**Part 1** **ADDENDUM NO.4**

**1.1** **General**

.1 This Addendum is issued prior to tender closing and shall become an integral part of the Tender, Specifications, Drawings and Contract Documents for this project.

.2 In the event of conflicts between the various Contract Documents, the order of precedence shall be as stipulated in the General Conditions of the Contract, except that this Addendum shall take overall precedence.

**Part 2**

**2.1** **Drawing AL1.0**

.1 Clarified area required for seeding around detachment

.2 See attached Drawing AL1.0 Rev 01

**2.2** **Specifications**

.1 Add Section 32 91 19.13 – Topsoil Placement and Grading

.2 Add Section 32 92 19.13 – Mechanical Seeding

**Part 3** **Equals Requests**

**3.1** **Reliable Overhead Door Systems Ltd. – Accepted See attached**

**3.2** **Nu-West Construction Products – Accepted but the supplier is responsible for proving system proposed works as a complete system equal to the specified system as per Section 07 27 00.01 Part 2.1.2. (See attached)**

**3.3** **Air Unlimited - Generac – Approved As per attached**

**3.4** **J-Tak Sales – Mixing Valves – Approved As per attached**

**3.5** **Prairie HVAC – Split System Air Conditioner - Rejected**

**END OF SECTION**

## Part 1 General

### 1.1 REFERENCES

.1 Agriculture and Agri-Food Canada

.1 The Canadian System of Soil Classification, Third Edition, 1998.

.2 U.S. Environmental Protection Agency (EPA)/Office of Water

.1 EPA 832R92005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

### 1.2 DEFINITIONS

.1 Compost:

.1 Mixture of soil and decomposing organic matter used as fertilizer, mulch, or soil conditioner.

.2 Compost is processed organic matter containing 40% or more organic matter as determined by Walkley-Black or Loss On Ignition (LOI) test.

.3 Product must be sufficiently decomposed (i.e. stable) so that any further decomposition does not adversely affect plant growth (C:N ratio below (25) (50)), and contain no toxic or growth inhibiting contaminates.

.4 Composed bio-solids to: CCME Guidelines for Compost Quality, Category (A) (B).

### 1.3 ACTION AND INFORMATIONAL SUBMITTALS

.1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

### 1.4 QUALITY ASSURANCE

.1 Pre-installation meetings: conduct pre-installation meeting to verify project requirements, installation instructions and warranty requirements in accordance with Section 01 32 16.07 - Construction Progress Schedules - Bar (GANTT) Chart.

### 1.5 WASTE MANAGEMENT AND DISPOSAL

.1 Separate waste materials for reuse recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

.2 Do not dispose of unused soil amendments into sewer systems, into lakes, streams, onto ground or in locations where it will pose health or environmental hazard.

## Part 2 Products

### 2.1 TOPSOIL

.1 Topsoil for seeded areas planting beds : mixture of particulates, micro organisms and organic matter which provides suitable medium for supporting intended plant growth.

.1 Soil texture based on The Canadian System of Soil Classification, to consist of 45% sand, minimum 25 % clay, and contain 10 % organic matter by weight.

.2 Contain no toxic elements or growth inhibiting materials.

.3 Finished surface free from:

.1 Debris and stones over 50 mm diameter.

.2 Course vegetative material, 10 mm diameter and 100 mm length, occupying more than 2% of soil volume.

.4 Consistence: friable when moist.

## 2.2 SOIL AMENDMENTS

.1 Fertilizer:

.1 Fertility: major soil nutrients present in following amounts:

.2 Nitrogen (N): 20 to 40 micrograms of available N per gram of topsoil.

.3 Phosphorus (P): 40 to 50 micrograms of phosphate per gram of topsoil.

.4 Potassium (K): 75 to 110 micrograms of potassium per gram of topsoil.

.5 Calcium, magnesium, sulfur and micro-nutrients present in balanced ratios to support germination and/or establishment of intended vegetation.

.6 Ph value: 6.5.

.2 Peatmoss:

.1 Derived from partially decomposed species of Sphagnum Mosses.

.2 Elastic and homogeneous, brown in colour.

.3 Free of wood and deleterious material which could prohibit growth.

.4 Shredded particle minimum size: 5 mm.

.3 Sand: washed coarse silica sand, medium to course textured.

.4 Organic matter: compost Category A, in accordance with CCME PN1340, unprocessed organic matter, such as rotted manure, hay, straw, bark residue or sawdust, meeting the organic matter, stability and contaminant requirements.

.5 Use composts meeting Category B requirements for land fill reclamation and large scale industrial applications.

.6 Limestone:

.1 Ground agricultural limestone.

.2 Gradation requirements: percentage passing by weight, 90% passing 1.0 mm sieve, 50% passing 0.125 mm sieve.

.7 Fertilizer: industry accepted standard medium containing nitrogen, phosphorous, potassium and other micro-nutrients suitable to specific plant species or application or defined by soil test.

## Part 3 Execution

### 3.1 PREPARATION OF EXISTING GRADE

.1 Verify that grades are correct.

.2 Grade soil, eliminating uneven areas and low spots, ensuring positive drainage.

.3 Remove debris, roots, branches, stones in excess of 50 mm diameter and other deleterious materials.

- .1 Remove soil contaminated with calcium chloride, toxic materials and petroleum products.
- .2 Remove debris which protrudes more than 75 mm above surface.
- .3 Dispose of removed material off site.

.4 Cultivate entire area which is to receive topsoil to minimum depth of 100 mm.

- .1 Cross cultivate those areas where equipment used for hauling and spreading has compacted soil.

### 3.2 PLACING AND SPREADING OF TOPSOIL/PLANTING SOIL

.1 Place topsoil after Consultant has accepted subgrade.

.2 Spread topsoil in uniform layers not exceeding 150 mm.

.3 For sodded areas keep topsoil 15 mm below finished grade.

.4 Spread topsoil as indicatedto following minimum depths after settlement.

- .1 150 mm for seeded areas.
- .2 135 mm for sodded areas.
- .3 300 mm for flower beds.
- .4 500 mm for shrub beds.

.5 Manually spread topsoil/planting soil around trees, shrubs and obstacles.

### 3.3 FINISH GRADING

.1 Grade to eliminate rough spots and low areas and ensure positive drainage.

- .1 Prepare loose friable bed by means of cultivation and subsequent raking.

.2 Consolidate topsoil to required bulk density using equipment approved by Consultant.

- .1 Leave surfaces smooth, uniform and firm against deep footprinting.

### 3.4 ACCEPTANCE

.1 Consultant will inspect and test topsoil in place and determine acceptance of material, depth of topsoil and finish grading.

### 3.5 SURPLUS MATERIAL

.1 Dispose of materials except topsoil not required off site

## 3.6 CLEANING

.1 Proceed in accordance with Section 01 74 11 - Cleaning.

.2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

**END OF SECTION**

## Part 1 General

### 1.1 ADMINISTRATIVE REQUIREMENTS

.1 Scheduling:

.1 Schedule sod laying to coincide with preparation of soil surface.

.2 Schedule sod installation when frost is not present in ground.

### 1.2 ACTION AND INFORMATIONAL SUBMITTALS

.1 Submit in accordance with Section 01 33 00 - Submittal Procedures.

.2 Product Data:

.1 Submit manufacturer's instructions, printed product literature and data sheets for seed, and fertilizer.

.2 Submit 2 copies of WHMIS MSDS in accordance with Section 01 35 29.06 - Health and Safety Requirements 01 35 43 - Environmental Procedures.

.3 Samples:

.1 Submit 0.5 kg container of each type of fertilizer used.

.4 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

.5 Test Reports: submit certified test reports showing compliance with specified performance characteristics and physical properties.

### 1.3 QUALITY ASSURANCE

.1 Qualifications:

.1 Landscape Planting Supervisor: Landscape Industry Certified Technician with Softscape Installation designation.

### 1.4 DELIVERY, STORAGE AND HANDLING

.1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements with manufacturer's written instructions.

.2 Delivery and Acceptance Requirements:

.1 Labelled bags of fertilizer identifying mass in kg, mix components and percentages, date of bagging, supplier's name and lot number.

.2 Fertilizer must be dry.

.3 Storage and Handling Requirements:

.1 Store fertilizer off ground indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.

.2 Replace defective or damaged materials with new.

**1.5 WARRANTY**

.1 For seeding, 12 months warranty period is extended to 24 months.

.2 End-of-warranty inspection will be conducted by Departmental Representative.

## Part 2 Products

**2.1 GRASS SEED**

.1 Canada "Certified" seed, "Canada No. 1Lawn Grass Mixture" in accordance with Government of Canada "Seeds Act" and "Seeds Regulations".

.2 In packages individually labelled in accordance with "Seeds Regulations" and indicating name of supplier.

**2.2 WATER**

.1 Free of impurities that would inhibit germination and growth.

**2.3 FERTILIZER**

.1 To Canada "Fertilizers Act" and Regulations.

.2 Complete synthetic fertilizer with guaranteed minimum analysis as specified.

## Part 3 Execution

**3.1 SEED BED PREPARATION**

.1 Remove and dispose of weeds; debris; stones 50 mm in diameter and larger; soil contaminated by oil, gasoline and other deleterious materials; off site.

.2 Verify that grades are correct. If discrepancies occur, notify Consultant and commence work when instructed by Consultant.

.3 Fine grade surface free of humps and hollows to smooth, even grade, to tolerance of plus or minus 15 mm, surface draining naturally.

.4 Cultivate fine graded surface approved by Consultant to 25 mm depth immediately prior to seeding.

**3.2 SEED PLACEMENT**

.1 Ensure seed is placed under supervision of certified Landscape Planting Supervisor.

.2 For mechanical seeding:

.1 Mechanical landscape drill seeder ("Brillion" type or equivalent) which accurately places seed at specified depth and rate and rolls in single operation.

.2 Use equipment and method acceptable to Departmental Representative DCC Representative Consultant.

.3 For manual seeding:

.1 Use manually operated drop seeder ("Cyclone" type or equivalent).

.2 Use manually operated, water ballast, landscaping type, smooth steel drum roller. Ballast as directed by Departmental Representative DCC Representative Consultant.

.3 Use equipment and method acceptable to Departmental Representative DCC Representative Consultant.

.4 On cultivated surfaces, sow seed uniformly as per manufacturers recomendation

.4 Blend applications 150 mm into adjacent grass areas to form uniform surfaces.

.5 Sow half of required amount of seed in one direction and remainder at right angles as applicable.

.6 Incorporate seed by light raking in cross directions.

.7 Consolidate mechanically seeded areas by rolling area if soil conditions warrant or if directed by Consultant with equipment approved by Consultant immediately after seeding.

## 3.3 CLEANING

.1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.

.1 Leave Work area clean at end of each day.

.2 Keep pavement and area adjacent to site clean and free from mud, dirt, and debris at all times.

.2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

.1 Clean and reinstate areas affected by Work.

## 3.4 PROTECTION

.1 Erect plastic snow fence around newly seeded areas sufficient to protect against deterioration due to pedestrian or other traffic.

## 3.5 MAINTENANCE DURING ESTABLISHMENT PERIOD

.1 Ensure maintenance is curried out under supervision of certified Landscape Maintenance Supervisor.

.2 Perform following operations from time of seed application until acceptance by Consultant:

.1 Water seeded area to maintain optimum soil moisture level for germination and continued growth of grass. Control watering to prevent washouts.

.2 Repair and reseed dead or bare spots to allow establishment of seed prior to acceptance.

.3 Cut grass to 50 mm whenever it reaches height of 70 mm. Remove clippings which will smother grass

.4 Fertilize seeded areas after first cutting in accordance with fertilizing program. Spread half of required amount of fertilizer in one direction and remainder at right angles and water in well.

.5 Control weeds by mechanical or chemical means utilizing acceptable integrated pest management practices.

.6 Adjust protection barrier as necessary to protect against deterioration due to pedestrian or other traffic as needed.

## 3.6 FINAL ACCEPTANCE

.1 Seeded areas will be accepted by Consultant provided that:

.1 Areas are uniformly established free of rutted, eroded, bare or dead spots and extent of weeds apparent in grass is acceptable.

.2 Areas have been cut at least twice.

.3 Areas have been fertilized.

.2 Areas seeded in fall will be accepted in following spring, one month after start of growing season provided acceptance conditions are fulfilled.

## 3.7 MAINTENANCE DURING WARRANTY PERIOD

.1 Perform following operations from time of acceptance until end of warranty period.

.1 Water seeded area to maintain optimum soil moisture level for continued growth of grass. Control watering to prevent washouts.

.2 Repair and reseed dead or bare spots to satisfaction of Consultant.

.3 Cut grass to 50 mm whenever it reaches height of 70 mm. Remove clippings which will smother grass as directed by Consultant.

.4 Fertilize seeded areas in accordance with fertilizing program. Spread half of required amount of fertilizer in one direction and remainder at right angles and water in well.

.5 Control weeds by mechanical or chemical means utilizing acceptable integrated pest management practices.

**END OF SECTION**

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PROJECT NAME: Facility Building – Island Lake

SUBMITTED BY: Reliance Overhead Door Systems Ltd.

DATE: July 14 2014 PHONE: 204-779-1209

REVIEWED BY: Reid Sitar

The following products have been reviewed in accordance with the General Requirements of the contract documents. It shall be conclusively assumed that the individual or firm, requesting the acceptance of the substitute product, certifies that the substitute will adequately perform the functions called for by the general design drawings and associated specifications, be similar and of equivalent substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Schedule of Work and Completion Date(s). Furthermore, in the event that the substitute product is accepted, any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the requested substitute, as well as any cost or time impacts that may be associated with the use of the substitute, shall be the responsibility of the individual or firm requesting approval of the substitute product.

| Spec. Section | I.D. No. | Proposed Alternate | Accepted | Rejected | Reason |
|---|---|---|---|---|---|
| 08 36 13.02 | | Steel Craft TD134-20 | X | | |
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can tec
1948 Main Street, Winnipeg, MB R2V 2B4
PHONE: (204)943-7222 FAX: (204)947-5717

PROJECT NAME: Facility Building – Island Lake

SUBMITTED BY: Nu-West Construction Products Inc.

DATE: July 14 2014 PHONE:

REVIEWED BY: Reid Sitar

The following products have been reviewed in accordance with the General Requirements of the contract documents. It shall be conclusively assumed that the individual or firm, requesting the acceptance of the substitute product, certifies that the substitute will adequately perform the functions called for by the general design drawings and associated specifications, be similar and of equivalent substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Schedule of Work and Completion Date(s). Furthermore, in the event that the substitute product is accepted, any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the requested substitute, as well as any cost or time impacts that may be associated with the use of the substitute, shall be the responsibility of the individual or firm requesting approval of the substitute product.

| Spec. Section | I.D. No. | Proposed Alternate | Accepted | Rejected | Reason |
|---|---|---|---|---|---|
| 07 13 52 | | Colphene 3000 by Soprema | X | | |
| 07 13 52 | | Elastocol Stick By Soprema | X | | |
| 07 27 00.01 | | Sopraseal Stick 1100 by Soprema | x | | |
| 07 92 00 | | GE RCS 20.02 Acrylic Laytex | x | | |
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Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

# REQUEST FOR EQUIVALENT

**Associated Engineering**
**203 - Five Donald Street**
**Winnipeg, MB R3L 2T4**
**Tel: 204.942.6391 Fax: 204.942.6399**

| | |
|---|---|
| **CLIENT:** | Can-Tec |
| **PROJECT:** | RCMP Island Lake Detachment |
| **PROJECT NO:** | 2013.4396.00 |
| **FILE NO:** | E.07.00 |
| **RFE NO:** | E01 |
| **DATE:** | 2014 / 07 / 02 |
| **REQUESTED BY:** | Alfred Wang<br>Air Unlimited Inc.<br>(204) 958-6800 Ext 520<br>alfred@airunlimited.ca |

| SECTION / CLAUSE | SPECIFIED MANUFACTURER / PRODUCT | PROPOSED MANUFACTURER / PRODUCT | ACCEPTED / REJECTED |
|---|---|---|---|
| 26 32 14 | Generator: Cat, Cummins, Kohler | Generac | Accepted |
| | | | |
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Comments:

The plans and specifications define the performance of the work and the performance of the proposed substitutes must be equal to the original design. Proof of equivalency rests with the bidder. Any costs involved in the modifications to the design to accommodate the proposed substitute are to be included in the base bid.

Per:
ASSOCIATED ENGINEERING (SASK.) LTD.

Darcy Robinson

can tec
1948 Main Street, Winnipeg, MB R2V 2B4
PHONE: (204)943-7222 FAX: (204)947-5717

PROJECT NAME: Facility Building – Island Lake

SUBMITTED BY: J-Tak Sales

DATE: July 15 2014 PHONE: 204-633-4889

REVIEWED BY: Reid Sitar

The following products have been reviewed in accordance with the General Requirements of the contract documents. It shall be conclusively assumed that the individual or firm, requesting the acceptance of the substitute product, certifies that the substitute will adequately perform the functions called for by the general design drawings and associated specifications, be similar and of equivalent substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Schedule of Work and Completion Date(s). Furthermore, in the event that the substitute product is accepted, any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the requested substitute, as well as any cost or time impacts that may be associated with the use of the substitute, shall be the responsibility of the individual or firm requesting approval of the substitute product.

| Spec. Section | I.D. No. | Proposed Alternate | Accepted | Rejected | Reason |
|---|---|---|---|---|---|
| 22 42 02 | EW-1 | Acorn Safety S0440-PT-1 | X | | |
| | Emerg. Mixing Valve | Acorn Control ET71-1-0TG | X | | |
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PHONE:(204)943-7222 FAX:(204)947-5717

PROJECT NAME: Facility Building – Island Lake

SUBMITTED BY: Prairie HVAC

DATE: July 16 2014 PHONE: 204-257-4822

REVIEWED BY: Janet Loesel Sitar

The following products have been reviewed in accordance with the General Requirements of the contract documents. It shall be conclusively assumed that the individual or firm, requesting the acceptance of the substitute product, certifies that the substitute will adequately perform the functions called for by the general design drawings and associated specifications, be similar and of equivalent substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Schedule of Work and Completion Date(s). Furthermore, in the event that the substitute product is accepted, any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the requested substitute, as well as any cost or time impacts that may be associated with the use of the substitute, shall be the responsibility of the individual or firm requesting approval of the substitute product.

| Spec. Section | I.D. No. | Proposed Alternate | Accepted | Rejected | Reason |
|---|---|---|---|---|---|
| 23 81 24 | AC-1 | LG120HEV | | X | Does not meet piping line length requirement of 100ft |
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