

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Bell Pat Brad Walk)
(Property Identification Number) PCB 015-
06-31-100-002) (Tax Certification
) Water)

NOTICE

Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60601

Patrick Walk
RR #1 Box 133A
Sigel, IL 62462

Steve Santarelli
Illinois Department of Revenue
101 West Jefferson
Post Office Box 19033
Springfield, Illinois 62794

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board an **APPEARANCE AND THE RECOMMENDATION** of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION
AGENCY

By: Vera Herst
Vera Herst
Assistant Counsel
Division of Legal Counsel

DATED: July 25, 2014

Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
(217) 782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Bell Pat Brad Walk)
(Property Identification Number) **PCB 015-**
06-31-100-002)) **(Tax Certification**
) **Water)**

A P P E A R A N C E

The undersigned, as one of its attorneys, hereby enters an **APPEARANCE** on behalf of Respondent,
Illinois Environmental Protection Agency.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: *Vera Herst*
Vera Herst
Assistant Counsel
Division of Legal Counsel

DATED: July 25, 2014
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
(217)782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Bell Pat Brad Walk)
(Property Identification Number) **PCB 015-**
06-31-100-002)) **(Tax Certification**
) **Water)**

RECOMMENDATION

The Illinois Environmental Protection Agency (“Illinois EPA”) hereby files its Recommendation pursuant to Section 125.204 of the regulations of the Illinois Pollution Control Board, 35 Ill. Adm. Code 125.204.

1. On April 23, 2013, the Illinois EPA received a request from Bell Pat Brad Walk (log number TC-09-13, Exhibit A) for an Illinois EPA recommendation regarding the tax certification of water pollution control facilities pursuant to 35 Ill. Adm. Code 125.204.
2. The applicant states there is no mailing address for the facility.
3. The proposed water pollution control facilities in this request are located at Section 31, T10N, R67 of 3rd PM in Cumberland County, and consist of the following:

Livestock waste management facilities consisting of one concrete manure pit (168 ft. x 61 ft. x 8 ft. 2 inches deep) with slotted floors beneath the building to collect swine waste.

These livestock waste management facilities are used to collect, transport and/or store livestock wastes prior to cropland application, and are further described in Exhibit A.
4. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2012), defines “pollution control facilities” as:

“any system, method, construction, device or appliance appurtenant thereto or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: (a) eliminating, preventing, or reducing air or water pollution

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...or (b) treating, pretreating, modifying or disposing of any potential solid, liquid or gaseous pollutant which if released without treatment, pretreatment modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property.”

5. Pollution control facilities are entitled to preferential tax treatment, 35 ILCS 200/11-5.

6. Based on the information in the application and the purpose of the facilities, it is the Illinois EPA’s engineering judgment that the described facilities may be considered “pollution control facilities,” pursuant to 35 Ill. Adm. Code 125.200(a), with the primary purpose of eliminating, preventing, or reducing water pollution, or as otherwise provided in 35 Ill. Adm. Code 125.200, and are eligible for tax certification from the Board.

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WHEREFORE, the Illinois EPA recommends that the Board issue the requested tax certification.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: *Vera Herst*
Vera Herst
Assistant Counsel
Division of Legal Counsel

Dated: July 25, 2014
Illinois Environmental Protection Agency
1021 North Grand Ave. E.
P.O. Box 19276
Springfield, Illinois 62794-9276
217/782-5544

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

Memorandum

To: Charles Gunnarson, Division of Legal Counsel

From: Al Keller, Manager, Permit Section

Date: July 16, 2014

Re: Patrick Walk
Sigel, IL
Recommendation of Tax Certification
Log # TC-09-13
Property ID # 06-31-100-002

The Bureau of Water received a request on April 23, 2013 from Patrick Walk for an Illinois EPA recommendation regarding the tax certification of water pollution control facilities pursuant to 35 Il. Adm. Code 125.204. We offer the following recommendation.

The water pollution control facilities in this request include the following:

Patrick Walk
Swine Facility
Sigel, Illinois

Section 31, T10N R7E of the 3rd PM in Cumberland County

Livestock waste management facilities consisting of one concrete manure pit (168 ft. x 61 ft. x 8 ft. 2 in.) with slotted floors beneath the building to collect swine waste. These livestock waste management facilities are used to collect, transport, and/or store livestock wastes prior to cropland application.

These facilities are further described in the enclosed applications and supporting documents.

Based on the information included in this submittal, it is our engineering judgment that the above proposed facilities may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing water pollution, or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. The Bureau of Water therefore recommends that the Board issue the requested tax certification for these facilities.

If you have any questions regarding the above, please contact Jenny Larsen at 217/782-0610.

SAK:JML:Tax Certs\AgChem\Log\TC-09-13.docx

cc: Tax Cert File

Watershed Unit Tax Certification Review Sheet

Project Name: None

Date: June 30, 2014

Reviewer: Jenny Larsen

Type: Agchem
 Livestock

Log number: TC-09-13

Contact: Patrick Walk

Applicant: Patrick Walk
RR #1 Box 133 A
Sigel, IL 62462

Phone: (217)844-2446

Property ID: 06-31-100-002

Facility:

County: Cumberland

Legal Description:

S: 31 T: 10N R: 7E PM: 3rd

Signature: Patrick Walk

Date Control Devices installed: 08/2012

Title: partner

Location: Big Spring, IL

Provided Fair cash Value: \$400,000

Wastes: Livestock waste is applied to cropland.

Agrichemical rinsate and spillage is recycled through the facility and/or land applied.

Other: _____

Physical Description of Pollution Control Devices:

A swine finishing building (168 ft. x 61 ft.) with slated floors and an 8 ft. 2 in. deep concrete manure pit beneath. The waste is pumped out and applied to the fields.

The primary purpose for this structure is to store swine waste thereby eliminating waste runoff.

Recommended Action: Permit the above mentioned structures.

(On 6/30/2014 at 2:30pm: I spoke with Patrick Walk who confirmed that there is a manure pit beneath the swine finishing building and that the swine waste is then collected and applied to the cropland. I also asked him for the facility address but he said that there was no mailing address for this site and it wasn't within any city limits.)

(On 7/15/2014 at 11:13 am: I spoke with Patrick Walk who confirmed that they are only asking for the manure pit to be certified as a pollution control facility.)



Illinois
Environmental
Protection Agency

Bureau of Water
P.O. Box 19276
Springfield, IL 62794-9276

August 2000

TC-09-13

Tax Certification Program for Livestock Waste Management Facilities

As an incentive for livestock producers to construct waste storage structures and other structures which prevent water pollution the Agency administers a tax certification program, which reduces the property tax value for many pollution control improvements. In order to recognize this tax reduction, the producer must have the improvement certified by the Illinois Environmental Protection Agency (Illinois EPA) as a pollution control facility.

Various facilities have been determined to meet the definition of a pollution control facility for livestock waste management. The following are examples of pollution control facilities for livestock waste management.

1. Manure pits under confined animal feed structures.
2. Slatted floors over manure pits.
3. Floors (not in feeding areas) specifically designed to collect and transport livestock wastes to liquid waste storage facilities.
4. Liquid livestock waste storage facilities including, but not limited to: tanks, lagoons, and holding ponds.
5. Dry manure stacking structures.
6. Feedlot runoff sediment capture basins.
7. Vegetative filter systems including, but not necessarily limited to those components designed, constructed and operated pursuant to Title 35 Illinois Administrative Code, Subtitle E, Chapter 11, Part 570 titled Design and Maintenance Criteria Regarding Runoff Field Application Systems adopted August 3, 1982.
8. Structures or other devices used specifically to divert uncontaminated runoff and roof drainage away from animal feeding facilities so as to minimize the production of feedlot runoff.
9. Roof structures specifically intended to prevent precipitation from entering livestock waste storage facilities provided that such a roof shall meet the requirement that animal feeding operations are not and also could not be normally conducted below said roof.
10. Building or structure walls specifically intended to support those roof structures described in item #9 above.
11. Tanks or other similar structures, such as methane digesters, that are specifically designed, constructed and operated for the only purpose of reducing odors from livestock wastes provided that such facilities shall meet the requirement that methane or products other than processed animal manures are not produced or collected for utilization in any purpose other than the normal operation of the facility.
12. Specific appurtenances to those facilities listed above such as pumps, pump pits, manure scrapers, ramps, manure stackers, or other devices provided that such appurtenances are designed, constructed and operated for the primary purpose of the normal operation of the pollution control facility.
13. Other facilities that meet the definition of a pollution control facility.

Once Illinois EPA has certified that the improvements made by the producer qualify as a pollution control facility, the Agency submits a copy of the certification to the producer and the Illinois Department of Revenue (IDOR). The IDOR assumes authority from the county tax assessment office to assess the value of the certified facilities based upon remaining useful lifetime and the salvage value (usually property taxes are based upon fair cash value). This reduces the assessed value of the certified facilities and, therefore, the property tax.

The date upon which the Illinois EPA received an application form from a producer determines the first assessment year that the IDOR assumes assessment jurisdiction from the county.

Pollution control facilities certified by the Illinois EPA will be assessed by the IDOR as of January 1 of the year after Illinois EPA's receipt of the tax certification application. For instance, if an application is received by the Illinois EPA on January 1, 1999, or December 31, 1999, both would come under the IDOR's assessment jurisdiction as of January 1, 2000.

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)
POLLUTION CONTROL FACILITY
AIR WATER

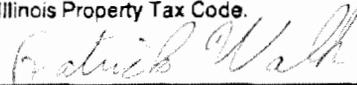
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
P. O. Box 19276, Springfield, IL 62794-9276

This Agency is authorized to request this information under Illinois Revised Statutes, 1979, Chapter. 120, Section 302a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

FOR AGENCY USE			
File No.	Date Received	Certification No.	Date
Sec. A APPLICANT	Company Name K&L APC - BRAD WALSH		PATRICK WALSH
	Person Authorized to Receive Certification PATRICK WALSH		Person to Contact for Additional Details
	Street Address RR # 1 BOX 133A		Street Address
	Municipality, State & Zip Code SIGEE ILL		Municipality, State & Zip Code 62452
	Telephone Number 217-844-2446		Telephone Number
	Location of Facility Quarter Section NW 31		Township BIG SPRING
	Township 10-1		Range 7 EAST
	Street Address		County CUMBERLAND
Book Number		Parcel Number 06-31-100-002	
Property Identification Number LF 0350220000			
Sec. B MANUFACTURING OPERATIONS	Nature of Operations Conducted at the Above Location SWINE FACILITY		
	Water Pollution Control Construction Permit No. NA	Date Issued	
	NPDES PERMIT No. NA	Date Issued	Expiration Date
	Air Pollution Control Construction Permit No. NA	Date Issued	
	Air Pollution Control Operating Permit No. NA	Date Issued	
Sec. C MANUFACTURING PROCESS	Describe Unit Process SWINE FINISH BUILDING		
	Materials Used in Process REINFORCED CONCRETE		
Sec. D POLLUTION CONTROL FACILITY DESCRIPTION	Describe Pollution Abatement Control Facility Reinforced concrete w/ waterstop on all joints built according to IDAA specs		

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APR 23 2013

IEPA
BOWWPC/PERMIT SECTION

Sec. E	(1) Nature of Contaminants or Pollutants		
POLLUTION CONTROL FACILITY - CONTAMINANTS			Material Retained, Captured or Recovered
	Contaminant or Pollutant	DESCRIPTION	DISPOSAL OR USE
	SOLID MATERIAL	MAINTENANCE	COLLECTED AND RECYCLED
			RECYCLED TO REUSE
	(2) Point(s) of Waste Water Discharge		
	Plans and Specifications Attached		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	(3) Are contaminants (or residues) collected by the control facility?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	(4) Date installation completed <u>Aug 2012</u> status of installation on date of application _____		
ACCOUNTING DATA	(5) a.	FAIR CASH VALUE IF CONSIDERED REAL PROPERTY:	\$ 400,000.00
	b.	NET SALVAGE VALUE IF CONSIDERED REAL PROPERTY:	\$ 400,000.00
	c.	PRODUCTIVE GROSS ANNUAL INCOME OF CONTROL FACILITY:	\$ 250,000.00
	d.	PRODUCTIVE NET ANNUAL INCOME OF CONTROL FACILITY:	\$ 45,000.00
	e.	PERCENTAGE CONTROL FACILITY BEARS TO WHOLE FACILITY VALUE:	% 39
Sec. F	The following information is submitted in accordance with the Illinois Property Tax Code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code.		
SIGNATURE	 Signature		Partner Title
Sec. G	INSTRUCTIONS FOR COMPILING AND FILING APPLICATION		
	General: Separate applications must be completed for each control facility claimed. Do not mix types (water and air). Where both air and water operations are related, file two applications. If attachments are needed, record them consecutively on an index sheet.		
INSTRUCTIONS	Sec. A	Information refers to applicant as listed in the tax records and the person to be contacted for further details or for inspection of facilities. Define facility location by street address or legal description. A plat map location is required for facilities located outside of municipal boundaries. The property identification number is required.	
	Sec. B	Self-explanatory. Submit copies of all permits issued by local pollution control agencies. (e.g. MSD Construction Permit)	
	Sec. C	Refers to manufacturing processes or materials on which pollution control facility is used.	
	Sec. D	Narrative description of the pollution control facility, indicating that its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility. State permit number, date, and agency issuing permit. A narrative description and a process flow diagram describing the pollution control facility. Include a listing of each major piece of equipment included in the claimed fair cash value for real property. Include an average analysis of the influent and effluent of the control facility stating the collection efficiency.	
	Sec. E	List air contaminants, or water pollution substances released as effluents to the manufacturing processes. List also the final disposal of any contaminants removed from the manufacturing processes. Item (1) - Refers to pollutants and contaminants removed from the process by the pollution control facility. Item (2) - Refers to water pollution but can apply to water-carried wastes from air pollution control facilities. Submit drawings, which clearly show (a) Point(s) of discharge to receiving stream, and (b) Sewers and process piping to and from the control facility. Item (3) - If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value in dollars reclaimed by sale or reuse of the collected substances. State the cost of reclamation and related expense. Item (4) - State the date which the pollution control facility was first placed in service and operated. If not, explain. Item (5) - This information is essential to the certification and assessment actions. This accounting data must be completed to activate project review prior to certification by this Agency.	
	Sec. F	Self-explanatory. Signature must be a corporate authorized signature.	
	Submit to:	Attention:	Attention:
	Illinois EPA P.O. Box 19276 Springfield, IL 62794-9276	Al Keller Permit Section Division of Water Pollution Control	Donald E. Sutton Permit Section Division of Air Pollution Control

Watershed Unit Tax Certification Review Sheet

Project Name: None

Date: June 30, 2014

Reviewer: Jenny Larsen

Type: Agchem

Livestock

Log number: TC-09-13

Contact: Patrick Walk

Applicant: Patrick Walk

RR #1 Box 133 A

Phone: (217)844-2446

Sigel, IL 62462

Property ID: 06-31-100-002

Facility:

County: Cumberland

Legal Description:

S: 31 T: 10N R: 7E PM: 3rd

Signature: Patrick Walk

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Title: partner

Location: Big Spring, IL

Provided Fair cash Value: \$400,000

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TC-09-13



Illinois
Environmental
Protection Agency

Bureau of Water
P.O. Box 19276
Springfield, IL 62794-9276

August 2000

Tax Certification Program for Livestock Waste Management Facilities

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APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)
 POLLUTION CONTROL FACILITY
 AIR WATER

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 P. O. Box 19276, Springfield, IL 62794-9276

This Agency is authorized to request this information under Illinois Revised Statutes, 1979, Chapter, 120, Section 502a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

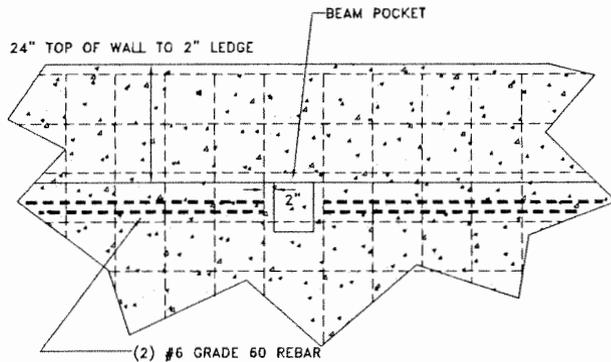
FOR AGENCY USE				
File No.	Date Received	Certification No.	Date	
Sec. A APPLICANT	Company Name BRAD WALSH		PATRICK WALSH	
	Person Authorized to Receive Certification PATRICK WALSH		Person to Contact for Additional Details	
	Street Address RR # 1 BOX 133A		Street Address	
	Municipality, State & Zip Code SIGEL ILL		Municipality, State & Zip Code 62452	
	Telephone Number 217-844-2426		Telephone Number	
	Location of Facility Quarter Section NW 31	Township 10-1	Range 7 EAST	Municipality BIG SPRING
	Street Address		County CUMBERLAND	Township Book Number
	Property Identification Number LP 0350220050		Parcel Number 06-31-100-002	
Sec. B MANUFACTURING OPERATIONS	Nature of Operations Conducted at the Above Location SWINE FACILITY			
	Water Pollution Control Construction Permit No. NA	Date Issued		
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	Materials Used in Process REINFORCED CONCRETE			
Sec. D POLLUTION CONTROL FACILITY DESCRIPTION	Describe Pollution Abatement Control Facility Reinforced concrete w/ waterstop on all joints built according to IDOA spec			

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 APR 23 2013

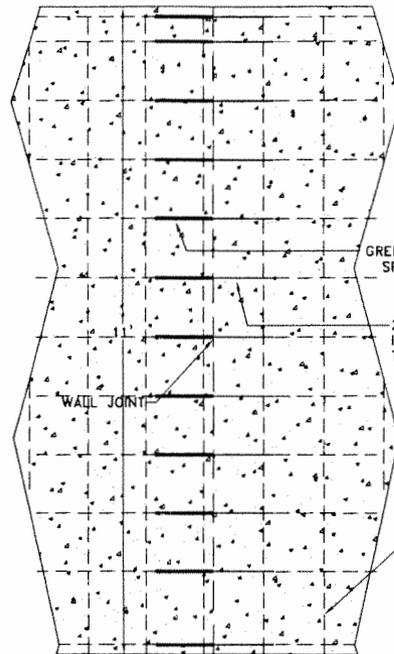
IEPA
 BOWWPC/PERMIT SECTION

Sec. E	(1) Nature of Contaminants or Pollutants		
POLLUTION CONTROL FACILITY - CONTAMINANTS	Material Retained, Captured or Recovered		
	Contaminant or Pollutant	DESCRIPTION	DISPOSAL OR USE
	SOLIDS RESIDUE	Amount 2500	10' x 20' area
			residue tank
ACCOUNTING DATA	(2) Point(s) of Waste Water Discharge		
	Plans and Specifications Attached		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	(3)	Are contaminants (or residues) collected by the control facility?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	(4)	Date installation completed <u>Aug 2012</u> status of installation on date of application _____	
	(5)	a. FAIR CASH VALUE IF CONSIDERED REAL PROPERTY:	\$ 400,000.00
		b. NET SALVAGE VALUE IF CONSIDERED REAL PROPERTY:	\$ 400,000.00
		c. PRODUCTIVE GROSS ANNUAL INCOME OF CONTROL FACILITY:	\$ 250,000.00
		d. PRODUCTIVE NET ANNUAL INCOME OF CONTROL FACILITY:	\$ 45,000.00
		e. PERCENTAGE CONTROL FACILITY BEARS TO WHOLE FACILITY VALUE:	% 39
	Sec. F	The following information is submitted in accordance with the Illinois Property Tax Code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code.	
SIGNATURE	<u>Patrick Walsh</u>	<u>Partner</u>	
	Signature	Title	
Sec. G	INSTRUCTIONS FOR COMPILING AND FILING APPLICATION		
General: Separate applications must be completed for each control facility claimed. Do not mix types (water and air). Where both air and water operations are related, file two applications. If attachments are needed, record them consecutively on an index sheet.			
INSTRUCTIONS	Sec. A	Information refers to applicant as listed in the tax records and the person to be contacted for further details or for inspection of facilities. Define facility location by street address or legal description. A plat map location is required for facilities located outside of municipal boundaries. The property identification number is required.	
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	Sec. F	Self-explanatory. Signature must be a corporate authorized signature.	
	Submit to:	Attention:	Attention:
	Illinois EPA P.O. Box 19276 Springfield, IL 62794-9276	Al Keller Permit Section Division of Water Pollution Control	Donald E. Sutton Permit Section Division of Air Pollution Control

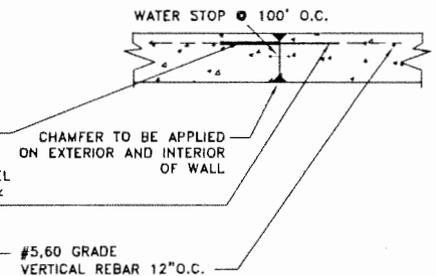
REINFORCEMENT DETAIL AT BEAM POCKET



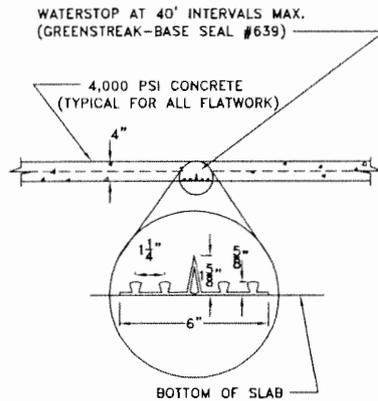
EXTERIOR WALL JOINT SIDE VIEW



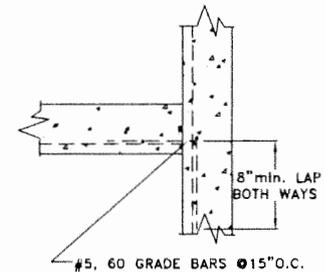
EXTERIOR WALL JOINT TOP VIEW

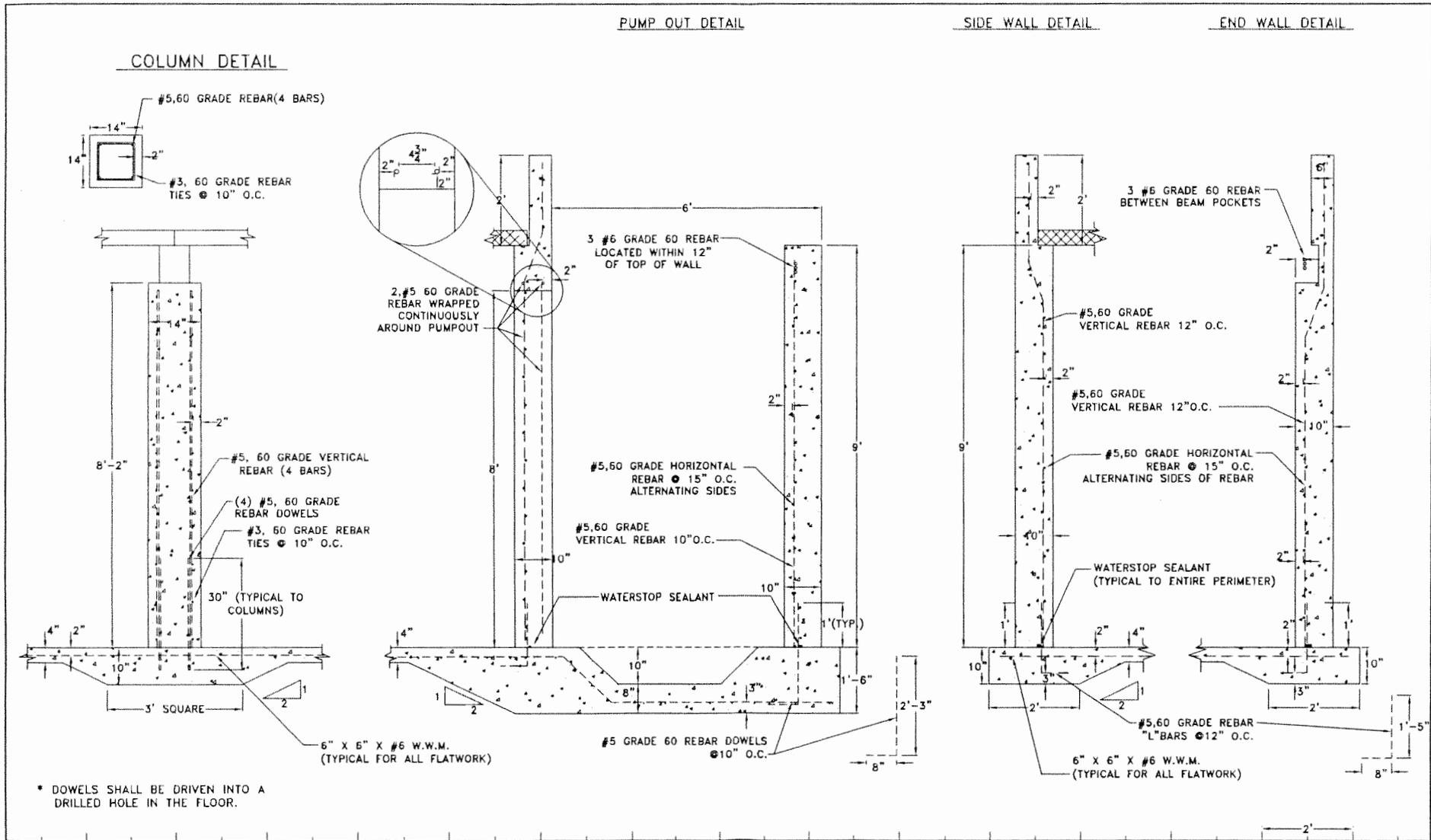


FLOOR CONTROL JOINT



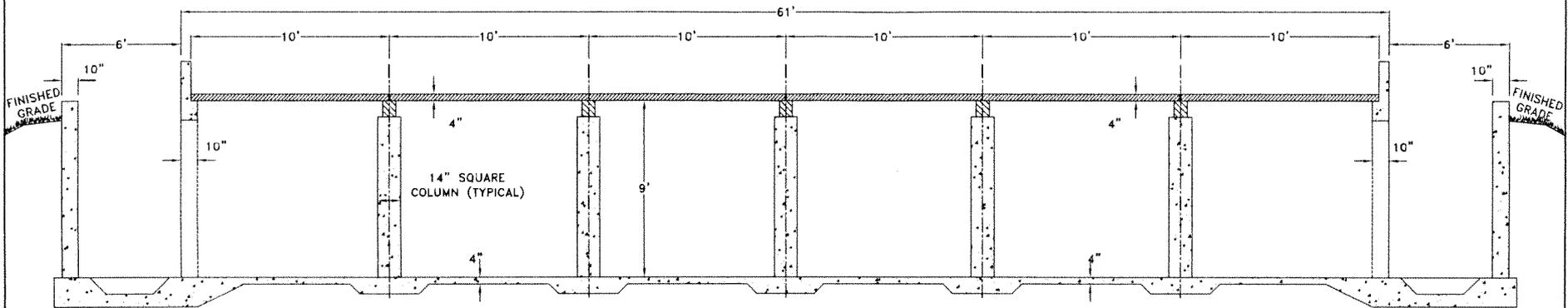
PUMPOUT TIE-IN





* DOWELS SHALL BE DRIVEN INTO A DRILLED HOLE IN THE FLOOR.

CROSS SECTION C-C



- SOLID PRECAST SLATS
- PRECAST BEAMS
- CONCRETE POURED ON SITE

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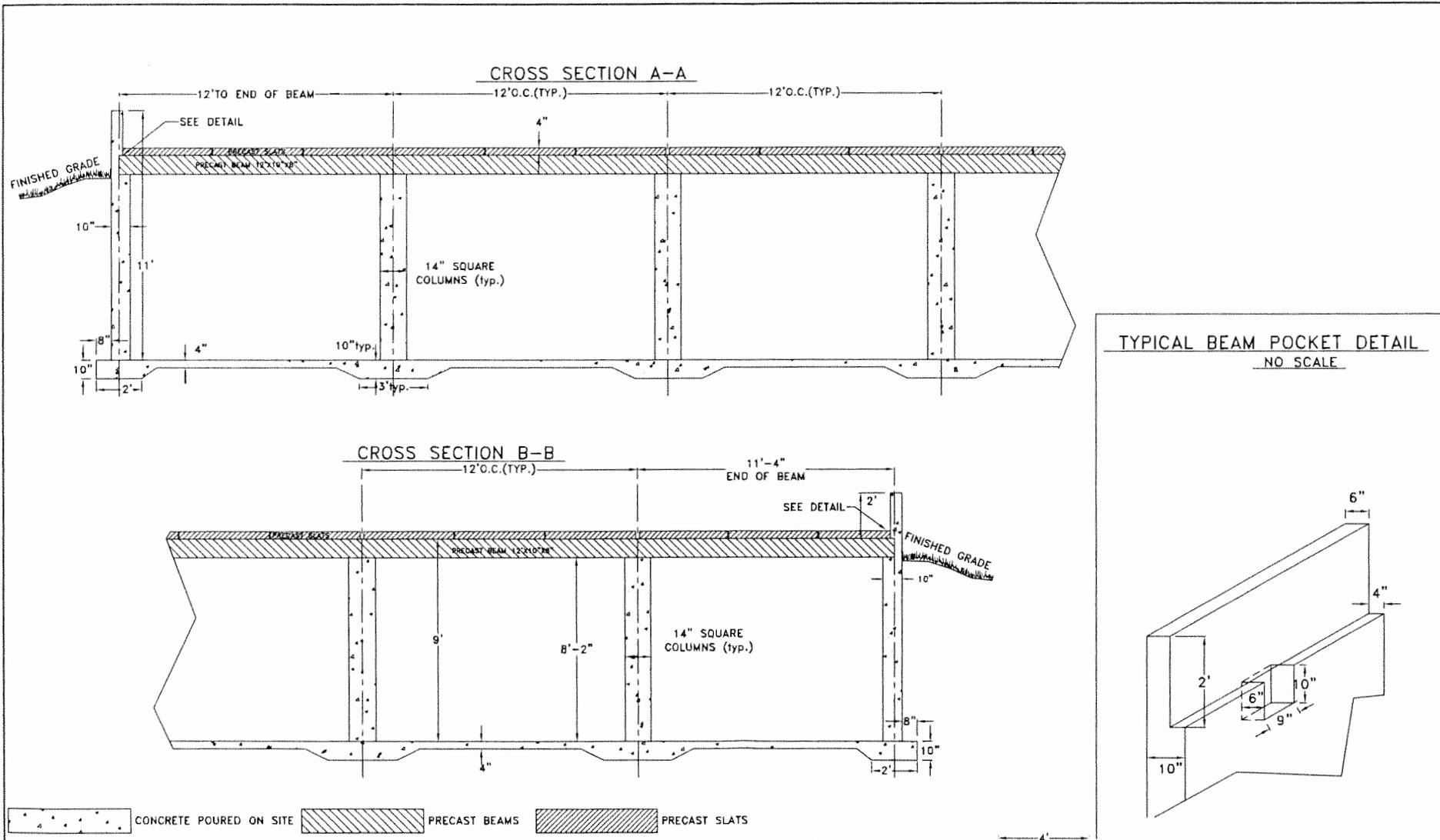
CROSS SECTION C-C

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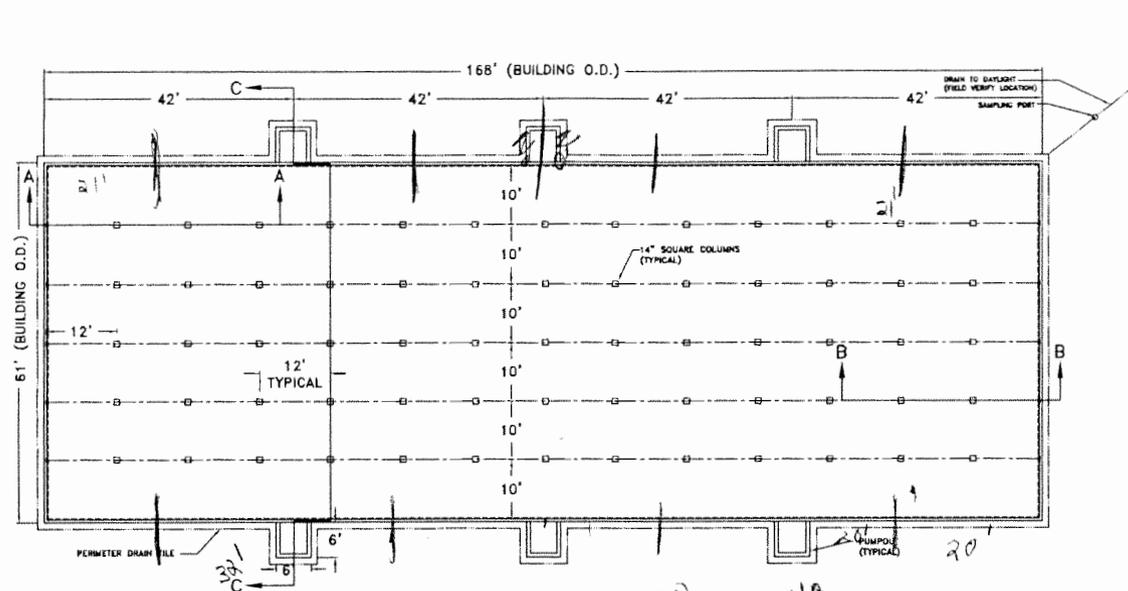


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 CROSS SECTIONS A-A & B-B
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GENERAL NOTES

- 1.) ANY REVISIONS TO THESE DRAWINGS MUST BE APPROVED BY THE PROJECT ENGINEER OF THE COMPANY LISTED IN THE TITLE BLOCK.
- 2.) CONCRETE CONSTRUCTION SHALL MEET WITH MIDWEST PLAN SERVICE-36, CONCRETE MANURE STORAGE UNLESS NOTED OTHERWISE.
- 3.) NO CONCRETE SHALL BE PLACED ON ON ICE, SNOW OR FROZEN FOUNDATION MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONCRETE DAMAGED BY LOW TEMPERATURES AND SHALL REMOVE AND REPLACE ANY CONCRETE SO DAMAGED AT HIS/HER EXPENSE.
- 4.) THE METHOD AND MANNER OF PLACING CONCRETE SHALL BE SUCH AS TO AVOID SEGREGATION OR SEPARATION OF THE AGGREGATES OR THE DISPLACEMENT OF THE REINFORCEMENT.
- 5.) THE FOOTINGS ARE TO BE CONSTRUCTED WITH A MINIMUM OF 3,000 PSI CONCRETE.
- 6.) ALL WALLS, COLUMNS, AND FLOORS ARE TO BE CONSTRUCTED OF 4,000 PSI CONCRETE.
- 7.) CONCRETE SLATS WILL BE UTILIZED FOR FLOORING.
- 8.) THE CONCRETE PAD WILL BE A CONTINUOUS POUR.
- 9.) EXTERIOR WALL CONSTRUCTION JOINTS WILL BE INSTALLED AT 100' O.C.
- 10.) NO VEHICLE LOADS ALLOWED WITHIN 5' OF PIT/GUTTER WALLS.
- 11.) ALL BEAMS SHALL BE BUTTED TIGHT AND/OR GROUTED TIGHT THE FULL WIDTH AND HEIGHT OF THE BEAM. GROUT WILL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,500 PSI.
- 12.) ALL SLATS SHALL BE BUTTED TIGHT AND/OR GROUTED TIGHT THE FULL LENGTH AND DEPTH OF THE SLAT. GROUT WILL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,500 PSI.
- 13.) NO PIPE PENETRATIONS OTHER THAN THE TYPES IDENTIFIED ON THESE DRAWINGS ARE ALLOWED. ALL WALL AND FLOOR PENETRATIONS, INCLUDING PIPE PENETRATIONS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 14.) THE PRESUMED SOIL BEARING CAPACITY IS 2,000 LBS./SQ. FT.

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PLAN VIEW

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GENERAL NOTES:

PREPARATION OF SUBGRADES :

ALL ORGANIC TOPSOIL INSIDE THE TANK AREA AND AT SITE FILL AREAS SHALL BE REMOVED. CONTRACTOR SHALL VERIFY TOPSOIL DEPTMS PRIOR TO CONSTRUCTION PER THE GENERAL CONDITIONS.

TOPSOIL SHALL BE STRIPPED FROM THE FOUNDATION AREA AND STOCKPILED FOR USE AS TOP DRESSING FOR VEGETATION ESTABLISHMENT UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

PROOF ROLL SUBGRADES BELOW TANK FLOOR, BEFORE FILLING OR PLACING AGGREGATE COURSES, WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF ROLL WET OR SATURATED SUBGRADES.

RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES.

FILL PLACEMENT:

FILL SHALL NOT BE PLACED UNTIL THE REQUIRED EXCAVATION AND PREPARATION OF THE UNDERLYING FOUNDATION IS COMPLETED AND APPROVED BY THE TESTING AND INSPECTION AGENCY. FILL SHALL BE PLACED BEGINNING AT THE LOWEST ELEVATION OF THE FOUNDATION. NO FILL SHALL BE PLACED ON A FROZEN SURFACE.

IF THE SURFACE OF ANY LAYER BECOMES TOO HARD AND SMOOTH FOR PROPER BOND WITH THE SUCCEEDING LAYER, IT SHALL BE SCARIFIED PARALLEL TO THE AXIS OF THE FILL TO A DEPTH NOT LESS THAN 2 INCHES BEFORE THE NEXT LAYER IS PLACED.

ALL FILL UNDER TANK AREAS SHALL BE PIT RUN GRAVEL, OR APPROVED ENGINEERED GRANULAR MATERIAL, PLACED IN 8" MAXIMUM LIFTS, AND COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR MAXIMUM DRY DENSITY. GRAVEL BASE BENEATH ALL CONCRETE SLABS SHALL BE 8" OF CLEAN SAND OR 3/4" CURED STONE WITH FINES COMPACTED. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED AS BACK FILL.

EXCAVATION CONTRACTOR MAY HIRE SOIL TESTING FIRM AND ALLOW TESTING OF SUBGRADES AND EACH FILL LAYER, PROVIDE (1) TEST FOR EVERY 2,900 SQ. FEET OF SUBGRADE AREA AND ONE TEST FOR EVERY 100 LINEAR FEET OF WALL FOOTING. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS PREVIOUSLY COMPLETED WORK COMPLY WITH COMPACTION REQUIREMENTS.

PREPARATION OF FORMS:

PRIOR TO THE PLACEMENT OF CONCRETE, THE FORMS AND SUBGRADE SHALL BE FREE OF CHIPS, SANDUST, DEBRIS, WATER, ICE, SNOW, EXTRANEIOUS OIL, MORTAR, OR OTHER HARMFUL SUBSTANCES OR COATINGS. ANY OIL IN THE REINFORCING STEEL OR OTHER SURFACES REQUIRED TO BE BONDED TO THE CONCRETE SHALL BE REMOVED. ROCK SURFACES SHALL BE CLEANED BY AIR-WATER CUTTING, WET SANDBLASTING, OR WIRE BRUSH SCRUBBING AS NECESSARY.

THE SITE SHALL BE GRADED TO THE DIMENSIONS AND ELEVATIONS AS SPECIFIED IN THE CONSTRUCTION PLANS.

ALL SURFACES SHALL BE FIRM AND DAMP PRIOR TO PLACING CONCRETE. CONCRETE SHALL NOT BE PLACED IN THE MUD, DRIED EARTH, UNCOMPACTED FILL OR FROZEN SUBORADE OR IN STANDING WATER. THE USE OF PLASTIC SHEETING TO ISOLATE THE CONCRETE FROM UNSUITABLE FOUNDATIONS WILL NOT BE PERMITTED.

THE FORMS AND ASSOCIATED FALSE-WORK SHALL BE SUBSTANTIAL AND UNYIELDING AND SHALL BE CONSTRUCTED SO THAT THE FINISHED CONCRETE WILL CONFORM TO THE SPECIFIED DIMENSIONS AND CONTOURS. METAL CHAIRS, FORMS SHALL BE MORTAR TIGHT. FORMS WITH TORN SURFACES, WORN EDGES, DENTS OR OTHER DEFECTS WILL NOT BE USED. FORMS SHALL BE COATED WITH A FORM RELEASE AGENT BEFORE BEING SET INTO PLACE. EXCESS FORM COATING MATERIAL SHALL NOT COME IN CONTACT WITH THE STEEL REINFORCEMENT OR WITH HARDENED CONCRETE AGAINST WHICH FRESH CONCRETE IS TO BE PLACED.

REINFORCEMENT SHALL BE ACCURATELY PLACED AS SHOWN ON THE DRAWINGS AND SECURED IN POSITION IN A MANNER THAT WILL PREVENT ITS DISPLACEMENT DURING THE PLACEMENT OF CONCRETE. METAL CHAIRS, METAL HANGERS, METAL SPACERS, PLASTIC CHAIRS, OR CONCRETE CHAIRS SHALL BE USED TO SUPPORT THE REINFORCEMENT. PRECAST CONCRETE CHAIRS SHALL BE MANUFACTURED FROM CONCRETE EQUAL IN QUALITY TO THE CONCRETE BEING PLACED. PRECAST CONCRETE CHAIRS SHALL BE MOIST AT THE TIME CONCRETE IS PLACED.

REINFORCEMENT FOR FLATWORK SHALL BE BY A MINIMUM OF 1 SUPPORT EVERY THIRD BAR OR EVERY 4 FEET IN EACH DIRECTION, WHICHEVER SPACING IS SMALLER. SUPPORT CHAIRS SHALL HAVE A MINIMUM BASE AREA OF 4 SQUARE INCH IN CONTACT WITH THE SUB GRADE.

STEEL TYING AND FORM CONSTRUCTION ADJACENT TO NEW CONCRETE SHALL NOT BE STARTED UNTIL CONCRETE HAS CURED FOR AT LEAST 12 HOURS.

CONCRETE JOINTS SHALL BE OF THE TYPE SHOWN ON THE CONSTRUCTION DRAWINGS. LOCATIONS SHALL BE DETERMINED BY CONTRACTOR.

WATERSTOPS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS AND SECURED IN POSITION SO THAT DISPLACEMENT DOES NOT OCCUR DURING CONCRETE PLACEMENT. WATERSTOPS MAY BE SECURED TO REINFORCEMENT USING WIRE OR "HOG RING" TYPE FASTENERS.

BACKFILLING:

ONCE THE CONCRETE IS PROPERLY CURED, BACKFILL CAN BE PLACED. AVOID BACKFILL CONTAINING LARGE ROCKS, HARD OR FROZEN SOIL LUMPS, OR CONSTRUCTION DEBRIS. BACKFILL SHOULD BE PLACED NO HIGHER THAN 12" FROM THE TOP OF THE WALL.

ADJACENT TO STRUCTURES AND PIPES WITHIN 2 FEET OF STRUCTURES OR PIPES, EARTHILL SHALL BE PLACED IN 4-INCH LIFTS (PRIOR TO COMPACTION) IN A MANNER ADEQUATE TO PREVENT DAMAGE TO THE STRUCTURE AND TO ALLOW THE STRUCTURE OR PIPE TO GRADUALLY AND UNIFORMLY ASSUME THE BACKFILL LOADS. COMPACTION SHALL BE ACCOMPLISHED BY MEANS OF MANUALLY DIRECTED POWER TAMPERS OR PLATE VIBRATORS OR HAND TAMPING UNLESS OTHERWISE SPECIFIED. HEAVY EQUIPMENT SHALL NOT BE OPERATED WITHIN 5 FEET OF ANY STRUCTURE OR PIPE. COMPACTION BY MEANS OF DROP WEIGHTS OPERATING FROM A CRANE OR HOIST OF ANY TYPE WILL NOT BE PERMITTED.

LENSES OR POCKETS OF UNSUITABLE SOIL SHALL BE REMOVED AND REPLACED WITH SPECIFIED MATERIALS AS DIRECTED BY THE TESTING AND INSPECTION AGENCY. THE EXTENT OR REMOVAL AND THE QUALITY OF REPLACEMENT MATERIALS WILL BE DETERMINED BY THE TESTING AND INSPECTION AGENCY.

THE SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE STRUCTURE AT A MINIMUM OF 1% SLOPE.



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GENERAL NOTES

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CONCRETING IN HOT WEATHER:

A.) HOT WEATHER DEFINITION:

FOR THE PURPOSE OF THIS SPECIFICATION, HOT WEATHER IS DEFINED AS ANY COMBINATION OF HIGH TEMPERATURE, (GENERALLY ABOVE 80 DEGREES F), HIGH CONCRETE TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND VELOCITY TENDING TO IMPAIR THE QUALITY OF FRESH OR HARDENED CONCRETE OR OTHERWISE RESULTING IN ABNORMAL PROPERTIES.

SPECIAL PROVISIONS SHALL BE MADE TO IMMEDIATELY PROTECT AND CURE THE CONCRETE DUE TO RAPID DRYING CONDITIONS. CONCRETE SURFACES SHALL NOT BE ALLOWED TO DRY AFTER PLACEMENT AND DURING THE CURING PERIOD.

IN EXTREME CONDITIONS, IT MAY BE NECESSARY TO (1) RESTRICT PLACEMENT TO LATE AFTERNOON OR EVENING, (2) RESURFACE THE DEPTH OF LAYERS TO ASSURE COVERAGE OF THE PREVIOUS LAYER WHILE IT WILL STILL RESPOND READILY TO VIBRATION, (3) SUSPEND PLACEMENT UNTIL CONDITIONS IMPROVE.

B.) PREPARATIONS FOR PLACING AND CURING:

***PLANING HOT WEATHER PLACEMENTS**

UNDER HOT WEATHER CONDITIONS, SCHEDULING CONCRETE PLACEMENTS AT OTHER-THAN-NORMAL HOURS MAY BE ADVISABLE. PERTINENT CONSIDERATIONS INCLUDE EASE OF HANDLING AND PLACING, AND MINIMIZING THE RISK OF PLASTIC SHRINKAGE AND THERMAL CRACKING.

***EXPEDITING PLACEMENT**

PREPARATIONS SHOULD BE MADE TO TRANSPORT, PLACE, CONSOLIDATE, AND FINISH THE CONCRETE AT THE FASTEST POSSIBLE POSSIBLE RATE. CONCRETE DELIVERY TO THE JOB SHOULD BE SCHEDULED SO THAT IT IS PLACED PROMPTLY ON ARRIVAL, PARTICULARLY THE FIRST BATCH.

***PLACING EQUIPMENT**

EQUIPMENT FOR PLACING THE CONCRETE SHOULD BE OF SUITABLE DESIGN AND HAVE AMPLE CAPACITY TO PERFORM EFFICIENTLY.

***CONSOLIDATION EQUIPMENT**

THERE SHOULD BE AMPLE VIBRATION EQUIPMENT AND WORKERS TO CONSOLIDATE THE CONCRETE IMMEDIATELY AS IT IS RECEIVED IN THE FORM.

***PREPARATIONS FOR PROTECTING AND CURING THE CONCRETE**

AMPLE WATER SHOULD BE AVAILABLE AT THE PROJECT SITE FOR MOISTENING THE SUBGRADE, AS WELL AS FOR FOGGING FORMS AND REINFORCEMENT BEFORE CONCRETE PLACEMENT. FOR MOIST CURING, USE WATER WITH A TEMPERATURE NO MORE THAN 20°F (11°C) COOLER THAN THE CONCRETE TEMPERATURE TO AVOID THERMAL SHOCK.

C.) PLACEMENT AND FINISHING:

***GENERAL**

EXPEDITIOUS PLACEMENT AND FINISHING MATERIALLY REDUCES HOT WEATHER DIFFICULTIES, DELAYS INCREASE SLUMP LOSS AND INVITE THE ADDITION OF WATER OFFSETS TO OFFSET THOSE LOSSES. THE CONCRETE SHOULD NOT BE PLACED FASTER THAN IT CAN BE PROPERLY CONSOLIDATED AND FINISHED.

***PLACEMENT OF FLATWORK**

WHEN CONCRETE IS DEPOSITED FOR FLATWORK ON THE GROUND, THE SUBGRADE SHOULD BE MOIST, BUT FREE OF STANDING WATER.

D.) CURING AND PROTECTION:

***GENERAL**

IMMEDIATELY FOLLOWING COMPLETION OF FINISHING OPERATIONS, EFFORTS SHOULD BE MADE TO PROTECT THE CONCRETE FROM LOW HUMIDITY, DRYING WINDS, AND EXTREME AMBIENT TEMPERATURE DIFFERENTIAL. WHENEVER POSSIBLE, THE CONCRETE AND SURROUNDING FORMWORK SHOULD BE KEPT IN A UNIFORM MOISTURE AND TEMPERATURE CONDITION TO ALLOW THE CONCRETE TO DEVELOP ITS MAXIMUM POTENTIAL STRENGTH AND DURABILITY. PROCEDURES FOR KEEPING EXPOSED SURFACES FROM DRYING SHOULD BEGIN PROMPTLY AND CONTINUE WITHOUT INTERRUPTION. FAILURE TO DO SO CAN RESULT IN EXCESSIVE DRYING SHRINKAGE AND RELATED CRACKING. AN APPROVED CURING METHOD SHOULD BE CONTINUED FOR AT LEAST 7 DAYS. IN ADDITION, CONCRETE SURFACES SHOULD NOT BE ALLOWED TO BECOME SURFACE-DRY AT ANY POINT DURING THE TRANSITION. CONCRETE SHOULD ALSO BE PROTECTED AGAINST THERMAL SHRINKAGE CRACKING DUE TO RAPID TEMPERATURE DROPS, PARTICULARLY DURING THE FIRST 24 HOURS. THERMAL SHRINKAGE CRACKING IS ASSOCIATED WITH A COOLING RATE OF MORE THAN 3°F (3°C) PER HOUR, OR MORE THAN 80°F (28°C) IN A 24 HOUR PERIOD FOR CONCRETE WITH A LEAST DIMENSION LESS THAN 12 IN. HOT WEATHER PATTERNS INCREASE THE POTENTIAL FOR THERMAL CRACKING DUE TO VAST DAY AND NIGHT TEMPERATURE DIFFERENCES.

***MOIST CURING OF FLATWORK**

A COMMON PRACTICAL METHOD OF MOIST CURING IS TO COVER THE CONCRETE WITH IMPERVIOUS SHEETING OR FABRIC MATS KEPT CONTINUOUSLY WET WITH WATER WITH A SOAKER HOSE OR SIMILAR MEANS. THE TEMPERATURE OF WATER USED FOR INITIAL CURING SHOULD BE AS CLOSE AS POSSIBLE TO THAT OF THE CONCRETE TO AVOID THERMAL SHOCK.

***MEMBRANE CURING OF FLATWORK**

CONCRETE SURFACES EXPOSED TO DIRECT SUNLIGHT SHOULD USE HEAT-REFLECTING, WHITE-PIGMENTED COMPOUNDS WHERE APPLICABLE. FOR USE IN HOT WEATHER CONDITIONS, A MATERIAL SHOULD BE SELECTED THAT ENSURES EQUAL OR GREATER MOISTURE RETENTION THAN REQUIRED BY ASTM C309. APPLICATION OF AN APPROVED MOISTURE-RETENTIVE MATERIAL SHOULD IMMEDIATELY FOLLOW THE DISAPPEARANCE OF SURFACE WATER SHEEN AFTER THE FINAL FINISHING PASS. MOST CURRING COMPOUNDS SHOULD NOT BE USED ON ANY SURFACE AGAINST WHICH ADDITIONAL CONCRETE OR OTHER MATERIALS ARE TO BE BUNDED.

CONCRETING IN COLD WEATHER:

A.) COLD WEATHER DEFINITION:

WHEN AIR TEMPERATURE HAS FALLEN TO, OR IS EXPECTED TO FALL BELOW, 40°F (4°C) DURING THE PROTECTION PERIOD, PROTECTION PERIOD IS DEFINED AS THE TIME REQUIRED TO PREVENT CONCRETE FROM BEING AFFECTED BY EXPOSURE TO COLD WEATHER.

WHEN THE MINIMUM DAILY ATMOSPHERIC TEMPERATURE IS LESS THAN 40 DEGREES F, CONCRETE SHALL BE INSULATED OR HOUSED AND HEATED IMMEDIATELY AFTER PLACEMENT. THE TEMPERATURE OF THE CONCRETE AND AIR ADJACENT TO THE CONCRETE SHALL BE MAINTAINED AT NO LESS THAN 50 DEGREES F NOR MORE THAN 90 DEGREES F FOR THE DURATION OF THE CURING PERIOD.

THE CURING PERIOD MAY BE REDUCED TO 3 DAYS WHEN TYPE III CEMENT IS USED. AN ADDITIONAL 100 POUNDS OF TYPE I CEMENT AND A MAXIMUM OF 6 GALLONS OF ADDED WATER PER CUBIC YARD MAY BE USED IN LIEU OF TYPE III CEMENT.

COMBUSTION HEATERS SHALL HAVE EXHAUST FLUE GASES VENTED OUT OF THE CONCRETE PROTECTION ENCLOSURE AND SHALL NOT BE PERMITTED TO DRY THE CONCRETE.

B.) OBJECTIVES, PRINCIPLES, AND PLANNING:

***OBJECTIVES**

PREVENT DAMAGE TO CONCRETE DUE TO EARLY AGE FREEZING. AT 50°F (10°C), MOST WELL-PROPORTIONED CONCRETE MIXTURES REACH A COMPRESSIVE STRENGTH OF 500 psi WITHIN 48 HOURS.

ENSURE THAT THE CONCRETE DEVELOPS THE REQUIRED STRENGTH FOR SAFE REMOVAL OF FORMS, SHORES AND RESHORES, AND FOR SAFE LOADING OF THE STRUCTURE DURING AND AFTER CONSTRUCTION.

***PRINCIPLES**

CONCRETE PROTECTED FROM FREEZING UNTIL IT ATTAINS A COMPRESSIVE STRENGTH OF 500 psi WILL NOT BE DAMAGED BY EXPOSURE TO A SINGLE FREEZING CYCLE (POWERS 1982).

***PLANNING**

PLANS TO PROTECT FRESH CONCRETE FROM FREEZING AND TO MAINTAIN TEMPERATURES ABOVE THE RECOMMENDED MINIMUM VALUES SHOULD BE MADE WELL BEFORE FREEZING ARE EXPECTED TO OCCURE. EQUIPMENT AND MATERIALS SHOULD BE AT THE WORK SITE BEFORE COLD WEATHER IS LIKELY TO OCCUR, NOT AFTER CONCRETE IS PLACED AND ITS TEMPERATURE APPROACHES THE FREEZING POINT.

***SUBGRADE CONDITION**

CONCRETE SHOULD NOT BE PLACED ON FROZEN SUBGRADE. REMOVE ALL FROST BEFORE PLACING THE CONCRETE AND RECOMPACT THAWED SOIL DISTURBED BY FROST. PLACEMENT OF INSULATION OVER THE SUBGRADE, OR PROVISION OF HEAT, IS REQUIRED TO REMOVE ANY FROST IN THE SOIL AND RAISE THE SUBGRADE TEMPERATURE ABOVE 32°F. WHEN THE CONCRETE TEMPERATURE IS MORE THAN 10°F COOLER OR 5°F WARMER THAN THE SUBGRADE, DIFFERENTIAL RATES OF SETTING BETWEEN THE TOP AND BOTTOM OF THE SLAB MAY RESULT IN VARIOUS SURFACE DEFECTS INCLUDING PLASTIC SHRINKAGE CRACKING, BLISTERING, AND DELAMINATIONS.

C.) TEMPERATURE DROP AFTER REMOVAL OF PROTECTION

AT THE END OF THE PROTECTION PERIOD, CONCRETE SHOULD BE COOLED GRADUALLY TO REDUCE CRACK-INDUCING DIFFERENTIAL STRAINS BETWEEN THE INTERIOR AND EXTERIOR OF THE STRUCTURE. THE TEMPERATURE DROP OF CONCRETE SURFACES SHOULD NOT EXCEED THE RATES INDICATED IN TABLE 1.

D.) EQUIPMENT, MATERIALS, AND METHODS OF TEMPERATURE PROTECTION

***INTRODUCTION**

THE TEMPERATURE OF CONCRETE PLACED DURING COLD WEATHER SHOULD BE MAINTAINED AS CLOSE AS POSSIBLE TO THE RECOMMENDED TEMPERATURES IN LINE 1 OF TABLE 1 AND FOR THE LENGTHS OF TIME RECOMMENDED IN TABLE 2 UNTIL THE IN-PLACE STRENGTH HAS REACHED A PREVIOUSLY ESTABLISHED TARGET VALUE.

***INSULATING MATERIALS**

HEAT OF HYDRATION IS RETAINED BY USING INSULATING BLANKETS ON UNFORMED SURFACES AND BY USING INSULATING FORMS. TO BE EFFECTIVE, KEEP INSULATION IN CLOSE CONTACT WITH THE CONCRETE OR THE FORM SURFACE.

TABLE 1 RECOMMENDED CONCRETE TEMPERATURES

LINE	AIR TEMPERATURE	SECTION SIZE MINIMUM >72 in.(1800 mm)
1	-	40°F(5°C)
2	ABOVE 30°F(-1°C)	45°F(7°C)
3	0°-30°F(-18°to-1°C)	50°F(10°C)
4	BELOW 0°F(-18°C)	55°F(13°C)
5	-	20°F(11°C)

TABLE 2 LENGTH OF PROTECTION PERIOD FOR CONCRETE PLACED DURING COLD WEATHER

LINE	SERVICE CONDITION	PROTECTION PERIOD AT MINIMUM TEMPERATURE INDICATED IN LINE 1 OF TABLE S.1, DAYS* (NORMAL SET CONCRETE)
1	NO LOAD, NOT EXPOSED	2
2	NO LOAD, EXPOSED	3
3	PARTIAL LOAD, EXPOSED	6
4	FULL LOAD	-

*A DAY IS A 24 HOUR PERIOD.



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CONSTRUCTION NOTES

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STATE OF ILLINOIS

COUNTY OF SANGAMON

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PROOF OF SERVICE

I, the undersigned attorney at law, hereby certify that on July 25, 2014, I served true and correct copies of an **APPEARANCE AND THE RECOMMENDATION**, upon the persons and by the methods as follows:

[1st Class U.S. Mail]

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Illinois Department of Revenue
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[1st Class U.S. Mail]

Patrick Walk
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[Electronic Filing]

Clerk
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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