDICAP PARKING AREAS SHALL BE GRADED TO A MAXIMUM OF 2%
- SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING OF PAVEMENT.
- THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
- ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.

NOTES:

- MCHENRY COUNTY COLLEGE (MCC) SHALL BE NOTIFIED OF ALL NON IDENTIFIED UNDERGROUND UTILITIES OR CONDUITS DISCOVERED DURING CONSTRUCTION. IF ANY OF THE UTILITY OR CONDUITS NEED TO BE REPAIRED, PLUGGED, REROUTED AND OR ABANDONED IN PLACE, IT SHALL TAKE PLACE PER THE DIRECTION OF THE MCC.
- ALL AREAS SHALL BE RESTORED WITH 4" TOPSOIL AND HYDROSEEDDED (SEE LANDSCAPE PLANS FOR DETAILS)
- TEMPORARY STOCKPILE AREA LOCATION AND SIZE SHALL BE COORDINATED BY SITE CONTRACTOR AND MCHENRY COUNTY COLLEGE (SEE SHEET C-08 FOR DETAIL)

- ALL STORM DRAINAGE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE.
- ELEVATIONS AND CONTOURS ARE TO STATE PLANE COORDINATES PER NAVD DATUM.
- ACCESSIBLE PARKING, RAMPS, AND SIGNAGE SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
- 1 WEEK PRIOR TO CONSTRUCTION WITHIN CITY ROW OR ANY CONNECTION TO PUBLIC SEWERS, CONTRACTOR SHALL NOTIFY THE APPROPRIATE CITY ENGINEERING DIVISIONS.
- THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION UNITS. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OR MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
- THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE MCHENRY COUNTY COLLEGE.
- ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS AND LATEST EDITION OF IDOT DESIGN STANDARDS
- ALL EXISTING UTILITY TRENCHES THAT ARE PROPOSED TO BE WITHIN PAVEMENT AREAS SHALL BE EXPOSED AND BACKFILLED WITH CA-6 CRUSHED AGGREGATE.
- ALL SUBGRADE, SUBBASE AND BINDER COURSE SHALL BE PROOFROLLED PER THE CITY OF CRYSTAL LAKE DEVELOPMENT ORDINANCES ENGINEERING SPECIFICATIONS.

STORM SEWER TAGS

6	158 LIN FT SS RCP, 15"
	@ 0.40%
7	STM SWR CB 4' DIA., R-2504 TY D
	RIM = 928.25
	INV = 925.00 SE 15" RCP
	INV = 925.00 N 15" RCP
8	116 LIN FT SS RCP, 15"
	@ 0.39%
9	STM SWR CB 4' DIA., R-2504 TY D
	RIM = 929.20
	INV = 925.45 S 15" RCP
	INV = 925.45 N 12" RCP
10	118 LIN FT SS RCP, 12"
	@ 0.51%
11	STM SWR CB 2' DIA., R-2504 TY D
	RIM = 929.55
	INV = 926.05 S 12" RCP
	INV = 926.05 N 12" RCP
12	119 LIN FT SS RCP, 12"
	@ 0.38%
13	STM SWR CB 2' DIA., R-2504 TY D
	RIM = 929.60
	INV = 926.50 S 12" RCP
14	FES RCP, 15"
	INV = 928.25
15	60 LIN FT SS RCP, 15"
	@ 0.50%
16	FES RCP, 15"
	INV = 927.95

LEGEND

- INDICATES EROSION CONTROL MEASURES (LIMITS OF GRADING)
- INDICATES PROPOSED RIPRAP AREA (SEE DETAILS) (QUANTITY AS INDICATED)
- xxx.xx DENOTES EXISTING AND OR PROPOSED SPOT ELEVATIONS.
- DENOTES AREA OF TRENCH BACK FILL
- DENOTES RIDGE LINES
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW.
- DENOTES OVERLAND OVERFLOW ROUTE

STAGING NOTE:

(STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

- EROSION CONTROL MEASURES AND STOCKPILE
- CONSTRUCTION ENTRANCES
- PLAN REMOVALS
- PROPOSED UNDERGROUND
- GRADING
- PAVING
- TOPSOIL RESPREAD/SEED

PROJECT NOTES:

- NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA) SEE SHEET C-07 THRU C-08 FOR EROSION CONTROL MEASURES)
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.



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 APPROVED: JFV JOB NUMBER: 180186
 CAD DATE: 11/8/2018 12:13:54 PM
 CAD FILE: J:\2018\180186\CAD\Draws\C\180186_Grading & Erosion Control Plan.dwg

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 420 N. FRONT STREET, SUITE 100
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 FAX: 815.385.1781 | HRGreen.com



MCHENRY COUNTY COLLEGE
 PARKING LOT E & F IMPROVEMENTS
 CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK
 GRADING & EROSION CONTROL PLAN

SHEET NO.
 C-04

SEE SHEET C-05 FOR CONTINUATION

NOTES:

This plan has been prepared to comply with the provisions of the NPDES Permit Number issued by the Illinois Environmental Protection Agency for Stormwater Discharges from Construction Site Activities.

1. Site Description.

The following is a description of the construction activity which is the subject of this plan: MCHENRY COUNTY COLLEGE - PARKING LOT E & F IMPROVEMENTS, 8900 US ROUTE 14, CRYSTAL LAKE, IL 60012

The proposed development consists of the reconstruction of Parking Lot E and a parking addition to Parking Lot F as well as the installation of utilities. The construction activities for site improvements will include: site clearing, demolition, grubbing, mass grading, pavement construction, installation of utilities including storm sewers, soil erosion and sedimentation control measures, as a minimum.

a. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site such as grubbing, excavation, and grading:

The sequence of the construction activities may be as follows: 1) Install silt filter fence, inlet protection, and stabilized construction entrance; 2) Site clearing, demolition and grubbing; 3) Mass grading; 4) Underground utilities installation; 5) Fine grading in pavement area; and 6) Pavement construction. The soil erosion and sedimentation control items will be constructed as needed during the above construction activities.

b. The total area of the construction site is estimated to be 3.20 acres.

The total area of the site that is estimated to be disturbed by excavation, grading, or other activities, is 3.20 acres.

c. The estimated runoff coefficients of the various areas of the site after construction activities are completed area contained in the project drainage study, titled FINAL ENGINEERING DRAINAGE REPORT for MCC PARKING LOT E & F IMPROVEMENTS, with (latest revision date) prepared by HR GREEN, INC. which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained in the Geotechnical Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.

2. Controls.

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b above. For each measure discussed, the contractor will be responsible for its implementation as indicated. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan.

a. Erosion and Sediment Controls.

(i) STABILIZATION PRACTICES. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Except as provided in 2.a. (i) (A) and 2.b. stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portions of the site where construction activity will not occur for a period of 21 or more calendar days.

(A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following interim and permanent stabilization practices, as a minimum will be implemented to stabilize the disturbed area of the site:

1. Permanent Seeding/Sodding
2. Inlet Protection
3. Silt Filter Fence
4. Stabilized Construction Entrance

(ii) STRUCTURAL PRACTICES. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. Storm Sewer System
2. Silt Filter Fence
3. Permanent Seeding/Sodding
4. Inlet Protection

b. Stormwater Management.

(i) Provided below is a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The practices selected for implantation were determined on the basis of the technical guidance contained in the IEPA's Standard Specifications for Soil Erosion and Sedimentation Control and other ordinances listed in the Specifications.

The stormwater pollutant control measures shall include:

1. Silt Filter Fence
2. Inlet Protection Filter
3. Storm Sewers

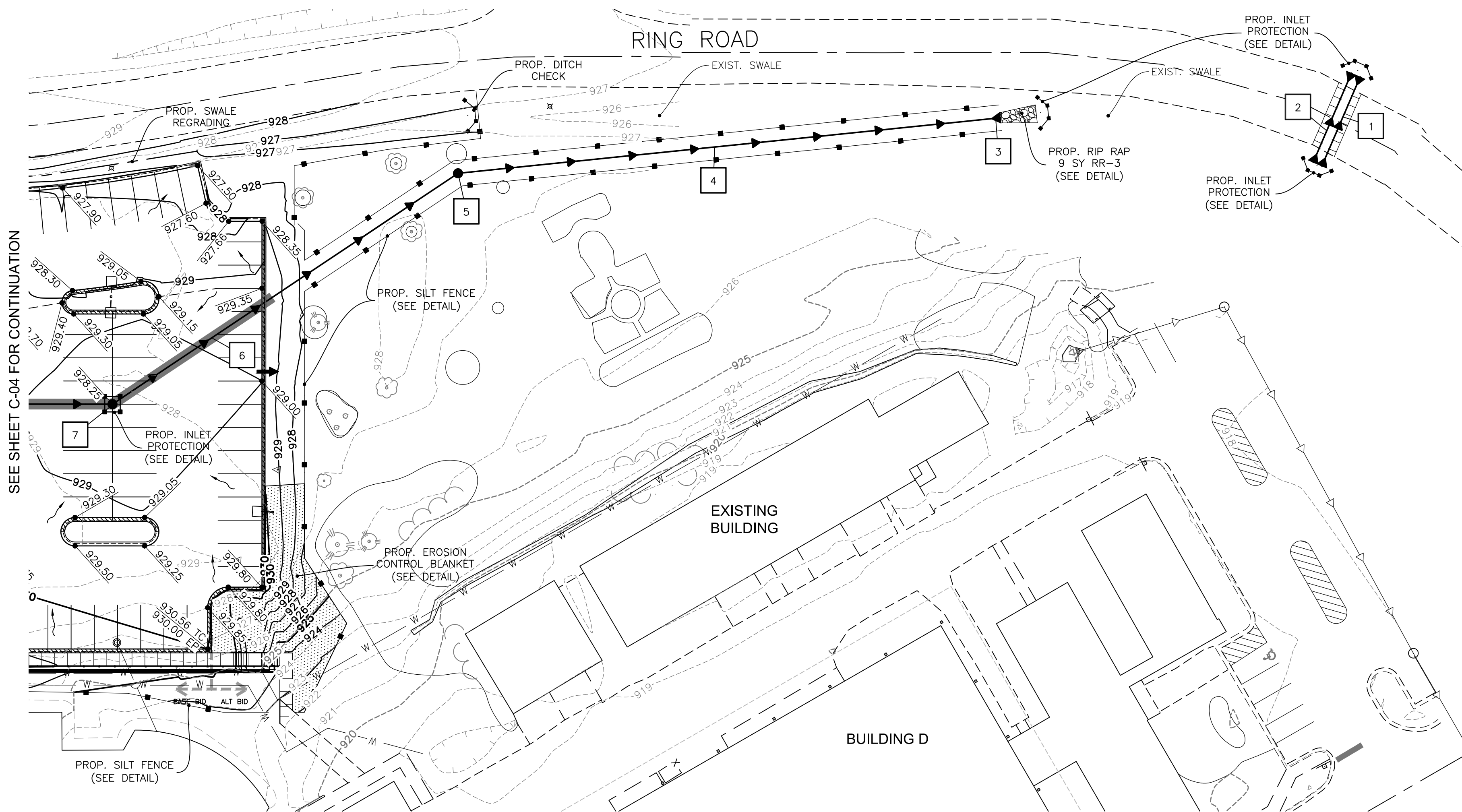
2. Other Controls.

(i) Waste Disposal. The solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed off-site by the contractor. The contractor is responsible to acquire any permit required for such disposal. Burning on the site will not be permitted. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.

(ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

EROSION CONTROL NOTES:

1. ALL SEDIMENTATION AND EROSION CONTROL REGULATIONS SHALL BE ADHERED TO PER THE CITY OF CRYSTAL LAKE AND ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.
2. NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.)
3. UTILIZE NRCS BLANKET OR SOD ON ALL SLOPES OF 5:1 OR GREATER.
4. ALL STREETS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
5. IF ANY ADDITIONAL SOIL EROSION MEASURES ARE DEEMED NECESSARY BY THE CITY ENGINEER OR HIS REPRESENTATIVE, THESE MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR.
6. REMOVE ALL DEBRIS TRANSFERRED INTO THE ROW OR ADJOINING PROPERTY AT THE END OF EACH WORK DAY.
7. INSTALL AND MAINTAIN INLET FILTER BASKET ASSEMBLIES AT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS.
8. PER THE NPDES CONSTRUCTION STORM WATER PERMIT, THE DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS MUST BE DOCUMENTED. RAINFALL AMOUNTS MUST BE OBTAINED FROM A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION WITHIN 1 MILE OF THE SITE, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
9. CONTRACTOR SHALL PROVIDE WEEKLY EROSION CONTROL INSPECTION REPORTS TO THE CITY IN AN ELECTRONIC FORMAT.



#	STORM SEWER TAGS
1	38 LIN FT SS CMP, 15" W/ FES @ 0.53% UPSTREAM INV = 922.10 DOWNSTREAM INV = 921.90
2	38 LIN FT SS CMP, 15" W/ FES @ 0.53% UPSTREAM INV = 922.10 DOWNSTREAM INV = 921.90
3	FES RCP, 15" INV = 923.50
4	210 LIN FT SS RCP, 15" @ 0.41%
5	STM SWR MH 4' DIA., R-1713 CL RIM = 927.75 INV = 924.36 SE 15" RCP INV = 924.36 NW 15" RCP
6	158 LIN FT SS RCP, 15" @ 0.40%
7	STM SWR CB 4' DIA., R-2504 TY D RIM = 928.25 INV = 925.00 SE 15" RCP INV = 925.00 N 15" RCP

LEGEND

- INDICATES EROSION CONTROL MEASURES (LIMITS OF GRADING)
- INDICATES PROPOSED RIPRAP AREA (SEE DETAILS) (QUANTITY AS INDICATED)
- XXX.XX DENOTES EXISTING AND OR PROPOSED SPOT ELEVATIONS.
- DENOTES AREA OF TRENCH BACK FILL
- DENOTES RIDGE LINES
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW.
- DENOTES OVERLAND OVERFLOW ROUTE

NOTES:

- MCHENRY COUNTY COLLEGE (MCC) SHALL BE NOTIFIED OF ALL NON IDENTIFIED UNDERGROUND UTILITIES OR CONDUITS DISCOVERED DURING CONSTRUCTION. IF ANY OF THE UTILITY OR CONDUITS NEED TO BE REPAIRED, PLUGGED, REROUTED AND OR ABANDONED IN PLACE, IT SHALL TAKE PLACE PER THE DIRECTION OF THE MCC.
- ALL AREAS SHALL BE RESTORED WITH 4" TOPSOIL AND HYDROSEEDDED (SEE LANDSCAPE PLANS FOR DETAILS)
- TEMPORARY STOCKPILE AREA LOCATION AND SIZE SHALL BE COORDINATED BY SITE CONTRACTOR AND MCHENRY COUNTY COLLEGE (SEE SHEET C-08 FOR DETAIL)

PROJECT NOTES:

- NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.) SEE SHEET C-07 THRU C-08 FOR EROSION CONTROL MEASURES)
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

STAGING NOTE:

(STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

1. EROSION CONTROL MEASURES AND STOCKPILE
2. CONSTRUCTION ENTRANCES
3. PLAN REMOVALS
4. PROPOSED UNDERGROUND
5. GRADING
6. PAVING
7. TOPSOIL RESPREAD/SEED



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FOR PERMIT/BID

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NO.	DATE	BY	REVISION DESCRIPTION
1	11/09/18	ECH	FOR PERMIT/BID



ILLINOIS DESIGN FIRM # 184-001322
420 N. FRONT STREET, SUITE 100
MCHENRY, ILLINOIS 60050
PHONE: 815.385.1778 | TOLL FREE: 800.728.7805
FAX: 815.385.1781 | HRGreen.com

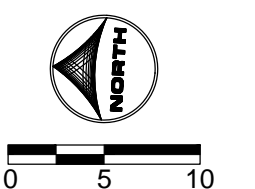
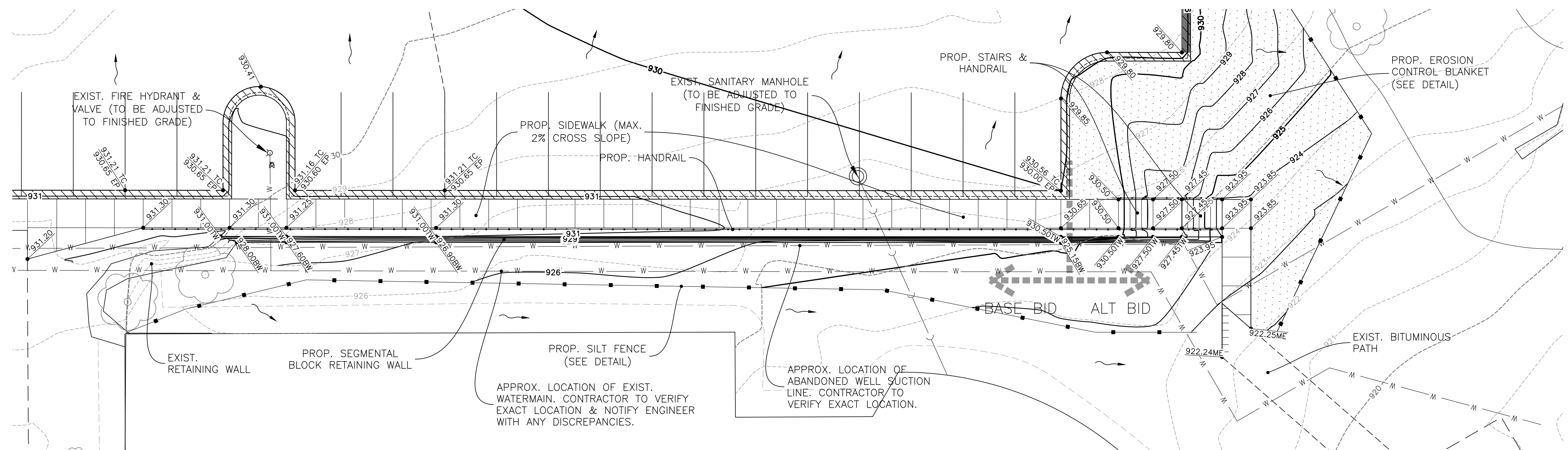
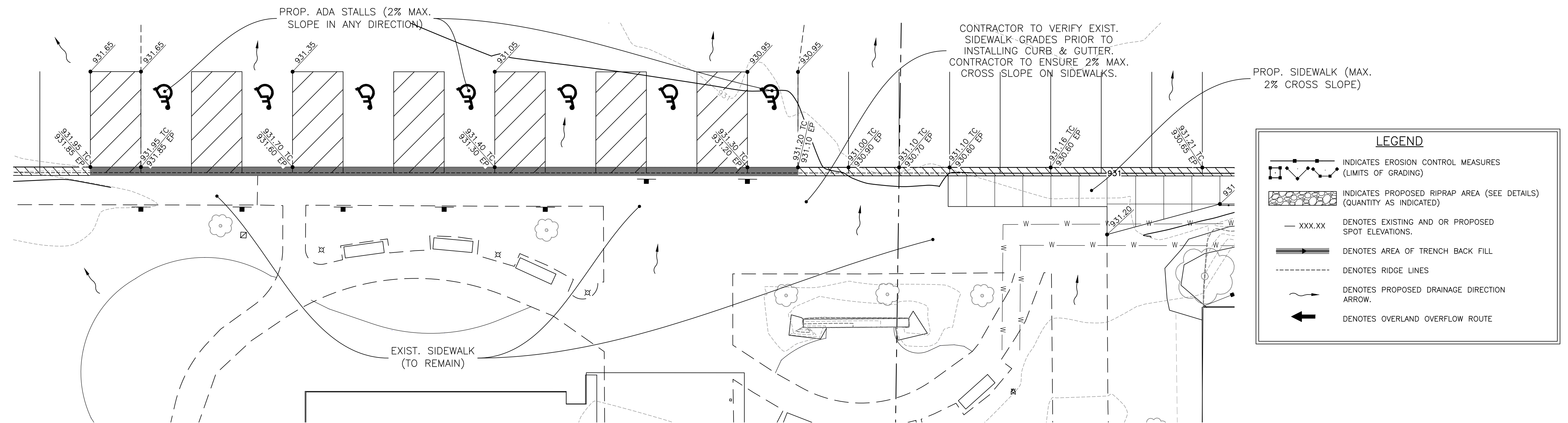


MCHENRY COUNTY COLLEGE
PARKING LOT E & F IMPROVEMENTS
CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK
GRADING & EROSION CONTROL PLAN

SHEET NO.

C-05



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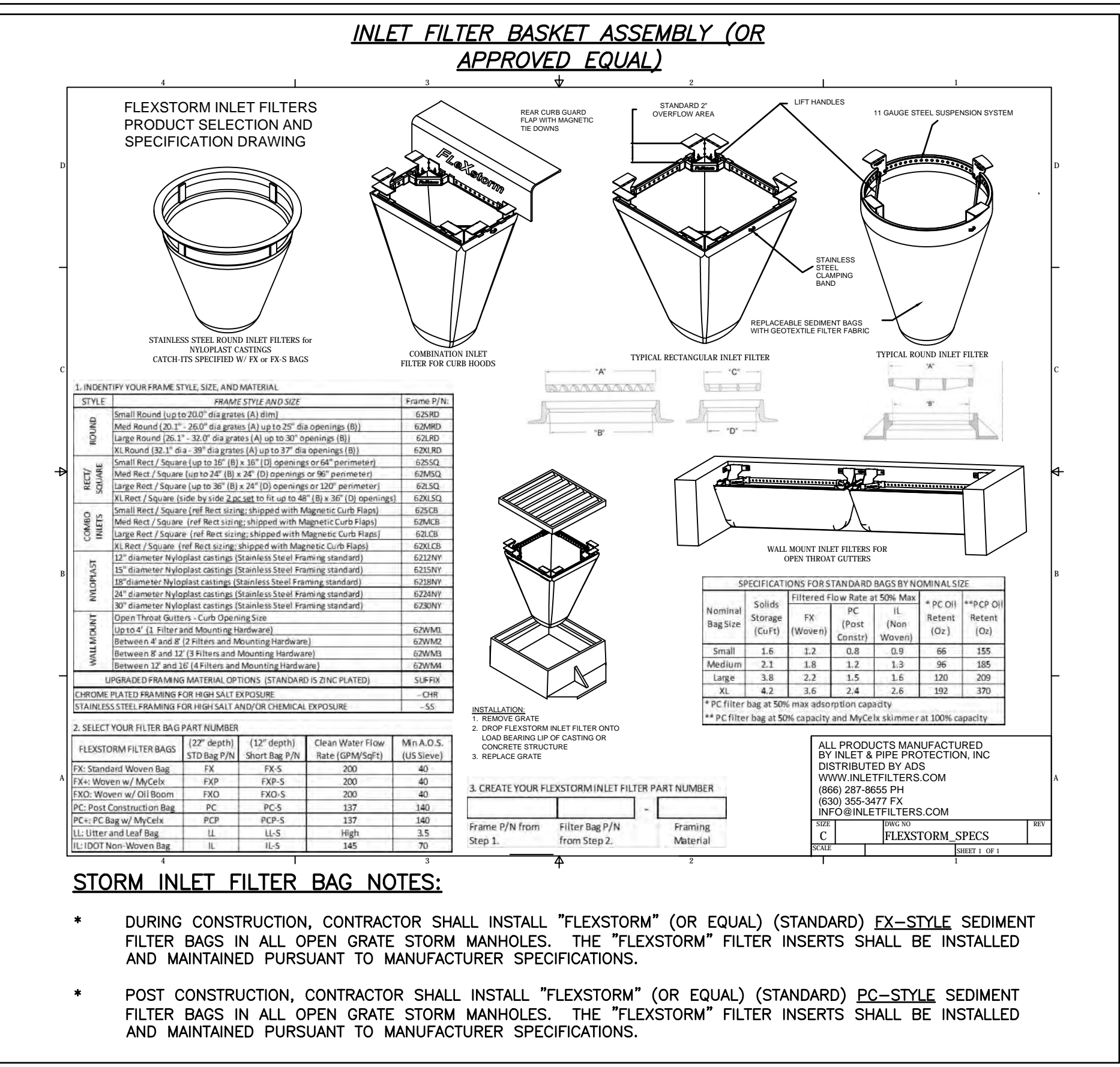
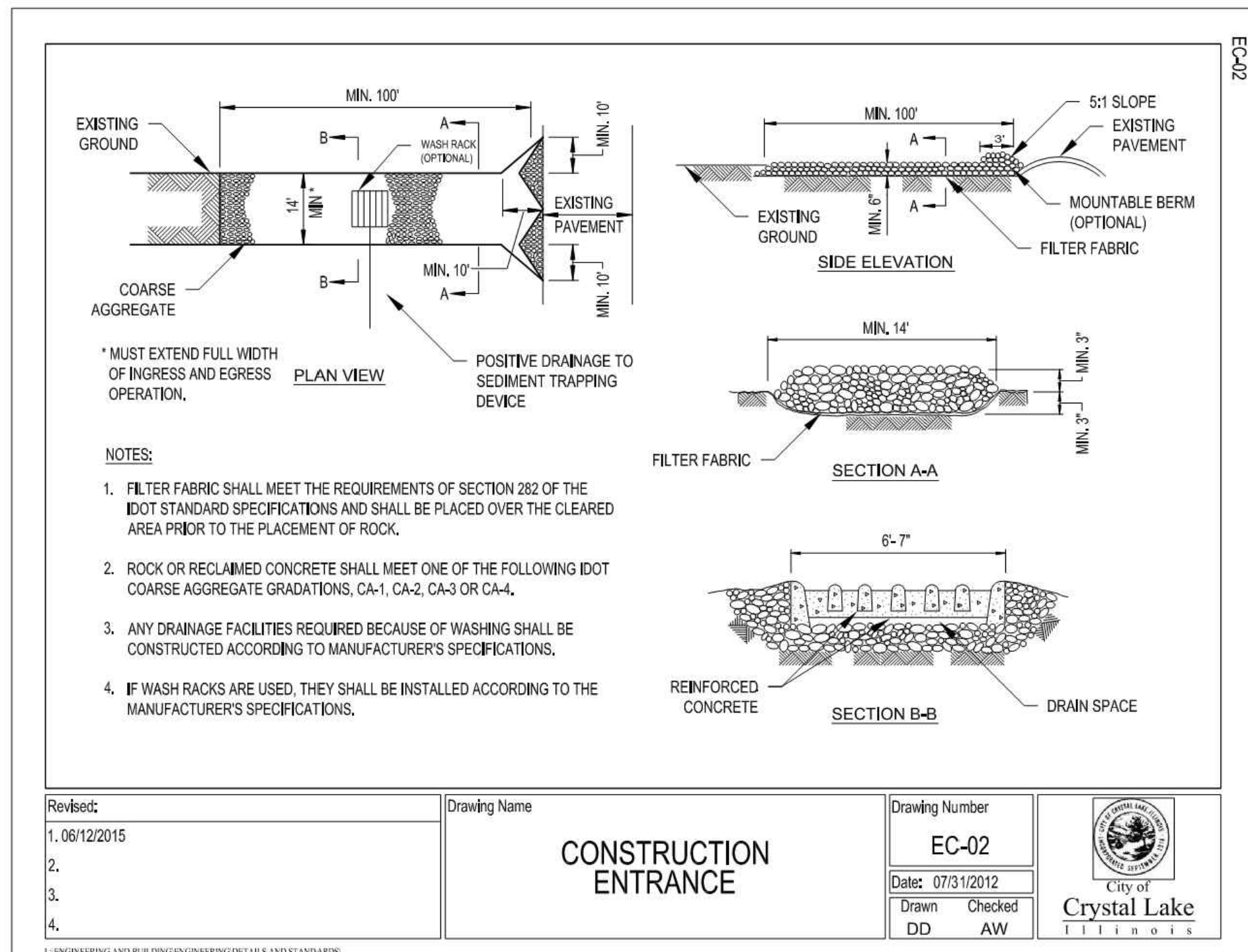
McHENRY COUNTY COLLEGE
PARKING LOT E & F IMPROVEMENTS
CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK
GRADING DETAILS

SHEET NO.
-06

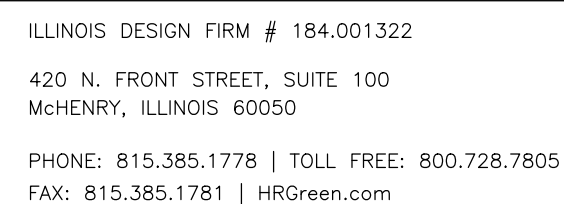
- All sedimentation and erosion control regulations shall be adhered to per City of Crystal Lake requirements
- All erosion control measures shall be installed prior to the start of construction.
- No land disturbing activities shall not commence until approval to do so has been received by governing authorities, in addition to, no land clearing or grading shall begin until all perimeter erosion and sediment control measures have been installed. (Including storm water pollution prevention plan per the development criteria.)
- If any additional soil erosion measures are deemed necessary by the City Engineer or his representative. These measures must be immediately implemented by the contractor
- The general contractor shall strictly adhere to the storm water pollution prevention plan (swppp) during construction operations.
- All exposed areas shall be seeded as specified within 14 days of final grading.
- Should construction stop for longer than 14 days, the site shall be seeded as specified.
- Sediment and erosion control measures shall be inspected at least once every seven (7) days and within 24 hours of a rainfall exceeding 0.5 inches during a 24-hour period or more frequently, if required by governing NPDES general permit. All maintenance required by inspection shall commence within 24 hours and be completed within 48 hours of report.
- This plan shall not be considered all inclusive as the general contractor shall take all necessary precautions to prevent soil sediment from leaving the site.
- General contractor shall comply with all state and local ordinances that apply.
- Additional erosion and sediment control measures will be installed if deemed necessary by on site inspection.
- General contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
- All erosion and sediment control practices shall be maintained and repaired as needed to ensure effective performance of the required erosion control measures.
- All erosion and sediment control work shall conform to the I.D.O.T. Manual for, standards and procedures for erosion control.
- All construction will adhere to the requirements set forth in the IEPA's new construction site remedial national pollutant discharge elimination system (NPDES) storm water permit.
- Contractor to remove all debris spilled into the R.O.W. at the end of each work day. Contractor shall also maintain and sweep debris off all access drives, roadways, bike paths, and other disturbed areas at the end of each construction day.
- All disturbed areas shall be stabilized within 7 days of active disturbance.
- All erosion control measures shall be disposed of within 30 days of final stabilization of the site.
- Ground cover for 5:1 slopes or greater shall be established as soon as possible.
- All disturbed areas to be restored w/ 4" topsoil respread & hydroseeded unless otherwise noted on plans
- Utilize hydroseeded on all slopes of 5:1 or greater.
*Mulch/hydroseed per I.D.O.T. Manual, section 251, standard specifications for road and bridge construction, (latest edition)
*Mulch/hydroseed method 4
- No dimensions shall be assumed by scaling.
- No known drain tiles are present on the proposed development, if tiles are encountered during construction please notify the engineer immediately.
- No part of the proposed project is located within a flood hazard 10-100yr area or flood hazard area
- General contractor shall notify all utility companies having underground utilities on site or in right-of-way prior to excavation. Contractor shall contact utility locating company and locate all utilities prior to grading start.

1. Install temporary erosion control silt fence & inlet protection in the specified locations
2. City inspection and signoff.
3. Clearing & grubbing if applicable.
4. Install underground utilities.
5. City inspection and signoff.
6. Add additional soil erosion and sediment control as needed. In particular the CLSO requirement for stabilization within 14 days of temporary or permanent cessation of grading must be met and will be vigorously enforced by the City.
7. Disk disturbed pervious areas to restore infiltration prior to topsoil placement and vegetation.
8. Permanent site stabilization.
9. City inspection.



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CIVIL SITEWORK

EROSION CONTROL NOTES & DETAILS

C-07

GENERAL SITEWORK:

1. Pre-Construction meeting shall be conducted with City Staff and all Contractors prior to commencing any grading or underground utility construction activities (schedule meeting with the Community Development Department at 815-356-3605).

2. 24-hour Emergency contact numbers shall be provided to City Staff at the Pre-Construction meeting.

3. Working hours shall be limited to the hours of 7:00 a.m. and 7:00 p.m. on weekdays only (except in cases of emergency). Non-emergency work on weekends or holidays is not permitted per City Code except under written permission from the City Engineer. The owner is responsible for the City Inspector cost of overtime inspection beyond the normal eight (8) hour day, including weekends and holidays.

4. Public/private streets shall be kept free of dirt and debris with regular cleaning, sweeping, and scattering conducted by the Contractor. Junk and debris shall not be allowed to accumulate, blow, or scatter onto streets or adjacent properties.

5. J.U.L.L.E. shall be contacted for utility locations on-site and in the adjacent rights-of-way.

6. Contractor shall provide and maintain fencing, barricades, traffic control signs, and other safeguarding measures during the course of all work to protect the public from the construction operations.

7. Maintain access to adjacent streets during construction. No closing of streets unless approval is first obtained from the agency with jurisdiction (City of Crystal Lake, McHenry County Department of Transportation, Illinois Department of Transportation, etc.).

8. Any damage to public right-of-way, public utilities, streets, curbs, etc., shall be repaired/replaced as soon as possible and as directed by the City Engineer.

9. The contractor shall give the City of Crystal Lake, Illinois Department of Transportation, and any other governmental agency having jurisdiction, at least two (2) working days notice excluding Saturday and Sunday prior to the initiation of any phase of construction. Contractor shall immediately notify if construction has ceased and renew the two (2) working day notification thereafter.

10. The Contractor shall be responsible for obtaining all required permits for construction prior to commencement along or across existing streets or highways. The Contractor shall make arrangements for the proper bracing, shoring and other protection of all roadways before construction begins.

GRADING:

1. The grading and construction of the site improvements shall not cause ponding of storm sewer water. All areas adjacent to these improvements shall be graded to allow positive drainage.

2. The proposed grading elevations shown on the plans are finished grade. A minimum of six (6) inches of topsoil is to be placed before finished grade elevations are achieved.

3. Embankment material within parkway and open space areas shall be compacted to a minimum of ninety percent (90%) of maximum density in accordance with ASTM Specification D-1557 (modified proctor method), or to such other density as may be determined appropriate by the soils engineer.

4. All subgrade material shall have a minimum CBR (California Bearing Ratio) of 3.0 as determined by the soils engineer, or base replacement and pavement design revisions shall be provided which are adequate to obtain equivalent pavement strength.

5. Proposed pavement areas, building pads, driveways and sidewalks and yard/open space areas shall be excavated or filled to plus or minus 0.1 foot of design subgrade elevations by the Contractor.

6. Any borrow pit locations shall be identified by the Contractor on a copy of the approved site plans and forwarded to the Engineering Division at least 24-hours prior to excavation. Provide backfill compaction reports from a geotechnical engineer and as-built plans to the Engineering Division for any borrow pit area.

7. Backfill shall be monitored by a geotechnical engineer on-site with compaction reports forwarded to the Engineering Division for review.

8. Water truck shall be on-site at all times during mass-grading operations and be available as needed for the purposes of dust control or at the request of City Staff.

9. Use of City fire hydrants is not allowed unless approved (separate from this permit) by the Public Works Department and a hydrant meter and RPZ is obtained from the City of Crystal Lake Water Division (815-356-8614). Only the City of Crystal Lake Water Division may operate valves and hydrants.

Revised:

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STANDARD NOTES AND SPECIFICATIONS

Drawing Number

GE-02a

Date:

01/30/15

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City of
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ILLINOIS

TOPSOIL STOCKPILING:

1. Location of any on-site topsoil stockpiles shall be identified on the approved plans with a fence installed around the perimeter of the stockpile.

2. Topsoil stockpiled for future use shall be relatively free from large roots, sticks, weeds, brush, stones larger than one (1) inch diameter, or other litter and waste products including other extraneous materials not conducive to plant growth.

3. Topsoil shall be stockpiled in sequence to eliminate any re-handling or double movements by the Contractor. Failure to properly sequence the stockpiling operations shall not constitute a claim for additional compensation. No material shall be stockpiled in front yards, in utility easements, or in the right-of-way lines.

4. If a stockpile is to remain in place for more than (14) calendar days, it is required that the stockpile meet the requirements as outlined in section 595 of the City Code.

EROSION CONTROL:

1. All specified erosion control measures shall be installed and maintained per the requirements of the Crystal Lake Stormwater Ordinance in accordance with the active NPDES permit.

2. All slopes 4:1 or steeper shall be sodded or blanketed immediately after mass earthwork.

3. All overland flow routes to be stabilized by sod or blanket.

4. Erosion control measures to be inspected and approved by City Engineering Division prior to additional work on site.

5. Continuous monitoring of erosion control measures is required. Maintain records of weekly reports per the City of Crystal Lake Stormwater Ordinance.

6. The Contractor shall implement any additional erosion control measures deemed necessary by the City per the standards of the City of Crystal Lake Stormwater Ordinance.

7. All storm sewer catch basins, sumps and/or retention basins provided are to be cleaned at the end of construction of the project prior to final acceptance. Cleaning may also be required during the course of the construction of the project if it is determined that the silt and debris traps are not properly functioning and their performance is impaired.

8. Rip-rap material RR 2 (6") - RR4 (16") shall be in accordance with Article 281 and grouted in place according to Article 601 of the IDOT Standard Specifications.

9. Projects of 1 Acre or greater must obtain an NPDES permit prior to commencement of any construction activity.

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Drawing Number

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WATER MAINS:

1. Water main shall be Ductile Iron or Molecularly Oriented Polyvinyl Chloride (PVCO).
a) Ductile Iron water main shall be Class 52 conforming to ANSI/AWWA C151/A21.51-09.
b) Gaskets and cast iron fittings shall conform to ANSI/AWWA C111/A21.11 and ANSI/AWWA C110/A21.10 respectively.
c) PVCO - See City Detail UW-12 and UW-13.

2. Thrust blocking or Mega-Lug or pre-approved equal shall be installed on water mains at all bends, tees, elbows, etc. except as noted below.

3. Thrust blocks not permitted with 45 degree vertical bends in water main (these shall be restrained with Mega-Lug or pre-approved equal).

4. When specified, ductile iron pipe shall be encased in polyethylene and shall conform with ANSI/AWWA C105/A21.10 - 10 and ASTM A674-10.

5. Minimum cover from finished grade to top of water main shall be six (6) feet; Maximum cover shall be eight (8) feet.

6. Water Main Taps: An Illinois licensed plumber is required for any water main tap.

7. All water mains shall be subjected to a pressure test and a separate leakage test at system pressure for 24 hours by the Contractor. Hydrostatic pressure test and leakage test shall be based on 125 PSI for two (2) hours. Water mains shall be chlorinated in accordance with the Standard Specifications.

8. The Underground Contractor shall consider incidental to the contract any chlorination and testing of existing water main where connections to and conclusion of such mains is indicated on the drawing.

PAVING:

1. All subgrades and bases shall be proof-rolled and approved by the Engineering Division prior to base or binder installation.

2. Subgrade and proposed pavements shall be finished by the Excavation Contractor to within 0.1 foot plus or minus, of plan elevation.

3. The Paving Contractor shall ensure that the subgrade has been properly prepared and that the finished top of subgrade elevation has been graded within the tolerances allowed in these specifications. Unless the Paving Contractor advises the owner and engineer in writing prior to the grading for base course construction, it is understood that the Contractor has approved and accepts responsibility for the subgrade.

4. For the purpose of providing handicap accessibility and complying with the American Disability Act and City Standards, curbs shall be depressed at locations where public walks or pedestrian paths intersect curb lines at street intersections and other locations as directed.

5. 1/2 inch thick premolded fiber expansion joints with two (2) No. 4 plain round steel dowel bars shall be installed at designated intervals and at all P.C., P.T., curb returns and at the end of each pour. Alternate ends of the dowel bars shall be grouted and fitted with metal expansion tubes.

6. 1/2 inch thick fiber expansion joints shall be used in every case where the sidewalk coincides with the curb and gutter. Contraction joints shall be saw cut at designated intervals in the curb. The cost of these joints shall be considered as incidental to the cost of the contract.

7. All poured in place concrete curb and gutter shall incorporate two (2) No. 4 reinforcing bars installed wherever the curb and gutter crosses utility service lines, the cost of which shall be considered incidental to the cost of concrete curb and gutter.

8. Sidewalks (where required) shall be of the thickness and dimensions as shown in the construction plans. All sidewalk concrete shall be a minimum of 6,1 bag mix (or IDOT class SI concrete) and shall develop a minimum of 3,500 psi compressive strength at fourteen (14) days. Contraction joints shall be set at five (5) foot centers, and one-half inch (1/2 inch) premolded fiber expansion joints at fifty (50) foot centers and where the sidewalk meets the curb or another sidewalk, or at the end of each pour. All sidewalks constructed over utility trenches and/or abutting driveway aprons shall be reinforced with three (3) No. 4 reinforcing bars (10 foot minimum length).

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STANDARD NOTES AND SPECIFICATIONS

Drawing Number

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* GUTTER "G" VARIES BY CURB TYPE:
TYPE M-3.24 = 24"
TYPE M-6.06 = 6"
TYPE M-6.12 = 12"
TYPE M-6.18 = 18"
TYPE M-6.24 = 24"

NOTES:
THICKNESS - T - THICKNESS OF PAVEMENT WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE OR RIGID PAVEMENT. THE VERTICAL THICKNESS OF THE GUTTER FLAG SHALL BE 9". ALSO, THE BARS SHALL BE OMITTED.
DRAINAGE OPENINGS - AT ALL LOCATIONS WHERE METAL CASTINGS ARE TO BE INCORPORATED IN THE CURB AND GUTTER, A 1" THICK PRE-FORMED EXPANSION JOINT FILLER, CONFORMING TO THE CROSS SECTIONS OF THE CURB AND GUTTER, SHALL BE INSTALLED IN THE CURB AND GUTTER A DISTANCE OF 5 FT. FROM EACH SIDE OF THE METAL CASTING. WHEN THE WIDTH OF THE METAL CASTING IS LESS THAN THE WIDTH OF THE CURB AND GUTTER, 2 - NO. 4 REBARS (L = 12" CASTING LENGTH + 12") SHALL BE INCORPORATED IN THE CONTINUOUS OF CONCRETE GUTTER IN FRONT OF THE CASTING.
TRANSITIONS - THE TRANSITION FROM FULL HEIGHT CURB TO DEPRESSED CURB SHALL BE MADE AT THE RATE OF 3" PER FOOT OF LENGTH OR FLATTER.
(2) - NO. 4 STEEL REINFORCING BARS SHALL BE INCORPORATED OVER TRENCH CROSSINGS IF REQUIRED BY THE CITY ENGINEER.

* GUTTER "G" VARIES BY CURB TYPE:
TYPE B-6.12 / B-6.12 = 12"
TYPE B-6.18 / B-6.18 = 18"
TYPE B-6.24 / B-6.24 = 24"

NOTES:
JOINTS - IN ADDITION TO THE REQUIREMENTS OF ARTICLE 606.06 OF THE STANDARD SPECIFICATIONS, JOINTS SHALL BE CONSTRUCTED AS FOLLOWS:
CONTRACTION JOINTS AND EXPANSION JOINTS SHALL BE INSTALLED IN THE CURB OR CURB AND GUTTER IN PROLONGATION WITH JOINTS IN ADJACENT P.C.C. PAVEMENT OR BASE COURSE.
WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, A 1" THICK PRE-FORMED EXPANSION JOINT FILLER, CONFORMING TO THE CROSS SECTION OF THE CURB AND GUTTER, SHALL BE INSTALLED AT POINTS OF CURVATURE FOR SHORT RADIUS CURVES AND AT CONSTRUCTION JOINTS. CONTRACTION JOINTS SHALL BE PLACED BETWEEN EXPANSION JOINTS AT DISTANCES NOT TO EXCEED 15 FEET.
ALL EXPANSION JOINTS SHALL BE PROVIDED WITH A 1 1/2" DIA. X 18" COATED SMOOTH DOWEL BAR CONFORMING TO ARTICLE 1006.10 OF THE STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PINCHED STOP THAT WILL PROVIDE 1" OF EXPANSION.
ALL CONSTRUCTION JOINTS SHALL BE PROVIDED WITH 1/2" DIA. DEFORMED STEEL REBARS 30" LONG CONFORMING TO ARTICLE 104.10 OF THE STANDARD SPECIFICATIONS. THE REBARS SHALL BE PLACED ON 9" CENTERS (MINIMUM 2 PER JOINT).
EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED 100 FEET.

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Drawing Name

CURB: CONCRETE CURB AND GUTTER

Drawing Number

RD-05a

Date:

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GUTTER FLAG WIDTH AS REQUIRED FOR CURB TYPE
1 1/4" FOR FLEXIBLE PAVEMENT
SLOPE 3/4" PER FT.
4" R
1/2" R (TYP.)
1 1/2" OR 1 1/2" +
6" MIN.
SLOPE SAME AS SUB-BASE OR 3/4" PER FT. WHEN SUB-BASE IS OMITTED
2" MIN. CA-6 BASE (TYP.)
SUITABLE SUBGRADE

NOTES:
1. THE TOP OF CURB SHALL BE DEPRESSED WHERE THE CURB AND GUTTER IS CONSTRUCTED ACROSS ALLEYS AND FOR PRIVATE DRIVES OR WHERE DIRECTED BY THE ENGINEER.
2. THICKNESS OF PAVEMENT "T". WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, THE VERTICAL THICKNESS OF THE GUTTER FLAG SHALL BE 9 INCHES. FOR RAMP PAVEMENT SECTIONS THE FLAG SHALL BE THE SAME THICKNESS AS THE PAVEMENT.

* ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED

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DEPRESSED CURB: DETAIL

Drawing Number

RD-04b

Date:

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City of
Crystal Lake
ILLINOIS

RESERVED HANDICAP PARKING SIGN PER MUTCD AND IL ACCESSIBILITY CODE
HIGH QUALITY YELLOW PAINT OR THERMOPLASTIC, LINE 6" (STRIPING AND SYMBOLS PER ILLINOIS ACCESSIBILITY CODE)
MIN. 2' MAX. 5' (FACE OF CURB TO SIGN POST)
SIDEWALK RAMP DESIGN AND LOCATION PER PLAN AND CITY DETAIL
19'

NOTES:
1. CONCRETE PARKING BUMPERS REQUIRED IF BARRIER CURB NOT PRESENT.
2. REFER TO CURRENT EDITION OF THE ILLINOIS ACCESSIBILITY CODE, SECTION 400.310(c) AND ILLUSTRATIONS "B" (FIGURE 9), "C", AND "D".

Revised:

1, 06/12/2015

2,

3,

4,

Drawing Name

TYPICAL HANDICAP ACCESSIBLE PARKING STALL

Drawing Number

TR-06

Date:

06/01/2007

Drawn

EM

Checked

AW

City of
Crystal Lake
ILLINOIS

DRAWN BY: ECH

JOB DATE: 8/15/2018

BAR IS ONE INCH ON OFFICIAL DRAWINGS.

APPROVED: JFV

JOB NUMBER: 180186

0

CAD DATE: 11/8/2018 1:59:45 PM

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY.

CAD FILE: J:\2018\180186\CAD\Draws\C\180186_Details.dwg

NO.	DATE	BY	REVISION DESCRIPTION
1	11/09/18	ECH	FOR PERMIT/BID

HRGreen

ILLINOIS DESIGN FIRM # 184.001.322

420 N. FRONT STREET, SUITE 100

McHENRY, ILLINOIS 60050

PHONE: 815.385.1778 | TOLL FREE: 800.728.7805

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McHenry
County College

McHENRY COUNTY COLLEGE

PARKING LOT E & F IMPROVEMENTS

CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK

STANDARD CONSTRUCTION DETAILS

SHEET NO.

C-09

FOR PERMIT/BID

