

building code analysis

Date: 01 JUNE 2010

PROJECT: GARFIELD STORAGE GARAGE
PROJECT #: OT-1034PW&U
LOCATION: 520 Garfield Avenue – DULUTH, MN
PREPARED BY: Terry L. Groshong, AIA, NCARB, CID City Architects Office

2000 International Building Code

OCCUPANCY AND CONSTRUCTION TYPE CLASSIFICATION (Chapter 3 & Chapter 6)

Description	Occupancy Class	Construction Type	Actual SF	Floor Level
Cold Storage Garage	S-2	Type V - B	1,500 GSF	1 Story

OCCUPANCY SEPARATIONS REQUIRED (Table 302.3.3) NA = Not Applicable

Occupancy Class	Occupancy Class	Separation Req'd (hours)
ADDITION	EXISTING	
NA	NA	2 Hours
X	X	NA

FIRE EXTINGUISHING SYSTEMS (Chapter 903.2.1.3)

a)	Is the building (or part of building) Sprinkled	No
b)	Is building being sprinkled for 1 Hr Construction Substitution	No
c)	Is building required to be Sprinkled	No
	Note:	

BASIC ALLOWABLE FLOOR AREA (Table 503)

Occupancy Class	Construction Type	Basic Allowable SF
S-2	Type V-B	13,500 SF

AREA INCREASES (Chapter 5)

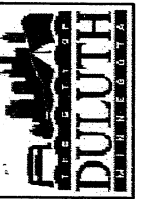
a)	Area Separation Walls (Section 302.3.3)	NA
b)	Multi Story (Table 503)	Yes – 2 Allowed
c)	Separation on four sides	Yes

FRONTAGE INCREASE (Section 506.2)

Occupancy	Const. Type	Allowable SF	% Increase	Adjusted SF
S – 2	V – B	13,500 SF	75%	23,625

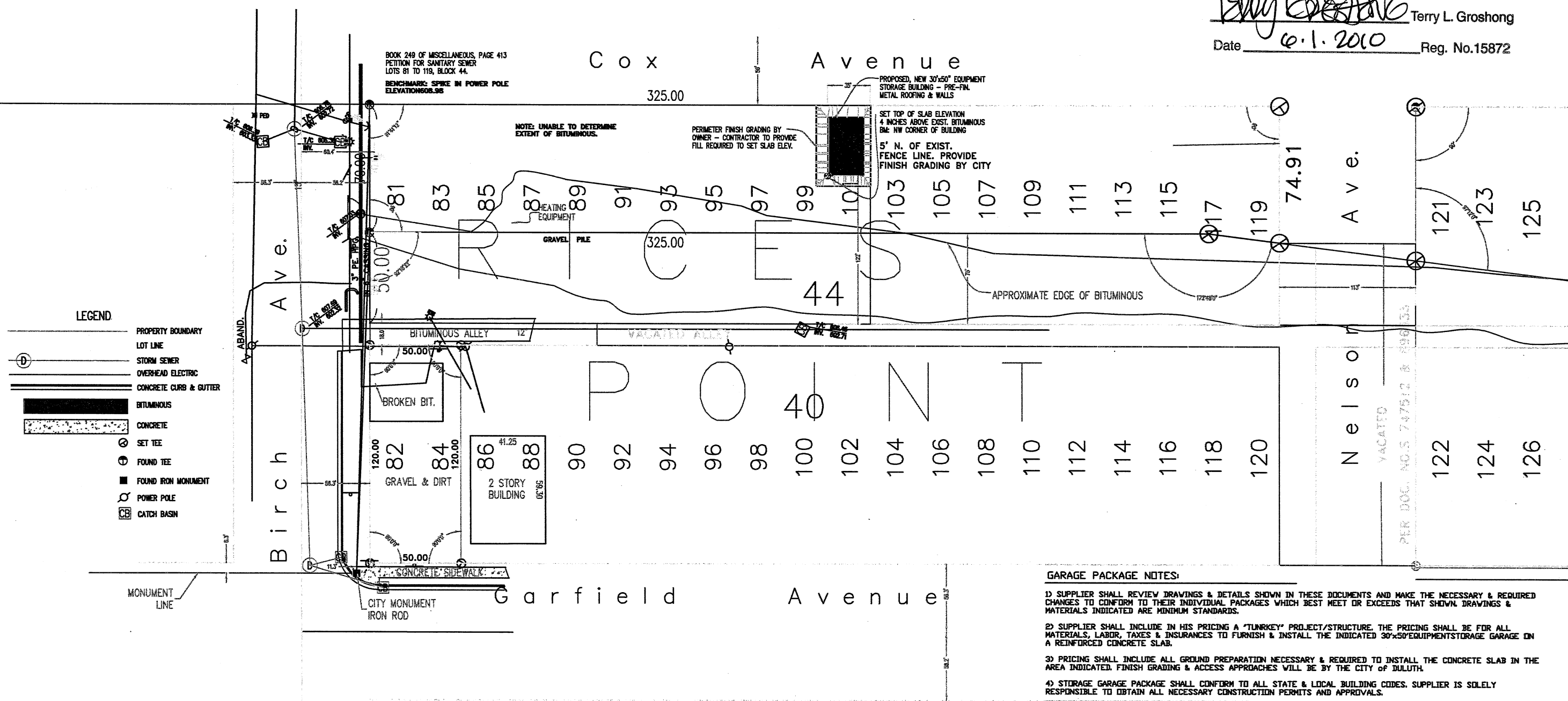
ACTUAL / TOTAL ALLOWABLE FLOOR AREA RATIO

Occupancy	Const. Type	Allowable SF	Actual SF	Ratio
S – 2	V – B	23,625 SF	1,500 SF	.063



I hereby certify that this plan, Specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of Minnesota.

Terry L. Groshong Terry L. Groshong
Date 6.1.2010 Reg. No.15872



- GARAGE PACKAGE NOTES:**
- 1) SUPPLIER SHALL REVIEW DRAWINGS & DETAILS SHOWN IN THESE DOCUMENTS AND MAKE THE NECESSARY & REQUIRED CHANGES TO CONFORM TO THEIR INDIVIDUAL PACKAGES WHICH BEST MEET OR EXCEEDS THAT SHOWN. DRAWINGS & MATERIALS INDICATED ARE MINIMUM STANDARDS.
 - 2) SUPPLIER SHALL INCLUDE IN HIS PRICING A "TURNKEY" PROJECT/STRUCTURE. THE PRICING SHALL BE FOR ALL MATERIALS, LABOR, TAXES & INSURANCES TO FURNISH & INSTALL THE INDICATED 30'x50'EQUIPMENT STORAGE GARAGE ON A REINFORCED CONCRETE SLAB.
 - 3) PRICING SHALL INCLUDE ALL GROUND PREPARATION NECESSARY & REQUIRED TO INSTALL THE CONCRETE SLAB IN THE AREA INDICATED. FINISH GRADING & ACCESS APPROACHES WILL BE BY THE CITY OF DULUTH.
 - 4) STORAGE GARAGE PACKAGE SHALL CONFORM TO ALL STATE & LOCAL BUILDING CODES. SUPPLIER IS SOLELY RESPONSIBLE TO OBTAIN ALL NECESSARY CONSTRUCTION PERMITS AND APPROVALS.
 - 5) GARAGE PACKET SHALL HAVE MATERIALS & CONSTRUCTION DETAILING SIMILAR AS INDICATED ON THE FOLLOWING PAGES. THESE DRAWINGS ARE PROVIDED TO THE SUPPLIER AS REFERENCE MATERIAL TO INDICATE MINIMUM REQUIREMENTS. SUCCESSFUL BUILDER SHALL PROVIDE ANY & ALL NECESSARY DOCUMENTATION TO SECURE A BUILDING PERMIT AND MEET/EXCEED ALL APPLICABLE CODES LISTED IN SECTION 4.

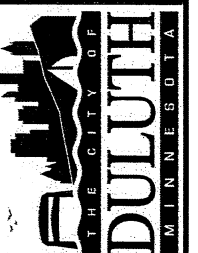
SITE PLAN: GARFIELD PW&U SITE - NEW 30'x50' COLD STORAGE GARAGE
520 GARFIELD AVENUE
SCALE: 1"=20'

Dept. of Administration
Office of City Architect
1532 W. MICHIGAN STREET

EQUIPMENT STORAGE BUILDING
Public Works & Utilities
520 GARFIELD AVENUE
Duluth, Minnesota

Revised
job number:
QT-1034 PWU
date: 5/28/2010
drawn by: TG
checked by: TLG
sheet number:

1 of 3 sheets



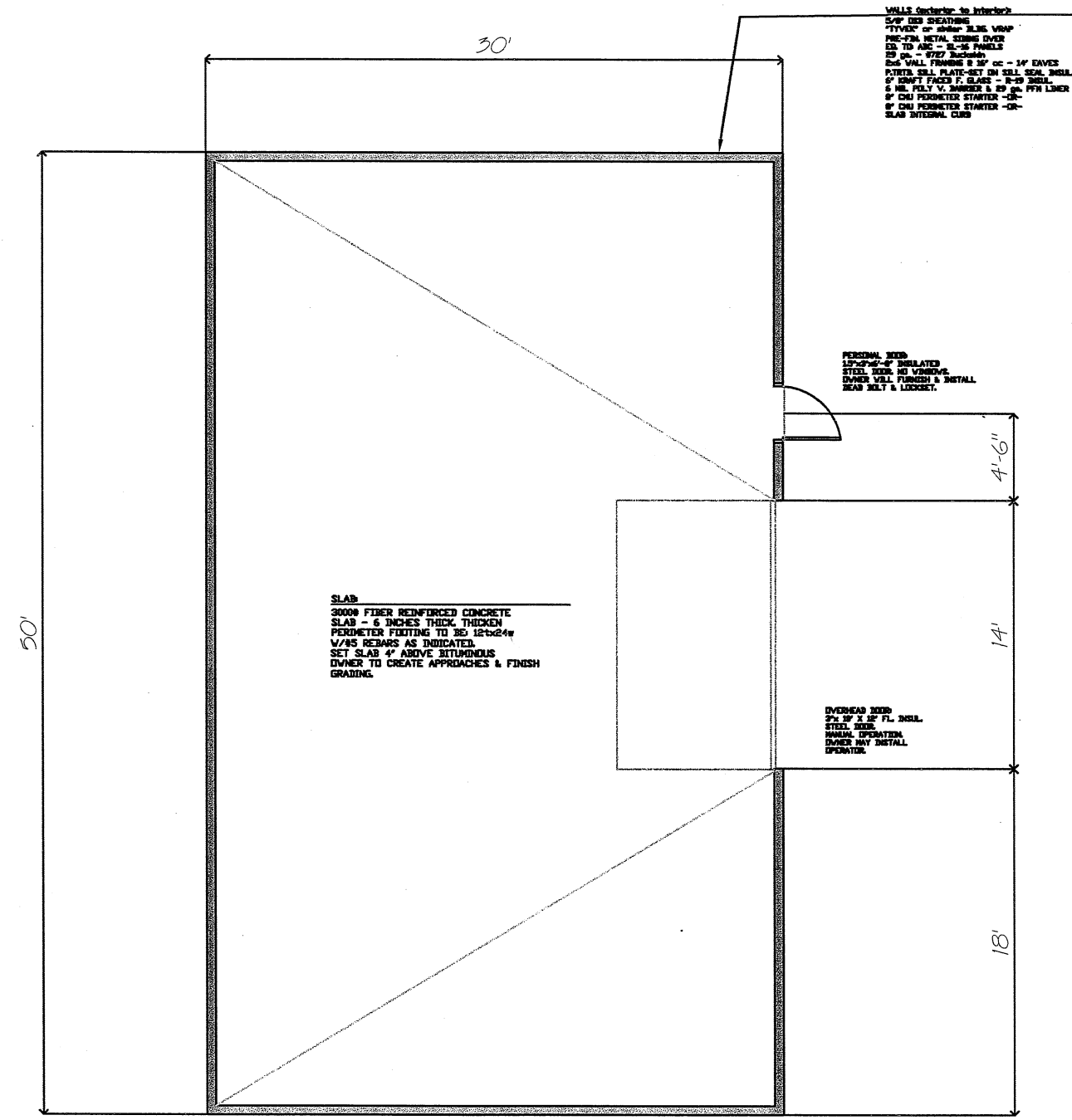
MAINTENANCE OPERATIONS
Office of City Architect
1532 W. Michigan Street

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Terry L. Groshong
Registration No: 15872
Date:

City of Duluth
COLD STORAGE BUILDING
PV & U GARFIELD AVENUE
520 GARFIELD AVENUE

Revised
Job number: 204 PVU
Date: 5/17/2010
Drawn by: TLG
Checked by: TLG
Drawing Number:
2
of 2 sheets



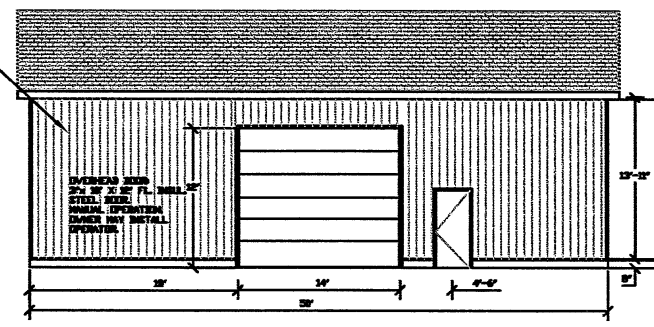
FLOOR PLAN

SCALE 1/4\"/>

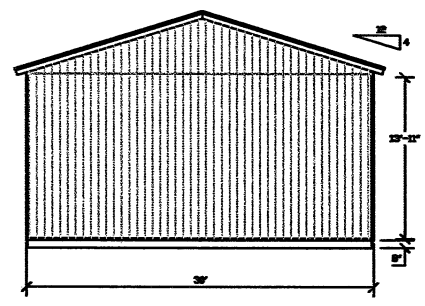
WALLS (exterior to interior):
5/8\"/>

PERSONAL WOOD
12\"/>

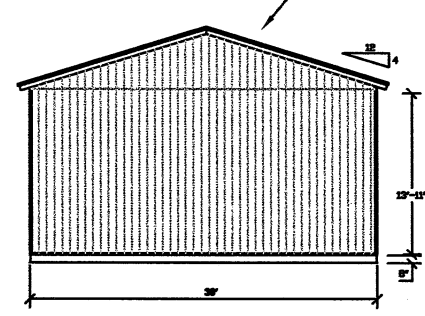
OVERHEAD WOOD
2\"/>



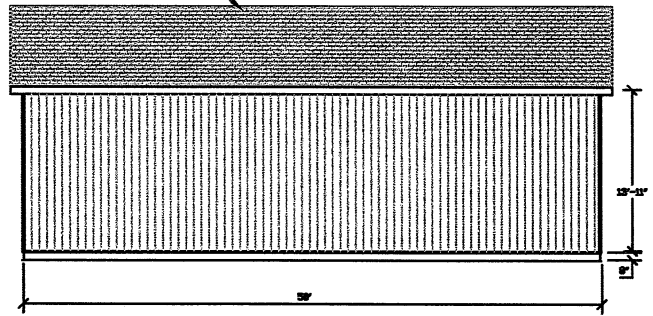
ELEVATION 1
SCALE 1/8\"/>



ELEVATION 2
SCALE 1/8\"/>



ELEVATION 3
SCALE 1/8\"/>



ELEVATION 4
SCALE 1/8\"/>

ROOF:
200# FIBER GLASS SHINGLES
15# ASPHALT FELT
1/2\"/>

ROOF:
200# FIBER GLASS SHINGLES
15# ASPHALT FELT
1/2\"/>

WALLS (exterior to interior):
5/8\"/>

SLAB:
3000# FIBER REINFORCED CONCRETE
SLAB - 6 INCHES THICK THICKEN
PERIMETER FOOTING TO 30 12x24w
V/RS REBARS AS INDICATED.
SET SLAB 4\"/>

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Terry Groshong
Terry L. Groshong
Date: 5.1.2010 Reg. No. 15872




LUND TOOLHOUSE
22407 COMMONWEALTH AV.,
Duluth, Minnesota

Job number: **DT-0801**
 Date: **2/13/2010**
 Drawn by: **TG**
 Checked by: **TLG**
 Sheet number:

3 of 3 sheets

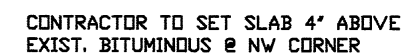


O.H. DOOR HEADER



CONT. RIDGE VENT

SCALE: 3/4" = 12'



TYP. PERIMETER @ SILL

SCALE: 3/4" = 12'



SCALE: 3/4" = 12'

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FINISH GRADE & APPROACH GRADING
BY CITY STAFF.