



Addendum No. 2
Page 1 of 4

DATE: June 25, 2015

Joliet Junior College
1215 Houbolt Road
Joliet, IL 60431

TO: Prospective Respondents
SUBJECT: Addendum No. 2
PROJECT NAME: Multipurpose Building Bid Release 1
JJC PROJECT NO.: B15017

This Addendum forms a part of the Bidding and Contract Documents and modifies the original bidding document as posted on the JJC website. ***Acknowledge receipt of this addendum as instructed on the last page.*** FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

Bidding Requirements:

1. The location of the bid opening has changed to A-3104, located on the third floor of A-Building.
2. Bids will still need to be submitted before 9:00am on July 7, 2015 on the forms provided on the College's website in a sealed envelope addressed to the Director of Business & Auxiliary Services, A-Building room A-3100, plainly marked, with the bidder's name and address and the notation:

BID: BID RELEASE 1- MULTIPURPOSE FACILITY: M-02A EXCAVATION, GRADING AND SITE UTILITIES

OR

BID: BID RELEASE 1- MULTIPURPOSE FACILITY: M-03A CONCRETE WORK

Questions Submitted:

1. The demolition sheets show curb removal along the western edge of the parking lot but only short sections at the north and south being replaced with new curb. Can you confirm that the sidewalk along this alignment should be PCC Barrier Sidewalk per detail on Sheet C7.1?
All carriage walks on campus are to be the PCC Barrier Sidewalk. At the north and south ends of the turnout area the curb needs to transition between the PCC Barrier Sidewalk into the curb and gutter of the parking lot.

Addendum No. 2

Page 2 of 4

2. There appears to be differences between the work limits shown on the Civil plans vs. sheet AS1.00. Can you confirm that the Civil Drawings will be used to define the work limits?
If you are referring to work in contract vs work not in contract, these work limits are not defined on sheet AS1.00; general note 2 states to refer to the Civil drawings for extents of proposed work. If you are referring to extents of work between trade packages, none of the drawings indicate this; refer to scope definitions in project manual.

3. The civil plans do not show or detail any ADA panels in the sidewalks - -Are any required?
Yes – sheet C5.1 indicates ADA ramps with detectable warning surfaces at the sidewalk abutting the parking lot.

4. Can you provide more detail or an explanation of the “1” Reveal Between Pads with a Broom Finish” as stated on Drawings AS1.00.

For the two patio areas shown on the east side of the building, the design intent is that each concrete tile (roughly 8x8 ft.) is separated by a 1 inch gap. The surface of each tile will have a broom finish.

5. Drawing AS1.00 states that a dashed line denotes a control joint - -Should this be an expansion joint?
This should be an expansion joint.

6. Can you provide details on Colors 1, 2 and 3? Will this work be in the Site Concrete scope of work?
See attached specification section 03 35 19 and revised AS1.00 for extents of color. There is colored concrete in the scope of both Bid Packages; M-02A for site pavement and M-03A for the main entry stoop.

7. Are the Structural concrete stoops in the Site Concrete Bid Package? They appear to be tied into the foundation wall?
Structural concrete stoops are part of Bid Package M-03A.

8. Drawing AS1.00 shows a concrete curb (scales 36” wide and noted to be Color 3) on the east side of the building at the north and south ends. The civil and structural drawings do not show or detail this. Can you provide information on what this is and what bid package the work is to be included?
See revised Civil drawings, attached. Planter curbs are part of Bid Package M-02A.

9. As a follow-up to Question No. 8, there is a note on AS1.00 stating that the top of curb should align with the top of the foundation wall - -No curb is shown in this location on the Civil plans - - Can you provide information on this?
See revised Civil drawings, attached.

And the Earthwork –

1. Given the tight schedule, time of year etc. – Should the building pad be filled with imported stone or use on-site clay. The on-site clay exhibits high moisture content and will require extensive drying to reach optimum.
Per the geotech report, either method is acceptable. However, if the silty clay is utilized as engineered fill, the contractor should be prepared to implement discing or other drying techniques prior to using it as compacted fill.
2. If the excess soil at the site is topsoil, will this material be acceptable for use at Site No. 2 or should it be hauled and disposed?
Per Addendum 1, Clarification 2, do not include export of material to Site No. 2. Excess material should be properly disposed off site.

Drawing Revisions:

1. Sheet AS1.00 Site Paving Geometry Plan
2. Sheet C3.1 Proposed Site Improvement Plan
3. Sheet C5.1 Proposed Site Geometry Plan
4. C6.1 Erosion Control Plan
5. C7.1 General Notes And Construction Details

Added Specifications:

033519 Integrally Colored Concrete Finishing

End of Addendum #2



Addendum No. 2
Page 4 of 4

DATE: June 25, 2015

TO: Prospective Respondents
SUBJECT: Addendum No. 2
PROJECT NAME: Multipurpose Building Bid Release 1
JJC PROJECT NO.: B15017

This Addendum forms a part of the Bidding and Contract Documents and modifies the original bidding document as posted on the JJC website. ***Acknowledge receipt of this addendum as instructed on the last page.*** FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

Issued by:

Janice Reodus
Director of Business & Auxiliary Services
Joliet Junior College
815.280.6643

I acknowledge receipt of Addendum #1

Company Name

Printed Name

Title

Signature



ARCHITECT OF RECORD
 DEMONICA KEMPER ARCHITECTS
 125 N. HALSTED STREET, SUITE 301
 CHICAGO, IL 60661
 P: 312.496.0000

STRUCTURAL AND MEP ENGINEERING
 KJWW ENGINEERING CONSULTANTS
 1100 WARRENVILLE RD., STE. 400W
 NAPERVILLE, IL 60563
 P: 630.527.2320

CIVIL ENGINEERING
 RUETTIGER, TONELLI & ASSOC., INC.
 129 CAPISTA DR.
 SHOREWOOD, IL 60404
 P: 815.744.6600

**JOLIET JUNIOR COLLEGE
 MULTI-PURPOSE FACILITY**
 1215 HOUBOLT ROAD, JOLIET, IL 60431
 DKA PROJECT NO: 14-004

KEY PLAN:

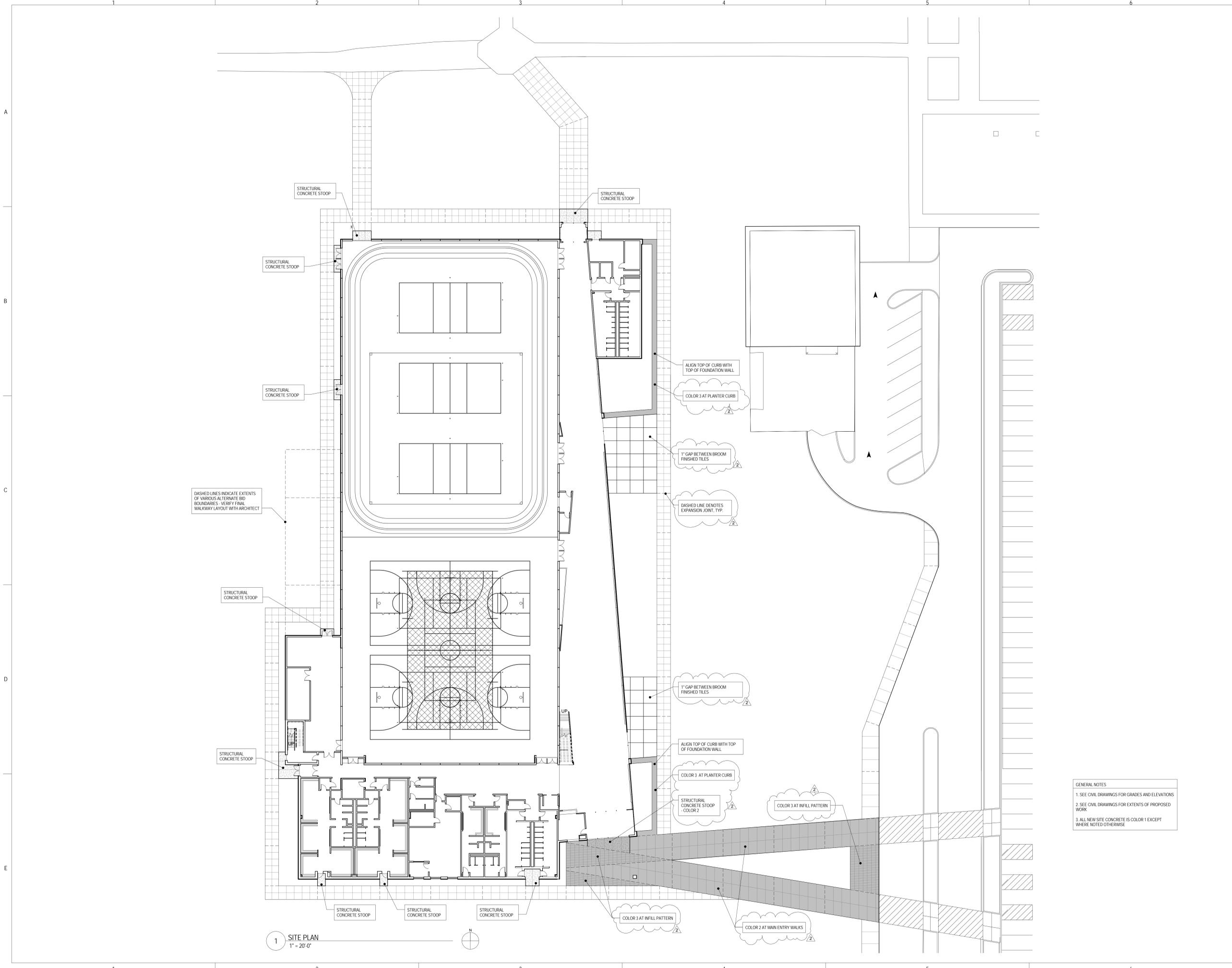
SHEET STATUS: 06/01/15
**BID PACKAGE 1
 ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
2	BP1 - ADDENDUM 2	6/24/2015

SHEET TITLE:
**SITE PAVING
 GEOMETRY PLAN**

SHEET NUMBER:
AS1.00

6/24/2015 1:37:10 PM



1 SITE PLAN
 1" = 20'-0"

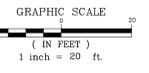
GENERAL NOTES
 1. SEE CIVIL DRAWINGS FOR GRADES AND ELEVATIONS
 2. SEE CIVIL DRAWINGS FOR EXTENTS OF PROPOSED WORK
 3. ALL NEW SITE CONCRETE IS COLOR 1 EXCEPT WHERE NOTED OTHERWISE



ARCHITECT OF RECORD
 DEMONICA KEMPER ARCHITECTS
 125 N. HALSTED STREET, SUITE 301
 CHICAGO, IL 60661
 P: 312.496.0000

STRUCTURAL AND MEPFP ENGINEERING
 KJWW ENGINEERING CONSULTANTS
 1100 WARRENVILLE RD. SUITE
 400W NAPERVILLE, IL 60563
 P: 630.527.2320

CIVIL ENGINEERING
 RUETTIGER, TONELLI & ASSOC., INC.
 129 CAPISTA DRIVE
 SHOREWOOD, IL 60404
 P: 815.744.6600



PROPOSED	LEGEND DESCRIPTION	EXISTING
XXXX	ELEVATION	XXXX
XXXX	T/C OR SIDEWALK ELEVATION	
XXXX	FLOW LINE OR PAVEMENT ELEVATION	
---	P.C.C. CURB	
---	STORM SEWER	
○	MANHOLE	○
○	INLET	○
○	CATCHBASIN	○
○	FLARED END SECTION	○
○	PARKING LOT LIGHT	○
○	EMERGENCY CALL BOX	○
○	ELECTRIC HANDLE	○
○	SON	○
---	SANITARY SEWER	---
---	WATERMAIN	---
---	PROPOSED RIPRAP	

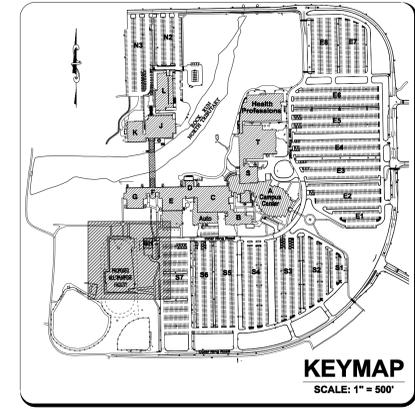
PROPOSED SITE GRADING NOTES:

- UNLESS OTHERWISE NOTED, ALL PROPOSED GRADES ARE EITHER FINISHED PAVEMENT ELEVATIONS OR FINISHED LANDSCAPE ELEVATIONS.
- CONTRACTOR TO PREVENT EROSION ONTO EXISTING PAVEMENT.
- GRADE SLOPE SHALL NOT EXCEED 4 TO 1.
- CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANS FOR ADDITIONAL SITE ANALYSES.

SITE BENCHMARK 1:
 HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO, LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS GOLF ROAD ON WEST SIDE ROAD.
 ELEVATION: 607.75 (NAVD 88)

SITE BENCHMARK 2:
 CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX.
 ELEVATION: 564.18 (NAVD 88)

FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.



RT & A Ruettiger, Tonelli & Associates, Inc.
 Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants
 129 CAPISTA DRIVE • SHOREWOOD, ILLINOIS 60404
 PH: (815) 744-6600 FAX: (815) 744-0101
 website: www.ruettiger-tonelli.com

LATEST RT & A REVISION: 6-24-2015
 FIELD BOOK & PAGE: JJC

R.T. & A. Dwg. No.: 401-0058-C1

**JOLIET JUNIOR COLLEGE
 MULTIPURPOSE FACILITY**
 1215 HOUBOLT ROAD, IL 60431
 DKA PROJECT NO: 14-004

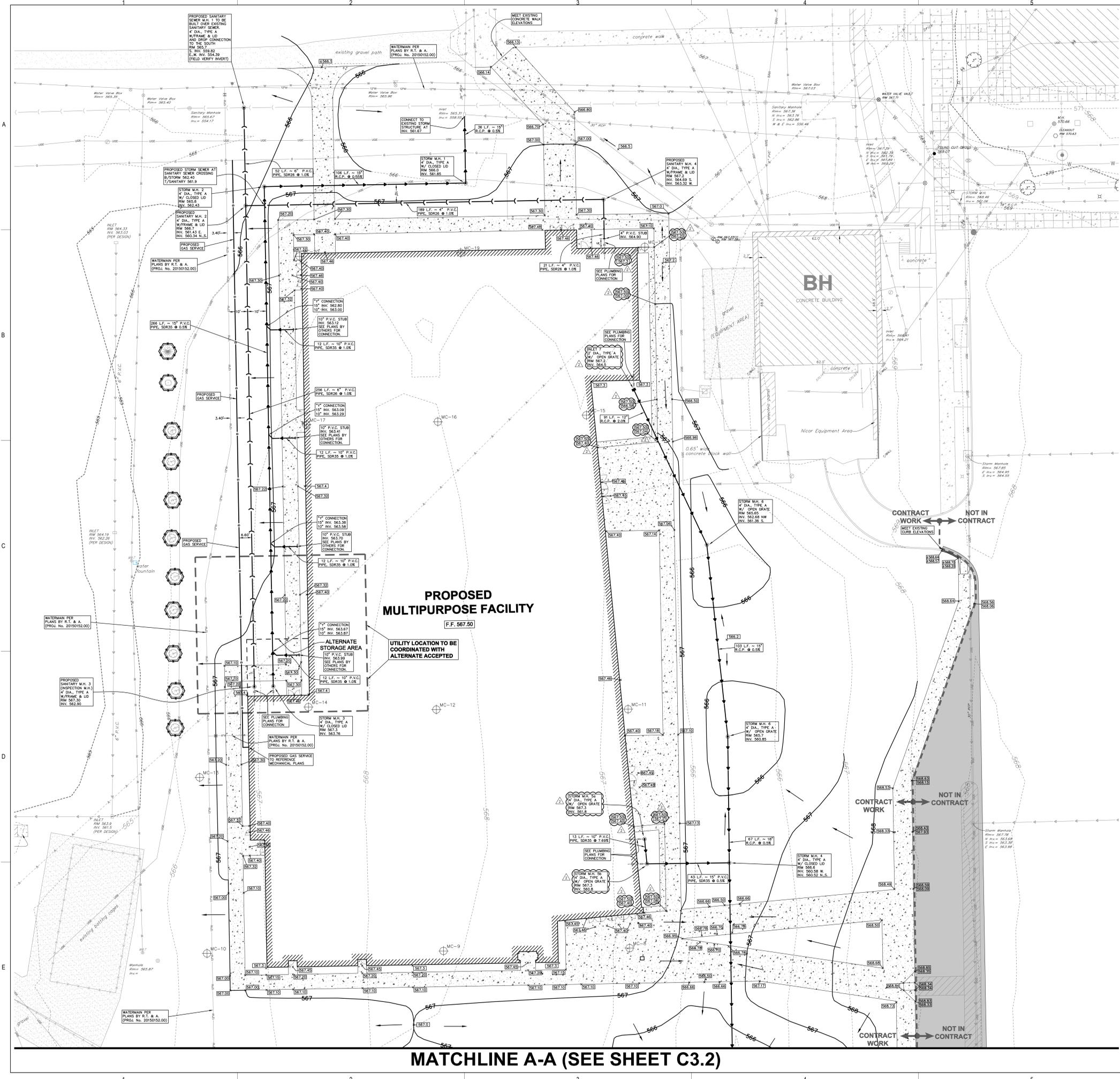
KEY PLAN:

SHEET STATUS: 06/01/15
**BID PACKAGE 1
 ISSUED FOR BID**

NO.	DESCRIPTION	DATE
1	BP-1 ADDENDUM 1	6-23-2015
2	BP-1 ADDENDUM 2	6-24-2015

SHEET TITLE:
**PROPOSED SITE
 IMPROVEMENT PLAN
 (1 OF 2)**

SHEET NUMBER:
C3.1



MATCHLINE A-A (SEE SHEET C3.2)



ARCHITECT OF RECORD
 DEMONICA KEMPER ARCHITECTS
 125 N. HALSTED STREET, SUITE 301
 CHICAGO, IL 60661
 P: 312.496.0000

STRUCTURAL AND MEP/FP ENGINEERING
 KJWW ENGINEERING CONSULTANTS
 1100 WARRENVILLE RD. SUITE
 400W NAPERVILLE, IL 60563
 P: 630.527.2320

CIVIL ENGINEERING
 RUETTIGER, TONELLI & ASSOC., INC.
 129 CAPISTA DRIVE
 SHOREWOOD, IL 60404
 P: 815.744.6600

**JOLIET JUNIOR COLLEGE
 MULTIPURPOSE FACILITY**
 1215 HOUBOLT ROAD, IL 60431
 DKA PROJECT NO: 14-004

KEY PLAN:

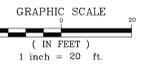
SHEET STATUS: 06/01/15

**BID PACKAGE 1
 ISSUED FOR BID**

NO.	DESCRIPTION	DATE
1	BP-1 ADDENDUM 1	6-23-2015
2	BP-1 ADDENDUM 2	6-24-2015

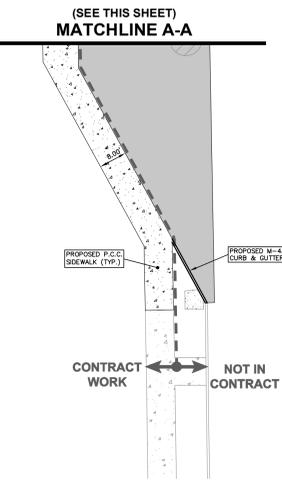
SHEET TITLE:
**PROPOSED
 GEOMETRY PLAN**

SHEET NUMBER:
C5.1



LEGEND

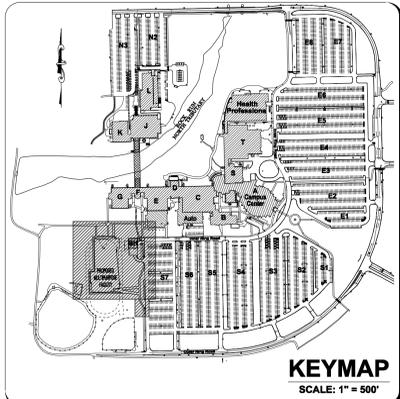
	EXISTING CURB
	PROPOSED CURB
	EXISTING PAVEMENT AREA
	PROPOSED STANDARD DUTY PAVEMENT AREA
	ARC DISTANCE
	BACK OF CURB DISTANCE
	FACE OF CURB DISTANCE
	BACK TO BACK OF CURB DISTANCE
	EDGE TO EDGE OF PAVEMENT DISTANCE
	TO EDGE OF PAVEMENT DISTANCE
	PROPOSED SIGN
	PROPOSED LIGHT BASE



SITE BENCHMARK 1:
 HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO, LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS GOLF ROAD ON WOODS T. ROAD.
 ELEVATION = 607.75 (NAVD 88)

SITE BENCHMARK 2:
 CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX.
 ELEVATION = 564.18 (NAVD 88)

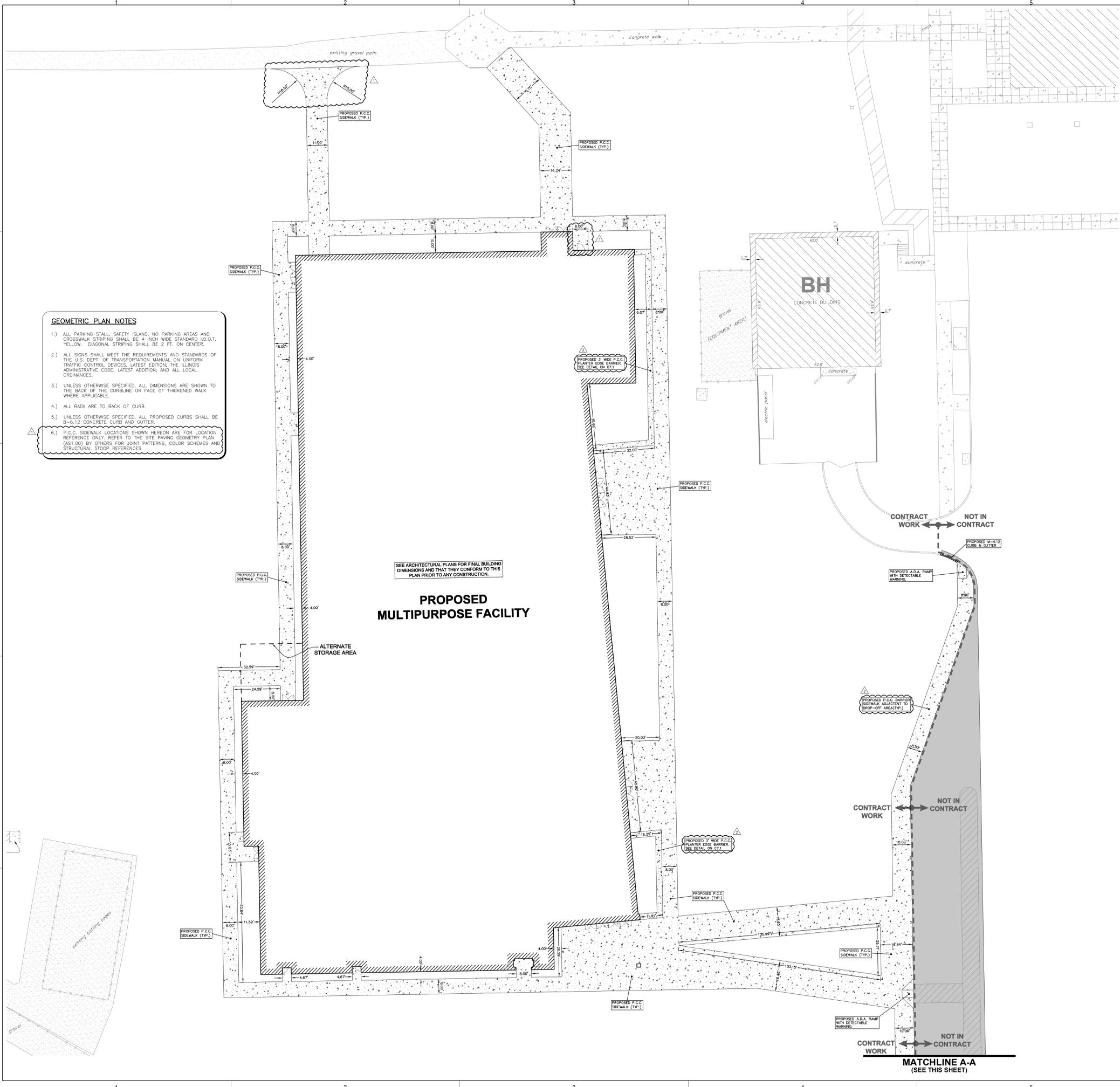
FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.



RT & A Ruettiger, Tonelli & Associates, Inc.
 Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants
 129 CAPISTA DRIVE • SHOREWOOD, ILLINOIS 60404
 PH: 815.744.6600 FAX: 815.744.6101
 website: www.ruettiger-tonelli.com

LATEST R.T. & A. REVISION: 6-24-2015
 FIELD BOOK & PAGE: JJC

R.T. & A. Dwg. No.: 401-0058-C1



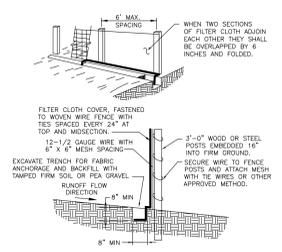
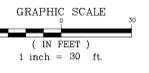
- GEOMETRIC PLAN NOTES**
- 1.) ALL PARKING STALL, SAFETY ISLAND, NO PARKING AREAS AND CROSSWALK STRIPING SHALL BE 4 INCH WIDE STANDARD I.D.O.T. YELLOW, DIAGONAL STRIPING SHALL BE 2 FT. ON CENTER.
 - 2.) ALL SIGNS SHALL MEET THE REQUIREMENTS AND STANDARDS OF THE U.S. DEPT. OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, THE ILLINOIS ADMINISTRATIVE CODE, LATEST ADDITION, AND ALL LOCAL ORDINANCES.
 - 3.) UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE SHOWN TO THE BACK OF THE CURBLINE OR FACE OF THICKENED WALK WHERE APPLICABLE.
 - 4.) ALL RADII ARE TO BACK OF CURB.
 - 5.) UNLESS OTHERWISE SPECIFIED, ALL PROPOSED CURBS SHALL BE 8x8x12 CONCRETE CURB AND GUTTER.
 - 6.) P.C.C. SIDEWALK LOCATIONS SHOWN HEREON ARE FOR LOCATION REFERENCE ONLY. REFER TO THE SITE PAVING GEOMETRY PLAN (AS1.00) BY OTHERS FOR JOINT PATTERNS, COLOR SCHEMES AND STRUCTURAL STOOP REFERENCES.

SEE ARCHITECTURAL PLANS FOR FINAL BUILDING DIMENSIONS AND THAT THEY CONFORM TO THIS PLAN PRIOR TO ANY CONSTRUCTION.

**PROPOSED
 MULTIPURPOSE FACILITY**

ALTERNATE STORAGE AREA

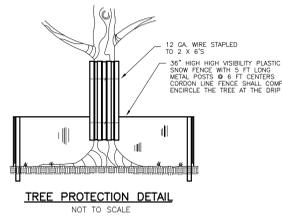
MATCHLINE A-A (SEE THIS SHEET)



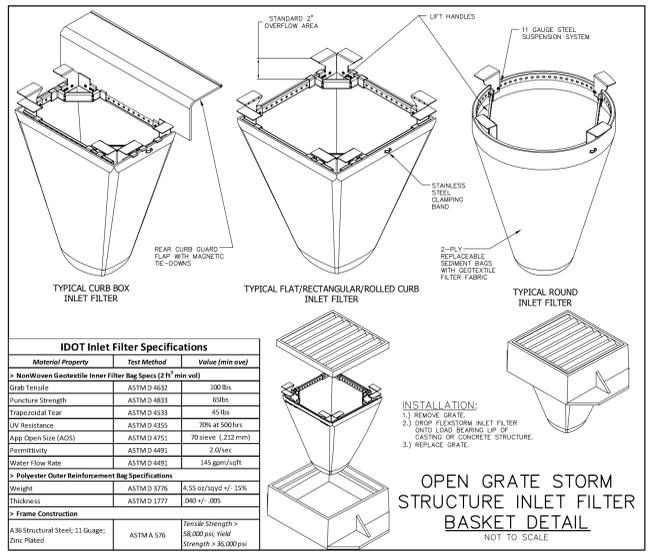
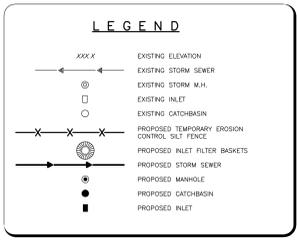
NOTES FOR SILT FENCE

1. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN RIDGES DEVELOP IN THE SILT FENCE.
2. FILTER CLOTH SHALL BE FILTER X, MIRA1 100X, STABILINKA 1140X, OR EQUAL.
3. PREFABRICATED UNIT SHALL BE GEOTAB, ENVROFENCE, OR EQUAL.

SILT FENCE INSTALLATION
NOT TO SCALE



TREE PROTECTION DETAIL
NOT TO SCALE



IDOT Inlet Filter Specifications

Material Property	Test Method	Value (min/ave)
NonWoven Geotextile Inner Filter Bag Specs (2' min vol)		
Grab Tensile	ASTM D 4632	500 lbs
Puncture Strength	ASTM D 4833	400 lbs
Trip Resistance	ASTM D 4833	45 lbs
UV Resistance	ASTM D 4335	70% at 500 hrs
App Open Size (AOS)	ASTM D 4751	70 sieve (212 mic)
Permittivity	ASTM D 4492	2.0/sec
Water Flow Rate	ASTM D 4492	145 gpm/ft ²
Polyester Outer Reinforcement Bag Specifications		
Weight	ASTM D 3776	4.55 oz/ft ² +/- 13%
Thickness	ASTM D 1777	0.90 +/- .003
Frame Construction		
A36 Structural Steel: 11 Gauge	ASTM A 376	Tensile Strength = 58,000 psi Yield Strength = 36,000 psi
Enc Plated		

SITE BENCHMARK 1:
 HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO. LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS GOLF ROAD ON/AT HOUBOLT ROAD.
 ELEVATION: 607.75 (NAVD 88)

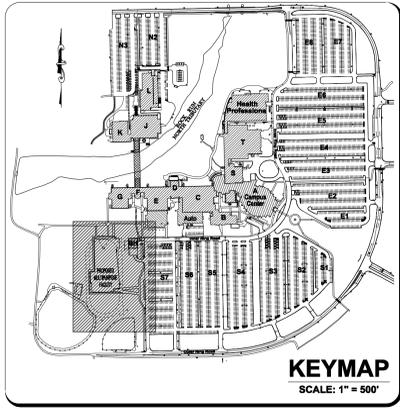
SITE BENCHMARK 2:
 CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX.
 ELEVATION = 564.18 (NAVD 88)
 FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.

EROSION CONTROL NOTES

1. EROSION CONTROL TO BE APPLIED PER THE ILLINOIS PROCEDURES FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL MANUAL, LATEST EDITION.
2. THE TEMPORARY EROSION CONTROL SYSTEMS INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY MAINTAINED AS DIRECTED BY THE CITY TO CONTROL SILTATION AT ALL TIMES DURING THE LIFE OF THE CONTRACT.
3. ALL STORM SEWER STRUCTURES WITH OPEN GRATES SHALL BE PROTECTED WITH INLET FILTER BASKETS.
4. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN (7) SEVEN CALENDAR DAYS FOLLOWING THE END OF ACTIVE DISTURBANCE. RE-DISTURBANCE CONSISTENT WITH THE FOLLOWING CRITERIA: APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION MEASURES SHALL INCLUDE SEEDING, MULCHING, SOGDING AND / OR NON-VEGETATIVE MEASURES.
5. ALL EROSION CONTROL ITEMS REMAIN IN PLACE AND BE MAINTAINED UNTIL DEEMED UNNECESSARY BY THE OWNER / DEVELOPER AND THE CITY AT WHICH TIME THE EROSION CONTROL ITEMS SHALL BE COMPLETELY REMOVED FROM THE SITE BY THE INSTALLER.
6. ALL DISTURBED AREAS NOT SPECIFICALLY IDENTIFIED FOR LANDSCAPING IMPROVEMENTS OR IMPROVED SURFACE TREATMENTS SUCH AS PARKWAYS, DRIVES, PATIOS, STOPS, SIDEWALKS OR WALKWAYS SHALL BE FINISHED WITH A MINIMUM OF 6" OF TOPSOIL AND RESTORED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AS FOLLOWS:
 - CLASS 2 SEED PER SECTION 205
 - FERTILIZER NUTRIENTS IN THE RATIO OF 1:1:1 OF NITROGEN, PHOSPHORUS AND POTASSIUM EACH, ALL AT THE RATE OF 90 LBS/Acre IN ACCORDANCE WITH SECTION 205.
 - EROSION CONTROL BASKET EXCESSIVE GREEN BASKET (E.O.C.B.) SEC. 205(D)
 - CONTRACTOR SHALL MAINTAIN RESTORED AREA AS NEEDED UNTIL CONSTRUCTION IS COMPLETED AND THE OWNER, OR LOCAL AGENCY HAVING JURISDICTION, HAS ACCEPTED THE WORK.
7. FOR EACH PHASE OF WORK, THE CONTRACTOR RESPONSIBLE FOR THAT WORK IS TO PROVIDE QUALIFIED PERSONNEL WHO SHALL INSPECT:
 - DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN STABILIZED WITH APPROPRIATE MATERIALS OR VEGETATIVE GROUND COVER.
 - STRUCTURAL CONTROL MEASURES (I.E. SILT FENCE, FILTER BASKETS, GRATE FABRIC, ETC.).
 - OFF SITE ROADS AND ON SITE PAVEMENTS WHICH THE CONTRACTOR'S VEHICLES AND OR EQUIPMENT OPERATE.

SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT HAS 0.5 INCHES OR MORE OF PRECIPITATION.

ALL INSPECTIONS SHALL BE IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN INSPECTION REQUIREMENTS.



KEY PLAN:

SHEET STATUS: 06/01/15
**BID PACKAGE 1
 ISSUED FOR BID**

NO.	DESCRIPTION	DATE
1	BP-1 ADDENDUM 1	6-23-2015
2	BP-1 ADDENDUM 2	6-24-2015

SHEET TITLE:
**EROSION CONTROL PLAN
 (1 OF 2)**

SHEET NUMBER:
C6.1

Ruettiger, Tonelli & Associates, Inc.
 Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants
 129 CAPISTA DRIVE • SHOREWOOD, ILLINOIS 60404
 PH: (815) 744-6600 FAX: (815) 744-6101
 website: www.ruettigertonnelli.com
 LATEST R.T. & A. REVISION: 6-24-2015 R.T. & A. Dwg. No.: 401-0058-C1
 FIELD BOOK & PAGE: JJC

SECTION 03 35 19 - INTEGRALLY COLORED CONCRETE FINISHING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Integrally colored finishes for site-cast concrete.
2. If this Section conflicts with Related Sections:
 - a. This Section takes precedence for matters that affect concrete appearance.
 - b. Related Sections take precedence for matters that do not affect concrete appearance.
 - c. In case of conflicts, notify Architect for clarification.

B. Related Sections

1. Related Site Cast Concrete Sections:
 - a. Division 32 Section "Concrete Paving": Basic requirements for concrete and coordination of sample submittal.

1.2 REFERENCE STANDARDS

A. Publications:

1. ACI 302.1R – Guide for Concrete Floor and Slab Construction.
2. ASCC – Guide for Surface Finish of Concrete Slabs on Ground.
3. ASCC – Decorative Concrete Council Problems & Practice papers.
4. PCA PA124 – Finishing Concrete with Color and Texture.
5. ACI 305.1 – Hot Weather Concreting.
6. ACI 306.1 – Cold Weather Concreting.
7. ACI 308R – Curing Concrete.
8. ASTM C309 – Liquid Membrane-Forming Compounds for Curing Concrete.
9. ASTM C979 – Pigments for Integrally Colored Concrete.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference:

1. Conduct conference at Project site.
2. Review procedures required to produce specified results.

1.4 SUBMITTALS

A. Product Data:

1. Color additives.
 2. Curing products.
 3. Proprietary cleaning agents.
- B. LEED Submittals: Submit data for:
1. Heat Island Effect – Non-Roof: LEED Credit SS 7.1 <Other Credit>.
 2. Recycled Content: LEED Credit MR 4.1 and MR 4.2.
 3. Regional Materials: LEED Credit MR 5.1 and MR 5.2.
- C. Shop Drawings: Indicate extent of each color of integrally colored concrete.
- D. Samples for Initial Selection: Submit color additive manufacturer's sample chip set.
- E. Samples for Verification: Submit sample chip of specified concrete colors indicating Davis color name.
- F. Qualification Data: For Installer.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with: ACI 303.1, ACI 305.1, ACI 306.1, ACI 318.
- B. Obtain each material from same source and maintain high degree of consistency in workmanship throughout Project.
- C. Installer Qualifications: Concrete work shall be by firm with [five]<Other number> years experience with work of similar scope and quality.
- D. Field Samples: Submit three samples 12 by 12 inches indicating concrete color range and texture.
- E. Integrally Colored Concrete Mock-Up:
1. Provide two mock-ups for each concrete color - one with and one without a moist curing blanket.
 2. At location acceptable to Architect, demonstrate methods used for construction, including forming and finishing conditions required for Project using materials, workmanship, joint treatments, and curing methods to be used throughout Project.
 3. Accepted mock-up provides visual standard for work of Section.
 - 4.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Color Additive: Deliver, store, and handle in accordance with manufacturer's instructions.
- B. Concrete: Schedule delivery to provide consistent mix times from time color additive is placed in mixture until placement of integrally colored concrete.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cements:
 - 1. Types: As specified in Related Sections..
 - 2. Colors: White.
- B. Supplementary Cementitious Materials:
 - 1. Types: As specified in Related Sections..
 - 2. Colors: White.
- C. Fine Aggregate:
 - 1. Types: As specified in Related Sections..
 - 2. Color: Locally available natural aggregate.
- D. Coarse Aggregate:
 - 1. Types: As specified in Related Sections..
 - 2. Color: Locally available natural aggregate.
- E. Water: Clean and potable.
- F. Admixtures: Do not use calcium chloride admixtures.

2.2 COLOR ADDITIVES

- A. Manufacturer: Davis Colors
 - 1. Contact Information:
 - a. Phone: 800-356-4848 or 323-269-7311.
 - b. E-mail: info@daviscolors.com.
 - c. Web Site: www.daviscolors.com.
- B. Type:
 - 1. Concentrated pigments specially processed for mixing into concrete and complying with ASTM C979.
 - 2. Color additives containing carbon black are not acceptable.
- C. Color Additive Delivery:
 - 1. Automated Dispensing: Meter and dispense colors using computer-controlled automated color weighing and dispensing system. Use Davis Colors Chameleon liquid metering system and Hydrotint liquid color additives.
 - 2. Manual Dispensing: Use Davis Colors Mix-Ready powdered color additives in pre-measured disintegrating bags.

2.3 CONCRETE FLATWORK

- A. Curing Compound for Flatwork: Davis Colors Color Seal II, tinted to match integrally colored concrete; complying with ASTM C309 and designed for use on integrally colored concrete. DO NOT USE PLASTIC SHEETS FOR CURING OF INTEGRALLY COLORED CONCRETE.
- B. Moist Curing Blankets: McTech Group (www.mctechgroup.com) UltraCure SUN disposable curing blankets designed for use on colored or decorative concrete and to keep surface of concrete moist for seven days.

2.4 ACCESSORIES

- A. Reinforcing Bar Supports: Use corrosion-resistant types at locations contacting exposed surfaces.
- B. Joint Sealants:
 - 1. Color: Color selected by Architect from manufacturer's full range to match integrally colored concrete.
- C. Cleaning Agents: Use products known to be compatible with integrally colored concrete.

2.5 MIXES

- A. Slump: 4 inches. If greater slump is required, use water-reducing or super-plasticizing admixture; do not add water.
- B. Color Additives: Mix in accordance with manufacturer's instructions. Mix until color additives are uniformly dispersed throughout mixture and disintegrating bags, if used, have disintegrated.
- C. Do not retemper mix or add water in field.

2.6 CONCRETE COLORS

- A. Concrete Colors:
 - 1. Concrete Color-01: White concrete; no color additive.
 - 2. Concrete Color-02: Light gray, color to be selected by Architect from manufacturer's Standard Group of colors.
 - 3. Concrete Color-03: Dark gray, custom color to match Architect's sample.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not place integrally colored concrete where standing water is present.

3.2 INSTALLATION

- A. Comply with color admixture manufacturer's recommendations unless otherwise specified in this Section.

3.3 FLATWORK

A. Finishing:

1. Broom Finish: Pull broom across freshly troweled concrete to produce medium texture in straight lines perpendicular to main line of traffic. Do not dampen brooms.
2. Trowel Finish: Provide smooth surface. Hard trowel to densify surface. Do not over-trowel or start troweling late.
 - a. Hand Trowel: Use steel trowel.
 - b. Machine Trowel: Use steel trowel blades.

B. Curing

1. Apply curing compound for flatwork or moist curing blanket, as selected based on mock-ups, in accordance with manufacturer's instructions. Apply curing at consistent time for each pour.
2. Maintain concrete between 65° and 85°F during curing.

3.4 APPEARANCE TOLERANCES

- A. Appearance: Minor variations in appearance of integrally colored concrete that are similar to natural variations in color and appearance of uncolored concrete are acceptable.

3.5 CLEANING

- A. Efflorescence: Remove efflorescence as soon as practical after it appears and as part of final cleaning.
- B. Use least aggressive cleaning techniques possible
- C. If proprietary cleaning agents are used, pre-wet surface, test cleaning agent on small, inconspicuous area, and check effects prior to proceeding. Thoroughly rinse surface afterwards with clean water. Follow cleaner manufacturer's instructions.
- D. Do not use muriatic or hydrochloric acid on integrally colored concrete.

END OF SECTION 03 35 19