



Addendum No. 1

DATE: March 17, 2014

Joliet Junior College
1215 Houbolt Road
Joliet, IL 60431

TO: Prospective Bidders
SUBJECT: Addendum No. 1
PROJECT NAME: Romeoville Parking Lot – Phase II
JJC PROJECT NO.: B140003

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 in the space provided on the Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

Additional bidding requirements:

1. All spoils are to be hauled off by the contractor.
2. As mentioned in the pre-bid meeting, provide pricing for the add alternate bid #1 for the work at Main Campus. If this work can be afforded, JJC will be awarding to a single contractor with the low combined bid of the base bid plus the add alternate. If the add alternate cannot be afforded, the qualified low base bid will be recommended for award.
3. **The contractor is to include a \$50,000 allowance within their base bid. This allowance shall be used at JJC discretion for unforeseen conditions, unsuitable soils costs above and beyond the base bid amount, etc. The contractor will not invoice against this allowance without means of an approved Allowance Expense Authorization form provided and approved by the college.**
4. The completion time frame for the work at Main Campus shall be extended to July 30th.
5. Use the revised bid form that includes unit pricing for determining extras/credits to the project.

Questions submitted by bidders:

Question #1 Do the electrical conduits have to be bored, or can they go in open trench?

Answer: Either is acceptable.

Question #2 If they are bored, can hdpe pipe be used instead of 1" pvc conduit?

Answer: HDPE is acceptable

Question #3 Is the electrical work a prime or sub work to the asphalt contractor?

Answer: The electrical portion is a sub to the asphalt contractor. All coordination efforts are between the asphalt contractor and their electrical sub.

Question #4 Are both conduits used for surveillance as shown in detail 2 on e101 or is one of them for lighting?

Answer: Conduits are for surveillance only.

Questions submitted by bidders (cont'd.):

Question #5 Are there any specs/details on the railing at main campus?

Answer: The railing will need to match the railing to be installed with the adjacent project being completed by others. The railing specs have been included with this addendum.

Question #6 Will there be a quantity/unit price submitted in the bid for asphalt patching or under cuts in the parking lot?

Answer: Base bid should include pricing based on 2500 sy. See revised bid form that includes unit pricing for extras/credits to be based on.

Question #7 Regarding the conduits to the light poles, are they looking for two homerun conduits back to the hand holes for EACH light pole base or are they looking for "daisy chained" conduits from one light pole base to the next with only one set of conduits going back to the hand holes? Please clarify.

Answer: Conduits should be daisy chained from one light pole to the next as shown on drawing E101. Each light pole does not require a home run back to the hand hole.

Question #8 Are there details/specs for the ramps (wall thickness/rebar/etc)?

Answer: The detailed design/specs of the ramp shall be design/build by the contractor. Design and reinforcement documents shall be prepared by a licensed structural engineer (hired by the contractor) and provided to JJC.

Question #9 The Soil Boring results were not found. Please let me know where they can be found.

Answer: The Pavement Core Report prepared by TSC is included as part of this addendum.

Question #10 The amount and area of undercutting in Area 1 is unknown. How would you like us to bid that area? Allowance? Proposed Sq. Ft.?

Answer: Base bid should include pricing based on 2500 sy. See revised bid form that includes unit pricing for extras/credits to be based on.

Question #11 What is the foundation depth for the concrete ramp? Please clarify.

Answer: The detailed design/specs of the ramp shall be design/build by the contractor. Design and reinforcement documents shall be prepared by a licensed structural engineer (hired by the contractor) and provided to JJC.

Question #11 This is a question concerning the Romeoville Parking Lot – Phase II project that is currently out to bid. The documents state that the contractor is responsible for undercutting any base material that fails a proof roll. The bid documents do not give a guessed quantity as to how much will need to be done. Most projects will give an estimated quantity so that all contractors are bidding on equal terms. They also then require a unit price to be provided in case this quantity fluctuates; increasing or decreasing the size of the contract. I am wondering if JJC would consider adding an estimated quantity and a unit price in order to make bidding on this project reasonable. Otherwise, this project will most likely come down to who is willing to take the largest risk as to how much undercutting will need to be done.

Answer: Base bid should include pricing based on 2500 sy. See revised bid form that includes unit pricing for extras/credits to be based on.

CERTIFICATION OF CONTRACT/BIDDER

The below signed contractor/bidder hereby certifies that it is not barred from bidding on this or any other contract due to any violation of either Section 33E-3 or 33E-4 of Article 33E, Public Contracts, of the Illinois Criminal Code of 1961, as amended. This certification is required by Public Act 85-1295. This Act relates to interference with public contracting, bid rigging and rotating, kickbacks and bribery.

SIGNATURE OF CONTRACTOR/BIDDER

TITLE

DATE

THIS FORM **MUST** BE RETURNED WITH YOUR BID TO:

Joliet Junior College District #525
Office of Facility Services
Main Campus L Building, L1005
1215 Houbolt Road
Joliet, IL 60431-8938

**CERTIFICATE OF COMPLIANCE WITH
ILLINOIS DRUG-FREE WORKPLACE ACT**

_____, does hereby certify pursuant to the *Illinois Drug-Free Workplace Act* (30 ILCS 580/) that [he, she, it] shall provide a drug-free workplace for all employees engaged in the performance of work under the contract by complying with the requirements of the *Illinois Drug-Free Workplace Act* and, further certifies, that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the *Illinois Drug-Free Workplace Act*.

By Authorized Agent

Date

SUBSCRIBED AND SWORN TO before me
This ____ day of _____, 20__.

NOTARY PUBLIC

B14003 - ADDENDUM #1 REVISED BID FORM
EXECUTE AND ATTACH TO PROPOSAL FORM

JOLIET JUNIOR COLLEGE – REQUEST FOR BID

DRAWINGS ARE AVAILABLE ON THE FOLLOWING WEBSITE:
WWW.JJC.EDU/INFO/PURCHASING

BID FORM

To: Joliet Junior College
1215 Houbolt Road
Joliet, IL 60431-8938

Project: _____

Date: _____

Submitted by:

(Full Name)

(Address)

(City, State, Zip)

(Phone)

(Fax)

(Email)

PART 1 OFFER

Having examined the site and having familiarized itself with the conditions affecting the cost of the work associated with the _____, and with the bidding documents, Bidder hereby proposes to perform everything required and to furnish all labor, materials, necessary tools, expendable equipment and transportation services necessary to complete in a workmanlike manner the subdivision of work stated above in accordance with the bidding documents for the following sums:

Base Bid (Romeoville Parking Lot):

Dollars (\$_____)

Write amount in both alpha and numeric, in case of discrepancy the lesser amount shown will govern.

Add Alternate #1: Extended Drive & Walk Behind D Mall at Main Campus

Dollars (\$_____)

Write amount in both alpha and numeric, in case of discrepancy the lesser amount shown will govern.

We have included herewith, the Security Deposit as required by the Instructions to Bidders.

Unit Pricing:

Bidder must complete the unit pricing spreadsheet included below. The following will be used if/when figuring additional/less scope:

Item Description	Unit	Unit Price
Remove existing bituminous pavement	SY	
Patch aggregate base, 18"	SY	
Bituminous binder course, 2"	SY	
Bituminous binder course, 3"	SY	
Bituminous surface course, 1.5"	SY	
Geo fabric	SY	
Parking lot pavement marking paint	LF	
ADA pavement marking paint	EA	

PART 2 ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for thirty (30) days from the Bid closing date.

If the bid is accepted by the Owner within the time period stated above, we will:

- A. Execute the Agreement within ten (10) days of receipt of Notice of Award.
- B. Furnish the required bonds within ten (10) days of receipt of Notice of Award in the form described in the Instruction to Bidders.
- C. Furnish the required Certificate of Insurance within ten (10) days of receipt of Notice of Award in the form and amounts described in the Instruction to Bidders.
- D. Commence work as established by the written Notice to Proceed.

If this Bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bonds(s), the Security Deposit shall be forfeited as damages to the Owner by reason of our failures.

In the event our Bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

PART 3 CONTRACT TIME

If the Bid is accepted, we will:

- A. Complete the work in manner consistent to meet the requirements of the schedule (_____) consecutive calendar days from the date established as the Date of Commencement in the Notice to Proceed.
- B. Contractor has examined the Schedule included in these documents and takes no exception, or records the following exceptions:

PART 4 CONTRACTOR'S FEES FOR CHANGES IN THE WORK

Lump Sum of Time and Materials Changes: We the undersigned bidder agree that the following percentages for overhead and profit shall be added to job costs for the net amount of work added to or deleted from the contract by written lump sum or time and material change orders recommended by the Engineer and approved by the Owner:

Add to net extra for job costs for additional work performed by:

Our own forces 12%

Our subcontractor 5% (including assigned subcontractors)

Note: Insurance, bond, and taxes are considered as job cost items and are not included in the percentages listed above.

PART 5 ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted therein have been considered and all costs thereto are included in the Bid Sum.

Addendum # _____ Dated _____

Addendum # _____ Dated _____

Addendum # _____ Dated _____

PART 6 SUBCONTRACTORS

- A. The following work will be performed (or provided) by the Subcontractors we have indicated below:

	<u>Name of Subcontractor</u>	<u>Work Performed</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

- B. We understand, and hereby agree, that we are obligated to use the indicated subcontractors, unless prior written permission to change has been obtained from the Owner.

PART 7 RELATED WORK EXPERIENCE

List a minimum of three jobs of similar type and scope performed in the last five years:

1. Client: _____
Building: _____
Phone: _____
Contact Name: _____
Dollar Amount: _____

2. Client: _____
Building: _____
Phone: _____
Contact Name: _____
Dollar Amount: _____

3. Client: _____
Building: _____
Phone: _____
Contact Name: _____
Dollar Amount: _____

PART 8 BID FORM ADDITION

Apprenticeship and Training Certification

In accordance with the Illinois Procurement Code, the Bidder certifies that the work to be performed by it and/or its subcontractors shall, at the time of such bid opening and at the time of the performance of work pursuant to the terms of this Contract, shall have participated in the approved apprenticeship and training programs as provided for above. The bidder shall list, in the space below, the official name of the program sponsor holding the certificate of registration or all types of work or crafts in which the bidder is a participant and that will be performed by the bidder and its sub-contractor's employees. Work that will be sub-contracted shall be indicated to be subcontracted work as provided for herein. **Failure to list required information may result in disqualification of bid.**

PART 9 CONTRACTOR EVALUATION

Upon completion of the project, a Construction Contractor Performance Evaluation form will be completed by the A/E and the JJC Project Coordinator. The contractor will be evaluated in the following categories:

- Professionally Administered and Supervised Work
- Business Practices

- Overall Performance
- Workmanship
- Timeliness
- Project Management

PART 10 BID FORM SIGNATURES(S)

The Corporate Seal of:

(Bidder – please print the full name of your Proprietorship, Partnership, or Corporation)

Was hereunto affixed in the presence of:

(Authorized signing officer) (Title)

(Seal)

(Authorized signing officer) (Title)

If the bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF SECTION

Report of Soils Exploration

**Joliet Junior College
North Parking Lot
Pavement Cores**

1125 W. Romeo Road

Romeoville, Illinois

Joliet Junior College



TESTING SERVICE CORPORATION

Local Office:

203 Earl Road, Suite A, Shorewood, IL 60404-9446
815.744.1510 • Fax 815.744.1728

Corporate Office:

360 S. Main Place, Carol Stream, IL 60188-2404
630.462.2600 • Fax 630.653.2988

January 2, 2013

Mr. Rick Lyman
Joliet Junior College
1215 Houbolt Road
Joliet, Illinois 60431

Re: L-79,574-2310
Joliet Junior College
North Pavement Cores
1125 W. Romeo Road
Romeoville, Illinois

Dear Mr. Lyman:

This report presents the results of the soils exploration performed for the proposed pavement re-construction for the north parking lot at the Joliet Junior College Romeoville Campus. These geotechnical services were provided in accordance with the attached General Conditions, which are incorporated herein by reference.

Field Investigation and Laboratory Testing

A total of eleven (11) pavement cores with shallow soil borings were performed for this exploration. The core locations were selected by representatives from Ruettiger, Tonelli & Associates. A Coring Location Plan is included with this report.

At each location, the pavement was penetrated using a 4" nominal diameter, diamond-tipped core barrel. Once the pavement was penetrated and sampled, the borings were advanced using hand-auger methods, with the soil being sampled by manually driving a split-spoon sampler. Soil samples were described in the field with representative portions of each sample being placed in a jar with a screw-type lid. Upon completion of each test location, the core holes were backfilled and patched.

At the end of the work day, the cores and soil samples were transported to our laboratory for testing. In the laboratory the core and aggregate samples were measured and described by an experienced laboratory technician. The thickness of each lift was determined according to procedures specified by ASTM D3549. The reported thicknesses are the average of four (4) measurements performed at the quarter points around the periphery of the core. The results of these observations and measurements are summarized in this report. Please note the total bituminous concrete thicknesses were rounded to the nearest quarter of an inch with the base course thicknesses being rounded to the nearest half inch.

The subgrade samples were examined in the laboratory to verify field descriptions and also to classify them in accordance with the Unified Soil Classification System. Laboratory testing included moisture content determinations for all cohesive soil types. An estimate of unconfined compressive strength was obtained for all clay soils using a calibrated pocket penetrometer. Dry unit weight determinations were also performed on specimens of cohesive soils. The results of the laboratory testing performed on the

subgrade soils are summarized on the sheets entitled "Report of Soil Test Data", which are included with this report.

Discussion of Test Data

The following table presents the results of thickness measurements performed on the cores and stone for the project. It is our understanding that the design values for the pavement section were: 1.5"- Surface course, 1.5"- Binder, 8"- Stone subbase.

Locations	Total Pavement Thickness (in)	Surface Thickness (in)	Binder Thickness (in)	Stone Thickness (in)
1	3.5	1.25	2.25	8.0
2	3.25	1.25	2.0	10.0
3	3.3	1.4	1.9	9.5*
4	3.2	1.3	1.9	7.5
5	2.7	1.1	1.6	9.5
6	3.1	1.4	1.7	8.5
7	2.75	1.5	1.25	9.0
8	3.3	1.6	1.7	8.5
9	2.2	1.1	1.1	10
10	4.5	1.5 & 1.0	2.0	8.0
11	2.75	1.25	1.5	8.5
Averages	3.1	1.4	1.7	8.8

Stone- Majority of stone appeared to consist of IDOT gradation CA-6
 * Additional 2 feet of CA-6 stone encountered below geotextile fabric at Core 3

The average thicknesses of the pavement and stone met the project designs. Clay fill materials were encountered at Cores 2, 5, 6, and 9 extending to depths on the order of 20 to 24 inches. They had moisture contents ranging from 18 to 23 percent, with dry unit weights from 102 to 112 pounds per square foot.

Native soils typically consisted of tough to hard silty soils extending to sample completion depth. They had unconfined compressive strengths generally ranging from 2.0 to 4.5 tons per square foot (tsf) at moisture contents between 16 and 27 percent. Soft to loose very silty to clayey silt were encountered at Core 1.

Analysis and Recommendations

It is our understanding that the removal and replacement, i.e. complete re-construction, is planned for the parking lot. It is expected that the pavement will be removed, the stone re-compacted and a proof roll performed on the existing stone base in order to detect the presence of unstable materials which require remedial treatment. The proof-roll should be performed using a loaded dump truck or other approved piece of heavy construction equipment.

Work performed for this study did not include performing an IBR test on any representative subgrade samples. However, the IBR value used for pavement design is typically based on the worst soil type (lowest IBR) within the limits of the project. The borings encountered predominately a silty to very silty clay subgrade. Based on these data, an IBR value of no greater than 3.0 is recommended for pavement design. This value represents a typical design bearing value for cohesive subgrade soils in the Chicago area.

Any necessary subgrade preparation should be performed in accordance with Section 301 of the IDOT Standard Specifications and the Subgrade Stability Manual. Compaction for subgrade materials should be to at least 95 percent Standard Proctor density (AASHTO T-99). This compaction requirement should also be specified for any new earth fill placed within pavement subgrade.

Poor to marginal subgrade soils were sampled at Cores 1, 2, 5, 6, 8 and 9, consisting of both fill or native clay soils with moisture contents over 22 percent. These materials will likely fail a proof roll without some type of remedial work. Remedial work for unstable subgrade should consist of discing, aerating, and recompacting exposed subgrade soils, as provided for in Art. 301.03 of the IDOT Standard Specifications. Compaction for subgrade materials should be to at least 95 percent Standard Proctor density (AASHTO T-99). This compaction requirement should also be specified for any new fill placed within pavement subgrade. Crushed aggregate fill will be required in areas of continued unstable subgrade or during adverse weather conditions which restrict the use of cohesive fill. As an alternate to traditional removal and replacement, lime stabilization would also work well for the project soils.

Base course materials for anticipated asphalt pavements should conform to IDOT gradation specification CA-6 and be compacted to 95 percent Modified Proctor density or 100 percent of the Standard Proctor (ASTM D 698) maximum density value. Bituminous materials should conform to an approved IDOT Superpave mix design (N50 typical for subdivision roads and parking lots), as well as Standard Specifications for Road and Bridge Construction, Sections 406 and 1032. They should be compacted to between 93 and 97 percent of their theoretical maximum density, as determined by the supplier.

Closure

The analysis and recommendations submitted in this report are based upon the data obtained from the eleven (11) borings performed as part of this investigation at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur, the nature and extent of

Joliet Junior College
L-79,574-2310 - January 2, 2013

which may not become evident until during the course of construction. If variations are then identified, recommendations contained in this report should be re-evaluated after performing on-site observations.

Please call if there are any questions in regard to this matter or if we may be of further service.

Respectfully submitted,

TESTING SERVICE CORPORATION



John T. Massa, P.E.
Registered Professional Engineer
Illinois No. 062-054960

JTM:wn

Encl. (2 copies)



SOIL TEST REPORT

TESTING SERVICE CORPORATION

203 Earl Road, Suite A, Shorewood, Illinois 60404 - Tel: (815) 744.1510 Fax: (815) 744-1528

Client: Joliet Junior College
 1215 Houbolt Road
 Joliet, IL 60431

Date Tested	12/18/2012
Job Number	79574
Page Number	1 of 2

Project: JJC- Romeoville Campus North Parking Lot Coring
 135th Street Romeoville, IL

Test Data					
Location	Depth / Elevation	Moisture	γ Dry	Qu*	Soil Description
Core 1	0.9	35.1	84.5	0.5*	Soft brown very silty CLAY, little to trace sand, very moist (CL)
Core 1	1.7	28.2	92.7	----	Loose brown SILT, little sand, very moist (ML)
Core 2	1.1	22.7	104.5	----	FILL: brown silty CLAY, trace sand, very moist (CL)
Core 2	1.9	27.0	96.7	2.0*	Tough to very tough brown and gray silty CLAY, trace sand, very moist (CL)
Core 3	3.0	19.0	111.4	4.25*	Hard brown silty CLAY, trace sand and gravel, moist (CL)
Core 4	0.9	24.5	101.4	3.5*	Very tough brown silty CLAY, trace sand, moist (CL)
Core 5	1.1	32.6	102.9	----	FILL: Brown silty CLAY, trace sand, moist (CL)
Core 5	2.0	22.3	105.2	2.5*	Very tough brown and gray silty CLAY, trace sand, moist (CL)
Core 6	0.9	19.3	110.8	----	FILL: Brown silty CLAY, trace sand and gravel, moist (CL)
Core 6	1.8	27.2	96.9	2.0*	Tough to very tough brown and gray silty CLAY, trace sand, very moist (CL)
Core 7	1.0	16.6	114.1	2.75*	Very tough brown silty CLAY, trace sand and gravel, moist (CL)
Core 7	2.0	17.8	112.3	2.25*	Very tough brown silty CLAY, trace sand and gravel, moist (CL)

Depth/Elevation = Depth in Feet below footing or final subgrade or expressed as elevation

Qu = Unconfined compressive strength in tons per square foot based on readings with a calibrated pocket penetrometer

Comments

Depth - From top of pavement.

Field Technician	Reviewed By
G. Search	J. Massa



SOIL TEST REPORT

TESTING SERVICE CORPORATION

203 Earl Road, Suite A, Shorewood, Illinois 60404 - Tel: (815) 744.1510 Fax: (815) 744-1528

Client: Joliet Junior College
 1215 Houbolt Road
 Joliet, IL 60431

Date Tested	12/18/2012
Job Number	79574
Page Number	2 of 2

Project: JJC- Romeoville Campus North Parking Lot Coring
 135th Street Romeoville, IL

Location	Depth / Elevation	Test Data			Soil Description
		Moisture	γ Dry	Qu*	
Core 8	1.0	25.3	98.0	2.0*	Tough to very tough brown and gray silty CLAY, trace sand, moist (CL)
Core 8	1.8	20.2	108.2	4.0*	Very tough to hard brown silty CLAY, little sand, moist (CL)
Core 9	1.0	18.5	112.9	----	FILL: Brown silty CLAY, trace sand, moist (CL)
Core 9	2.2	26.7	97.7	----	FILL: Brown silty CLAY, trace sand, very moist (CL)
Core 10	1.1	23.9	102.3	3.0*	Very tough brown and gray silty CLAY, trace sand and gravel, moist (CL)
Core 10	1.9	16.9	115.7	4.5*	Hard brown silty CLAY, trace sand and gravel, moist (CL)
Core 11	0.9	18.1	113.2	4.5*	Hard brown silty CLAY, trace to little sand and gravel, moist (CL)
Core 11	2.0	17.9	113.6	4.5*	Hard brown silty CLAY, trace to little sand and gravel, moist (CL)

Depth/Elevation = Depth in Feet below footing or final subgrade or expressed as elevation

Qu = Unconfined compressive strength in tons per square foot based on readings with a calibrated pocket penetrometer

Comments

Depth - From top of pavement.

Field Technician

G. Search

Reviewed By

J. Massa



TESTING SERVICE CORPORATION

Corporate Office

360 South Main Place, Carol Stream, IL 60188-2404
630.462.2600 • Fax 630.653.2988

January 2, 2013

Mr. Rick Lyman
Joliet Junior College
1215 Houbolt Road
Joliet, Illinois 60431

ICO/ Joseph Hammer
Ruettiger, Tonelli & Associates
2174 Oneida Street
Joliet, Illinois 60435

RE: L-79,574
LPC-663 Form
Joliet Junior College
Romeoville Campus
North Parking Lot
1125 W. Romeo Road
Romeoville, Illinois

Dear Mr. Hammer:

Testing Service Corporation (TSC) has completed soil sampling and laboratory analyses for the above captioned project. The scope of services was outlined in TSC proposal 50,099, dated December 5, 2012. TSC was requested to evaluate soil in the north parking lot at the above referenced property for disposal of soil at a Uncontaminated Soil Fill Operation (USFO).

The area where the soil will be generated for disposal consists of a paved parking lot at the Joliet Junior College. TSC searched the Illinois Environmental Protection Agency (IEPA) website and identified that the property is not listed on either the Leaking Underground Storage Tank (LUST) or the Site Remediation Program (SRP) databases. On this basis, TSC concluded that the property would not be considered a Potentially Impacted Property (PIP). TSC was requested by the client to collect soil samples for analysis in order to complete the LPC-663 form for disposal of the soil at a USFO.

On December 19, 2012, TSC collected performed eleven cores through the parking lot. Two soil samples representative of the soil to be excavated for disposal were collected. The soil was screened at several locations using a Mini-RAE 3000 photo-ionization detector (PID), which detected no readings exceeding background conditions of 0.2 ppm. Samples B-9 and B-11 were placed in laboratory supplied jars and 5035 preserved vials and transported to the analytical laboratory using standard chain of custody procedures for analysis of VOCs, PNAs, Lead and pH.

The analytical results were compared to the Maximum Allowable Concentrations of Chemical Constituents (MACs) listed in 35 IAC 1100 Subpart F. The analytical results obtained from soil samples indicate that all analyzed parameters meet their respective MACs. Additionally, pH is within the required range of 6.25-9.0 units.

Joliet Junior College
L-79,574 - January 2, 2013

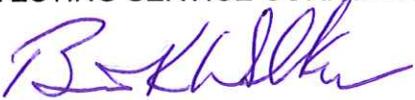
A copy of the IEPA Form LPC-663, Uncontaminated Soil Certification, signed by a Licensed Professional Geologist, along with the analytical report and chain of custody is attached.

Please note that USFO's screen each load with a PID, which will determine the final acceptance of individual loads, regardless of the analytical results.

We appreciate the opportunity to be of service to you. Please contact us with any questions.

Respectfully,

TESTING SERVICE CORPORATION



Brian K. Walker, P.G.196.000772
Manager, Environmental Assessments

Enc: LPC-663 Form
 Analytical Report and Chain of Custody
 General Conditions



Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Joliet Junior College Office Phone Number, if available: _____

Physical Site Location (address, including number and street):
1125 West Romeo Road

City: Romeoville State: IL Zip Code: 60446

County: Will Township: DuPage

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.64208 Longitude: -88.11214
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

Google Earth

IEPA Site Number(s), if assigned: _____ BOL: None BOW: None BOA: None

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Joliet Junior College

Name: Joliet Junior College

Street Address: 1215 Houbolt Road

Street Address: 1215 Houbolt Road

PO Box: _____

PO Box: _____

City: Joliet State: IL

City: Joliet State: IL

Zip Code: 60436 Phone: 815-280-2212

Zip Code: 60436 Phone: 815-280-2212

Contact: Rick Lyman

Contact: Rick Lyman

Email, if available: rlyman@jjc.edu

Email, if available: rlyman@jjc.edu

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Joliet Junior College

Latitude: 41.64208 Longitude: -88.11214

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Aerial Photos show property undeveloped prior to current college. Neither site nor adjoining properties are listed on reviewed LUST or SRP databases. Two soil samples collected for analytical testing, beneath parking lot. The soil was screened with a Mini-RAE 3000, which detected no VOCs.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Soil samples B-9 and B-11 were analyzed for VOC's, PNA's, Lead and pH. Both samples meet the maximum allowable concentrations (MACs) presented in 35 IAC 1100 Subpart F for these compounds. Both have pH within acceptable range.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Brian K. Walker (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Testing Service Corporation

Street Address: 360 South Main Place

City: Carol Stream State: IL Zip Code: 60188

Phone: 630-462-2600

Brian K. Walker

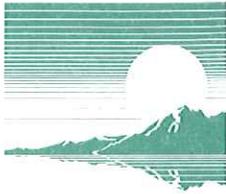
Printed Name:

1-2-13

Date:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:





**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

December 27, 2012

Mr. Brian Walker
TESTING SERVICE CORP.
360 So. Main Place
Carol Stream, IL 60188

Project ID: 79574
First Environmental File ID: 12-6667
Date Received: December 19, 2012

Dear Mr. Brian Walker:

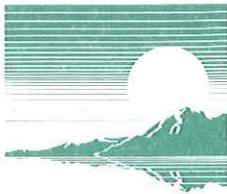
The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 002902: effective 03/08/2012 through 02/28/2013.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200.

Sincerely,

Bill Mottashed
Project Manager



Case Narrative

TESTING SERVICE CORP.

Project ID: **79574**

First Environmental File ID: **12-6667**

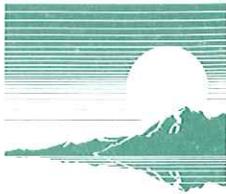
Date Received: **December 19, 2012**

Flag	Description	Flag	Description
<	Analyte not detected at or above the reporting limit.	L+	LCS recovery outside control limits; high bias.
B	Analyte detected in associated method blank.	L-	LCS recovery outside control limits; low bias.
C	Identification confirmed by GC/MS.	M	MS recovery outside control limits; LCS acceptable.
D	Surrogates diluted out; recovery not available.	M+	MS recovery outside control limits high bias; LCS acceptable.
E	Estimated result; concentration exceeds calibration range.	M-	MS recovery outside control limits low bias; LCS acceptable.
F	Field measurement.	N	Analyte is not part of our NELAC accreditation.
		ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.
G	Surrogate recovery outside control limits; matrix effect.	P	Chemical preservation pH adjusted in lab.
H	Analysis or extraction holding time exceeded.	Q	The analyte was determined by a GC/MS database search.
J	Estimated result; concentration is less than calib range.	S	Analyte was sub-contracted to another laboratory for analysis.
K	RPD outside control limits.	T	Sample temperature upon receipt exceeded 0-6°C
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	W	Reporting limit elevated due to sample matrix.

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

Sample Batch Comments:

Sample acceptance criteria were met.



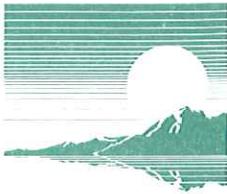
Analytical Report

Client: TESTING SERVICE CORP.
Project ID: 79574
Sample ID: B9
Sample No: 12-6667-001

Date Collected: 12/19/12
Time Collected: 14:00
Date Received: 12/19/12
Date Reported: 12/27/12

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 12/20/12				
Total Solids	81.58		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/20/12				
Acetone	< 100	100	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	



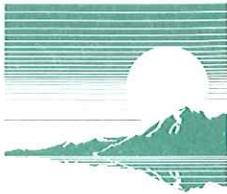
Analytical Report

Client: TESTING SERVICE CORP.
Project ID: 79574
Sample ID: B9
Sample No: 12-6667-001

Date Collected: 12/19/12
Time Collected: 14:00
Date Received: 12/19/12
Date Reported: 12/27/12

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/20/12				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		Preparation Method 3540C
Analysis Date: 12/26/12				
Preparation Date: 12/20/12				
Acenaphthene	< 50	50	ug/kg	
Acenaphthylene	< 50	50	ug/kg	
Anthracene	< 50	50	ug/kg	
Benzo(a)anthracene	< 8.7	8.7	ug/kg	
Benzo(a)pyrene	< 15	15	ug/kg	
Benzo(b)fluoranthene	< 11	11	ug/kg	
Benzo(k)fluoranthene	< 11	11	ug/kg	
Benzo(ghi)perylene	< 50	50	ug/kg	
Chrysene	< 50	50	ug/kg	
Dibenzo(a,h)anthracene	< 20	20	ug/kg	
Fluoranthene	< 50	50	ug/kg	
Fluorene	< 50	50	ug/kg	
Indeno(1,2,3-cd)pyrene	< 29	29	ug/kg	
Naphthalene	< 25	25	ug/kg	
Phenanthrene	< 50	50	ug/kg	
Pyrene	< 50	50	ug/kg	
Total Metals		Method: 6010B		Preparation Method 3050B
Analysis Date: 12/21/12				
Preparation Date: 12/21/12				
Lead	16.1	0.2	mg/kg	
pH @ 25°C, 1:2		Method: 9045C		
Analysis Date: 12/21/12				
pH @ 25°C, 1:2	8.38		Units	



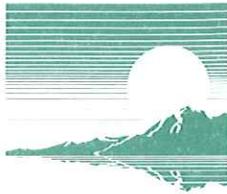
Analytical Report

Client: TESTING SERVICE CORP.
Project ID: 79574
Sample ID: B11
Sample No: 12-6667-002

Date Collected: 12/19/12
Time Collected: 13:50
Date Received: 12/19/12
Date Reported: 12/27/12

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 12/20/12				
Total Solids	89.05		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/20/12				
Acetone	< 100	100	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	



Analytical Report

Client: TESTING SERVICE CORP.
Project ID: 79574
Sample ID: B11
Sample No: 12-6667-002

Date Collected: 12/19/12
Time Collected: 13:50
Date Received: 12/19/12
Date Reported: 12/27/12

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/20/12				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		Preparation Method 3540C
Analysis Date: 12/26/12				
Preparation Date: 12/20/12				
Acenaphthene	< 50	50	ug/kg	
Acenaphthylene	< 50	50	ug/kg	
Anthracene	< 50	50	ug/kg	
Benzo(a)anthracene	37.0	8.7	ug/kg	
Benzo(a)pyrene	19	15	ug/kg	
Benzo(b)fluoranthene	21	11	ug/kg	
Benzo(k)fluoranthene	21	11	ug/kg	
Benzo(ghi)perylene	< 50	50	ug/kg	
Chrysene	< 50	50	ug/kg	
Dibenzo(a,h)anthracene	< 20	20	ug/kg	
Fluoranthene	50	50	ug/kg	
Fluorene	< 50	50	ug/kg	
Indeno(1,2,3-cd)pyrene	< 29	29	ug/kg	
Naphthalene	< 25	25	ug/kg	
Phenanthrene	< 50	50	ug/kg	
Pyrene	< 50	50	ug/kg	
Total Metals		Method: 6010B		Preparation Method 3050B
Analysis Date: 12/21/12				
Preparation Date: 12/21/12				
Lead	2.9	0.2	mg/kg	
pH @ 25°C, 1:2		Method: 9045C		
Analysis Date: 12/21/12				
pH @ 25°C, 1:2	8.91		Units	



TESTING SERVICE CORPORATION

GENERAL CONDITIONS

Geotechnical and Construction Services

1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.

5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C. § 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance

with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.

9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence. These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Base Bid:
 - 1. General Contractor:
 - a. Stainless steel pipe and tube guardrails and handrails for exterior Terrace perimeter and guards, gates, etc at exterior stair perimeter.

1.2 RELATED REQUIREMENTS

- A. Section 03 30 00 - Cast-in-Place Concrete: Placement of anchors in concrete.
- B. Section 05 51 00 - Metal Stairs: Handrails other than those specified in this section.

1.3 REFERENCE STANDARDS

- A. ASTM E935 - Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings.
- B. ASTM E985 - Standard Specification for Permanent Metal Railing Systems and Rails for Buildings.

1.4 SUBMITTALS

- A. See Section 01 33 23 – Shop drawings, Product Data, and Samples.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.
- C. Provide certification/testing of specified stainless steel tubing.
- D. Samples: Submit two, 12 inch long samples of handrail. Submit two samples of Tee and end stop.
- E. Design all items as designed as specified. Fabricator shall detail all conditions on shop drawings to fully describe conditions of steel fabrication.

1.5 QUALITY ASSURANCE

- A. Design all items described herein under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the State of Illinois. Minimum shapes/sizes of steel shapes indicated on drawings. Fabricator shall detail all conditions on shop drawings to fully describe conditions of steel fabrication.

PART 2 PRODUCTS

2.1 RAILINGS - GENERAL REQUIREMENTS

- A. Fabricate in accordance with the most stringent requirements of ASTM E985 and applicable local code.
- B. Concentrated Loads: Design railing assembly, wall rails, and attachments to resist a concentrated force of 200 pounds applied at any point on the top of the assembly and in any direction, without damage or permanent set. Test in accordance with ASTM E

935.

- C. Design railing assembly, wall rails, and attachments to resist lateral force of 75 lbs at any point without damage or permanent set. Test in accordance with ASTM E 935.
- D. All connections to be fully welded. Allow for expansion and contraction of members and building movement without damage to connections or members.
- E. Dimensions: See drawings for configurations, heights etc.
 - 1. Top Rails and Wall Rails: 1-1/2 inches outside diameter, round.
 - 2. Posts: 1-1/2 inches outside diameter, round.
 - 3. Handrails: 1-1/2 inches outside diameter, round.
 - 4. Pickets: 1/2" x 1/2" square.
 - 5. Minimum thickness of all Stainless pipe to be 1/4" thick.
- F. Provide anchors and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.
 - 1. For anchorage to concrete, provide inserts to be cast into concrete, for sleaving and sealing vertical posts.
 - 2. For anchorage to masonry, provide brackets to be embedded in masonry, for bolting anchors.
 - 3. For anchorage to stud walls, provide backing plates, for bolting anchors.
 - 4. Posts: Provide adjustable flanged brackets.
- G. Provide heavy-duty stainless steel hinges at gates, 1-1/2 pair at each gate. Provide 3/16" stainless steel welded stop plates at top and bottom, Tubular st.stl. operation handles, double eye locking, and latch mechanisms. Using agency to provide two locks for gates. Provide stainless steel heavy wall tube/post for attachment of gate and catch.

2.2 STAINLESS STEEL RAILING SYSTEM

- A. Stainless Steel Tube: type 316L, #4 finish, heavywall, with 2" radius corners structural tubing. Provide slip joints for movement.
- B. Non-Weld Mechanical Fittings: Slip-on, galvanized malleable iron castings, for Schedule 40 pipe, with flush setscrews for tightening by standard hex wrench, no bolts or screw fasteners.
- C. Welding Fittings: Factory- or shop-welded from matching pipe or tube; seams continuously welded; joints and seams ground smooth.
- D. Exposed Fasteners: No exposed bolts or screws.
- E. Straight Splice Connectors: Stainless steel welding collars.

2.3 FABRICATION

- A. Accurately form components to suit specific project conditions and for proper connection to building structure.
- B. Fit and shop assemble components in largest practical sizes for delivery to site.

- C. Fabricate components with joints tightly fitted and secured. Provide spigots and sleeves to accommodate site assembly and installation.
- D. Welded Joints:
 - 1. Exterior Components: Continuously seal joined pieces by continuous welds. Drill condensate drainage holes at bottom of members at locations that will not encourage water intrusion.
 - 2. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.

3.2 PREPARATION

- A. Supply items required to be cast into concrete or embedded in masonry with setting templates, for installation as work of other sections.
- B. Coordinate placement of vertical tubes with concrete rein-forcing shopdrawings.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.
- C. Anchor railings securely to structure. Sleeve, grout and seal a minimum depth of 12" into concrete foundation wall. Provide for expansion.

3.4 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per floor level, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION