It is expected that a Quorum of the Board of Public Works, Park Board, Administration Committee, and/or Common Council may attend this meeting: (although it is not expected that any official action of any of those bodies will be taken)

CITY OF MENASHA
PLAN COMMISSION
First Floor Conference Room
140 Main Street, Menasha

February 17, 2009

3:30 PM

AGENDA

A. CALL TO ORDER

B. ROLL CALL/EXCUSED ABSENCES

C. MINUTES TO APPROVE
   1. Minutes of the February 3, 2009 Plan Commission Meeting

D. PUBLIC COMMENT ON ANY ITEM OF CONCERN ON THIS AGENDA
   Five (5) minute time limit for each person

E. DISCUSSION
   1. None

F. ACTION ITEMS
   1. Preliminary Plat – Second Addition to Woodland Hills

G. ADJOURNMENT

Menasha is committed to its diverse population. Our Non-English speaking population or those with disabilities are invited to contact the Community Development Department at 967-3650 at least 24-hours in advance of the meeting so special accommodations can be made.

CITY OF MENASHA
Plan Commission
Third Floor Council Chambers
140 Main Street, Menasha

February 3, 2009

3:30 PM

MINUTES

A. CALL TO ORDER

The meeting was called to order at 3:32 p.m. by Mayor Donald Merkes.

B. ROLL CALL/EXCUSED ABSENCES

PLAN COMMISSION MEMBERS PRESENT: Mayor Merkes, Ald. Benner , DPW Radtke and Commissioners Sanders, Cruickshank, and Schmidt.

PLAN COMMISSION MEMBERS EXCUSED: Dick Sturm

OTHERS PRESENT: CDD Keil, AP Beckendorf, and Lonnie Pichler.

C. MINUTES TO APPROVE

1. Minutes of the January 20, 2009 Plan Commission Meeting.
    a. Moved by Comm. Sanders, seconded by Ald. Benner to approve the January 20, 2009 Plan Commission meeting minutes. The motion carried.

D. PUBLIC COMMENT ON ANY ITEM OF CONCERN ON THIS AGENDA

No one spoke.

E. DISCUSSION

F. ACTION ITEMS

1. Utility Cabinet Ordinance.
    a. CDD Keil described the changes made since the last Plan Commission meeting.
    b. Commissioners discussed the following:
        I. Minimum and maximum cabinet size.
        II. Under which circumstances the permits can be denied.
        III. The possibility of requiring clear distances from curbs.
        IV. The addition of a notification requirement.
        V. Landscaping and difficulties of enforcement.
        VI. Landscape maintenance.
        VII. Length of time for permit approval.

c. Moved by DPW Radtke, seconded by Comm. Sanders to recommend approval of the proposed ordinance with the addition of a notification requirement.
d. Commissioners discussed requiring landscaping for cabinets located in the right-of-way.
e. Moved by Mayor Merkes, seconded by DPW Radtke to amend the motion to recommend approval of the proposed ordinance with the addition of a notification requirement and screening requirement when the cabinet is located within the right-of-way. The motion carried on a roll call vote of 6-0.

2. Sign Code Amendment.
    a. AP Beckendorf explained the process the Landmarks Commission had participated in when developing the proposed changes to the sign code.
    b. Commissioners discussed the following:
        I. Requiring revocable occupancy permits for hanging, projecting, canopy signs, and awnings.
    c. CDD Keil described the proposed changes to the electronic message center ordinance.
    d. Commissioners discussed the following:
        I. The use of static images.
        II. LED colors, single-color versus multi-color displays.
        III. Video displays.
        IV. Requiring the same color be used for both static and changeable displays when located on the same sign.
    e. CDD Keil explained that existing code does not allow for any off-premise signage. Presently, businesses located at Lake Park Square do not have a sign at the entrance because such a sign would not be in conformance with city ordinances.
    f. No action was taken on this item to allow staff time to make modifications.

3. Acquisition of 428 Sixth Street.
    a. CDD Keil described the location and explained the Neighborhood Stabilization Act which provides funds that can be used for acquisition and demolition of blighted properties.
    b. This item was held over to allow time for an analysis of the site condition.

G. **ADJOURNMENT**

Moved by Comm. Schmidt, seconded by Comm. Sanders to adjourn at 5:38 p.m. The motion carried.

Minutes respectfully submitted by Jessica Beckendorf, Associate Planner

PRELIMINARY PLAT

SECOND ADDITION TO WOODLAND HILLS

ALL OF LOT 17 OF WOODLAND HILLS, ALL OF LOTS 72-74 OF FIRST ADDITION TO WOODLAND HILLS, PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 8, AND PARTS OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 17, TOWNSHIP 20 NORTH, RANGE 18 EAST, CITY OF MENASHA, CALUMET COUNTY, WISCONSIN

UTILITY EASEMENTS - NO POLES OR BURIED CABLES ARE TO BE PLACED SUCH THAT THE INSTALLATION WOULD DISTURB ANY SURVEY STAKE OR OBSTRUCT VISION ALONG ANY LOT LINE OR STREET LINE. THE DISTURBANCE OF A SURVEY STAKE BY ANYONE IS A VIOLATION OF SECTION 236.32 OF WISCONSIN STATUTES. UTILITY EASEMENTS AS HEREIN SET FORTH ARE FOR THE USE OF PUBLIC BODIES AND PRIVATE PUBLIC UTILITIES HAVING THE RIGHT TO SERVE THE AREA.

NOTES

THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

THE LOCATION OF THE WETLANDS AS SHOWN ON THIS MAP WERE DELINEATED BY NORTHERN ENGINEERING OCTOBER, 2008 AND SUPPLIED DIGITALLY. MARTENSON AND EISELE, INC. IS NOT RESPONSIBLE FOR THE WETLANDS BOUNDARY ACCURACY IN ANY WAY.

BENCHMARKS

BM#1
TAG BOLT ON HYDRANT ON KERNAN AVENUE 500' NORTH OF GOSLING WAY AT LOTS 25 AND 26 OF WOODLAND HILLS
ELEVATION = 760.29'

BM#2
TAG BOLT ON HYDRANT ON KERNAN AVENUE 200' SOUTH OF GOSLING WAY AT LOTS 14 AND 15 OF WOODLAND HILLS
ELEVATION = 758.99'

NOTES

A. CONTOURS ARE 1 FOOT INTERVALS AND BASED ON THE USGS DATUM.
B. UTILITY EASEMENTS, LOCATIONS AND WIDTHS WILL BE SHOWN ON THE FINAL PLAT.
C. PLAT ZONING IS RESIDENTIAL.

APPROVING AND OBJECTING AUTHORITIES

DEPARTMENT OF ADMINISTRATION
CITY OF MENASHA
CALUMET COUNTY
DEPARTMENT OF TRANSPORTATION

SUPPLEMENTARY DATA

TOTAL AREA	2,542,185 SQ. FT. (58.360 ACRES)
RIGHT OF WAY AREA	339,963 SQ. FT. (7.804 ACRES)
NET SUBDIVISION AREA	2,202,222 SQ. FT. (50.556 ACRES)
NUMBER OF LOTS	80
NUMBER OF OUTLOTS	1
AVERAGE LOT SIZE	12,150 SQ. FT.
TYPICAL LOT SIZE	90' x 135'
LINEAL FEET OF ROAD	5513

CURVE TABLE

CURVE	RADIUS	LENGTH
1	11564.16'	50.07'
2	1330.00'	3.19'
3	2030.00'	518.49'
4	432.50'	139.37'
5	432.50'	28.40'
6	432.50'	110.97'
7	567.50'	144.79'
8	567.50'	36.24'
9	567.50'	108.55'
10	632.50'	161.38'
11	632.50'	114.66'
12	632.50'	46.72'
13	367.50'	118.43'
14	60.00'	87.93'
15	250.00'	86.78'
16	250.00'	68.01'
17	250.00'	18.76'
18	1032.50'	372.08'
19	1032.50'	104.74'
20	1032.50'	120.43'
21	1032.50'	119.72'
22	1032.50'	27.19'
23	365.00'	93.24'
24	430.00'	103.69'
25	967.50'	212.98'
26	967.50'	64.98'
27	967.50'	148.00'
28	967.50'	74.58'
29	330.00'	98.65'
30	330.00'	78.58'
31	330.00'	39.00'
32	130.00'	70.73'
33	235.00'	148.52'
34	165.00'	104.28'
35	300.00'	147.22'
36	240.00'	172.62'
37	170.00'	69.99'
40	1030.00'	398.48'
41	1030.00'	16.81'
42	1030.00'	95.00'

CURVE TABLE

CURVE	RADIUS	LENGTH
43	1030.00'	94.94'
44	1030.00'	94.94'
45	1030.00'	96.80'
46	60.00'	252.40'
47	60.00'	132.40'
48	60.00'	120.01'
49	50.00'	57.48'
50	970.00'	293.27'
51	970.00'	20.57'
52	970.00'	96.17'
53	970.00'	96.17'
54	970.00'	80.36'
55	230.00'	94.69'
56	230.00'	12.74'
57	230.00'	81.95'
58	370.00'	126.64'
59	370.00'	102.32'
60	370.00'	24.32'
61	430.00'	147.17'
62	430.00'	95.92'
63	430.00'	51.25'
64	20.00'	34.00'
65	80.00'	136.01'
66	80.00'	9.94'
67	80.00'	62.53'
68	80.00'	63.55'
69	130.00'	29.32'
70	70.00'	15.79'
71	60.00'	282.74'
72	60.00'	47.80'
73	60.00'	34.86'
74	60.00'	62.64'
75	60.00'	52.02'
76	60.00'	85.43'
77	2030.00'	56.61'
78	2030.00'	97.94'
79	2030.00'	154.55'
80	2030.00'	70.00'
81	2030.00'	139.38'

BEARINGS ARE REFERENCED TO THE NORTH LINE OF THE NORTHWEST 1/4, SECTION 17, ASSUMED TO BEAR S 88°34'40" W

SCALE 1" = 100'
0 100 200

OWNER
WOODLAND DEVELOPMENTS, LLC
C/O MIKE HAGENS
N319 BREEZEWOOD DRIVE
APPLETON, WI 54914

LOCATION MAP
MANITOWOC ROAD
KERNAN AVENUE
8 SW
SITE
GOSLING WAY
NAVIGABLE WATERWAY
1425'± TO PUBLIC ACCESS
U.S.H. "10" S.T.H. "114"
17
NO SCALE

THE SOUTHWEST 1/4 OF SECTION 8 AND THE NORTHWEST 1/4 OF SECTION 17, TOWNSHIP 20 NORTH, RANGE 18 EAST, CITY OF MENASHA, CALUMET COUNTY, WISCONSIN

LEGAL DESCRIPTION

ALL OF LOT 17 OF WOODLAND HILLS, ALL OF LOTS 72-74 OF FIRST ADDITION TO WOODLAND HILLS, PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 8, AND PARTS OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 17, TOWNSHIP 20 NORTH, RANGE 18 EAST, CITY OF MENASHA, CALUMET COUNTY, WISCONSIN DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 17; THENCE SOUTH 88 DEGREES 34 MINUTES 40 SECONDS WEST, ALONG THE NORTH LINE OF SAID NORTHEAST 1/4 OF THE NORTHWEST 1/4, A DISTANCE OF 330.03 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 00 DEGREES 41 MINUTES 43 SECONDS EAST, 1291.27 FEET; THENCE SOUTH 87 DEGREES 51 MINUTES 12 SECONDS WEST, 977.57 FEET; THENCE SOUTH 04 DEGREES 09 MINUTES 15 SECONDS WEST, 252.99 FEET; THENCE ALONG THE NORTH RIGHT OF WAY LINE OF U.S.H. "10" / S.T.H. "114", 50.07 FEET ALONG AN ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 11564.16 FEET WITH A CHORD WHICH BEARS NORTH 77 DEGREES 15 MINUTES 58.5 SECONDS WEST, 50.07 FEET; THENCE NORTH 04 DEGREES 09 MINUTES 15 SECONDS EAST, 248.28 FEET; THENCE SOUTH 87 DEGREES 28 MINUTES 51 SECONDS WEST, 366.37 FEET; THENCE SOUTH 89 DEGREES 03 MINUTES 45 SECONDS WEST, 300.01 FEET; THENCE NORTH 01 DEGREE 00 MINUTES 10 SECONDS WEST, 78.11 FEET; THENCE SOUTH 89 DEGREES 03 MINUTES 45 SECONDS WEST, 302.20 FEET; THENCE NORTH 01 DEGREE 00 MINUTES 10 SECONDS WEST, 85.31 FEET; THENCE NORTH 88 DEGREES 59 MINUTES 50 SECONDS EAST, ALONG THE SOUTH LINE OF LOT 3 OF CERTIFIED SURVEY MAP #2676, A DISTANCE OF 17.00 FEET; THENCE NORTH 01 DEGREE 00 MINUTES 10 SECONDS WEST, ALONG THE EAST LINE OF SAID LOT 3, A DISTANCE OF 152.64 FEET; THENCE NORTH 88 DEGREES 59 MINUTES 50 SECONDS EAST, ALONG THE NORTH LINE OF SAID LOT 17 OF WOODLAND HILLS, 111.51 FEET TO A MEANDER CORNER WHICH IS SOUTH 88 DEGREES 59 MINUTES 50 SECONDS EAST, 21 FEET MORE OR LESS FROM THE WATERS' EDGE OF A NON-NAVIGABLE POND; THENCE SOUTH 05 DEGREES 49 MINUTES 18 SECONDS EAST, ALONG A MEANDER LINE, 23.16 FEET TO A MEANDER CORNER WHICH IS SOUTH 39 DEGREES 39 MINUTES 12 SECONDS WEST, 29 FEET MORE OR LESS FROM SAID WATERS' EDGE; THENCE SOUTH 79 DEGREES 01 MINUTE 03 SECONDS EAST, ALONG A MEANDER LINE 155.54 FEET TO A MEANDER CORNER WHICH IS SOUTH 11 DEGREES 42 MINUTES 42 SECONDS WEST, 21 FEET MORE OR LESS FROM SAID WATERS' EDGE; THENCE SOUTH 85 DEGREES 24 MINUTES 57 SECONDS EAST, ALONG A MEANDER LINE 480.29 FEET TO A MEANDER CORNER WHICH IS SOUTH 56 DEGREES 40 MINUTES 27 SECONDS EAST, 21 FEET MORE OR LESS FROM SAID WATERS' EDGE; THENCE NORTH 02 DEGREES 43 MINUTES 58 SECONDS WEST, ALONG A MEANDER LINE 410.65 FEET TO A MEANDER CORNER WHICH IS SOUTH 67 DEGREES 59 MINUTES 44 SECONDS EAST, 20 FEET OR MORE FROM SAID WATERS' EDGE; THENCE SOUTH 67 DEGREES 59 MINUTES 44 SECONDS EAST, ALONG THE SOUTH LINE OF LOT 1 OF CERTIFIED SURVEY MAP #2823, A DISTANCE OF 54.79 FEET; THENCE NORTH 63 DEGREES 37 MINUTES 11 SECONDS EAST, ALONG SAID SOUTH LINE, 68.15 FEET; THENCE NORTH 08 DEGREES 56 MINUTES 46 SECONDS EAST, ALONG THE EAST LINE SAID LOT 1, A DISTANCE OF 234.78 FEET; THENCE NORTH 12 DEGREES 24 MINUTES 33 SECONDS EAST, ALONG SAID EAST LINE, 58.66 FEET; THENCE NORTH 71 DEGREES 32 MINUTES 25 SECONDS WEST, ALONG THE NORTH LINE SAID LOT 1, A DISTANCE OF 179.69 FEET; THENCE ALONG SAID NORTH LINE, 3.19 FEET ALONG AN ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 130.00 FEET WITH A CHORD WHICH BEARS SOUTH 48 DEGREES 58 MINUTES 57.5 SECONDS WEST, 3.19 FEET; THENCE NORTH 72 DEGREES 53 MINUTES 36 SECONDS WEST, ALONG THE NORTH RIGHT OF WAY LINE OF GOSLING WAY, 151.82 FEET; THENCE, ALONG SAID NORTH RIGHT OF WAY LINE 518.49 FEET ALONG AN ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 2030.00 FEET A CHORD WHICH BEARS NORTH 80 DEGREES 12 MINUTES 37.5 SECONDS WEST, 517.08 FEET; THENCE NORTH 01 DEGREE 00 MINUTES 10 SECONDS WEST, ALONG THE WEST LINE OF SAID LOT 72 OF FIRST ADDITION TO WOODLAND HILLS, A DISTANCE OF 143.72 FEET; THENCE NORTH 88 DEGREES 59 MINUTES 50 SECONDS EAST, ALONG THE NORTH LINE OF SAID LOT 72, A DISTANCE OF 27.00 FEET; THENCE NORTH 01 DEGREE 00 MINUTES 10 SECONDS WEST, ALONG THE EAST LINE OF SAID WOODLAND HILLS, 163.42 FEET; THENCE NORTH 60 DEGREES 05 MINUTES 49 SECONDS WEST, ALONG SAID EAST LINE, 104.00 FEET TO A MEANDER CORNER WHICH IS SOUTH 60 DEGREES 05 MINUTES 49 SECONDS EAST, 23 FEET MORE OR LESS FROM THE CENTERLINE OF A NAVIGABLE STREAM; THENCE NORTH 29 DEGREES 50 MINUTES 37 SECONDS EAST, ALONG A MEANDER LINE 473.97 FEET TO A MEANDER CORNER WHICH IS SOUTH 76 DEGREES 41 MINUTES 53 SECONDS EAST, 36 FEET MORE OR LESS FROM SAID CENTERLINE OF A NAVIGABLE STREAM; THENCE SOUTH 76 DEGREES 41 MINUTES 53 SECONDS EAST, 155.16 FEET; THENCE SOUTH 65 DEGREES 40 MINUTES 58 SECONDS EAST, 66.73 FEET; THENCE SOUTH 80 DEGREES 12 MINUTES 37 SECONDS EAST, 179.05 FEET; THENCE SOUTH 10 DEGREES 37 MINUTES 57 SECONDS WEST, 106.82 FEET; THENCE SOUTH 81 DEGREES 21 MINUTES 28 SECONDS EAST, 186.22 FEET; THENCE SOUTH 66 DEGREES 35 MINUTES 24 SECONDS EAST, 68.56 FEET; THENCE SOUTH 81 DEGREES 21 MINUTES 28 SECONDS EAST, 138.93 FEET; THENCE SOUTH 00 DEGREES 54 MINUTES 11 SECONDS EAST, 296.57 FEET; THENCE NORTH 88 DEGREES 34 MINUTES 40 SECONDS EAST, 983.28 FEET TO THE POINT OF BEGINNING, PARCEL CONTAINS 2,617,960 SQUARE FEET MORE OR LESS (60.100 ACRES MORE OR LESS). PARCEL INCLUDES LANDS LYING BETWEEN THE MEANDER LINE AND THE CENTERLINE OF A NAVIGABLE STREAM, AND LANDS LYING BETWEEN THE MEANDER LINES AND THE WATERS' EDGE OF A NON-NAVIGABLE POND, INCLUSIVE OF THE FULL BED OF SAID NON-NAVIGABLE POND.

SURVEYOR'S CERTIFICATE

I, DAVID D. EISELE, HEREBY CERTIFY THAT THIS PRELIMINARY PLAT IS A CORRECT REPRESENTATION OF ALL EXISTING LAND DIVISIONS AND FEATURES, AND THAT I HAVE COMPLIED WITH THE PROVISIONS OF CALUMET COUNTY AND CITY OF MENASHA SUBDIVISION ORDINANCE.

DAVID D. EISELE, R.L.S. S-974 DATE

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Planning
Environmental
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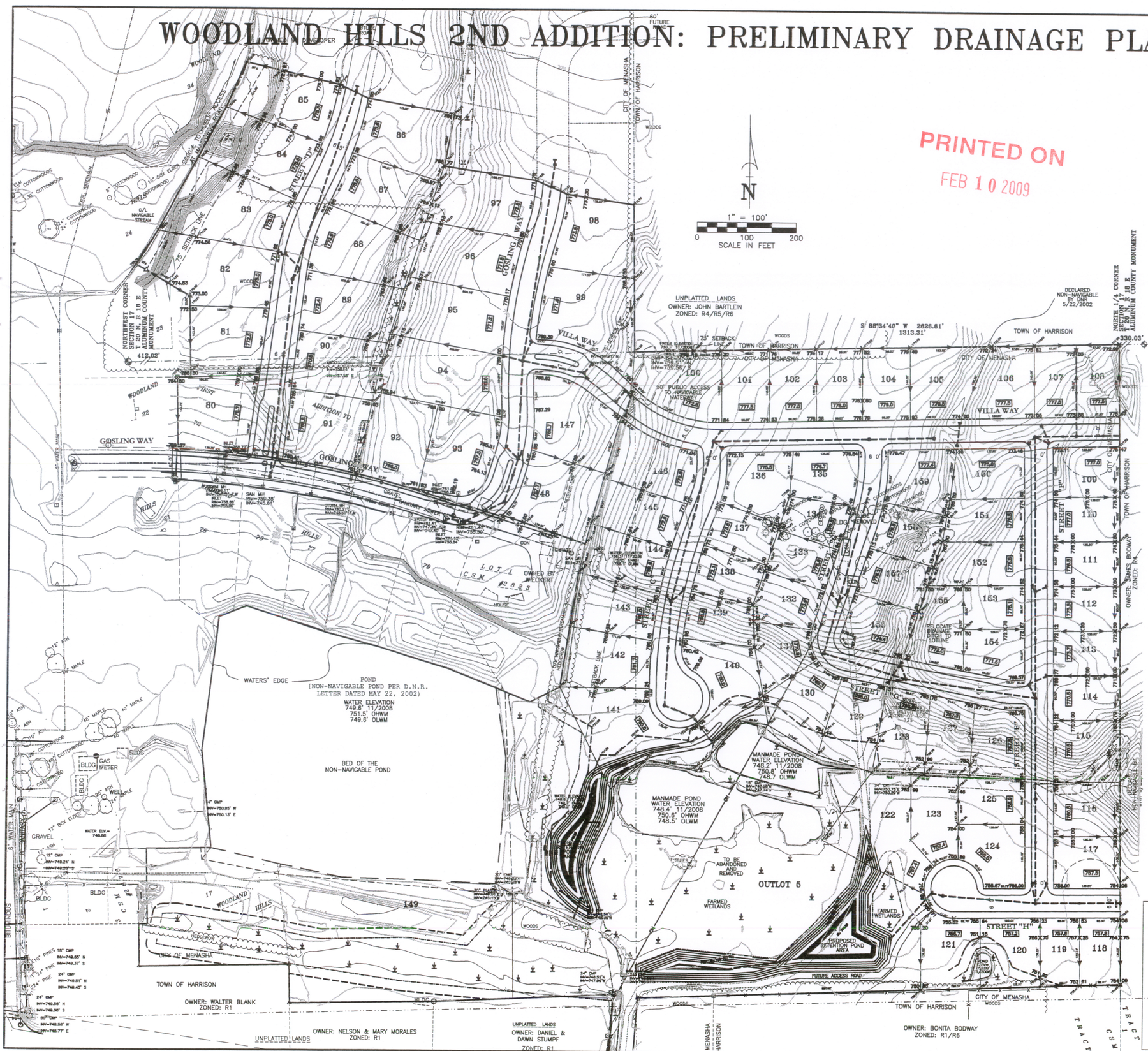
Architecture

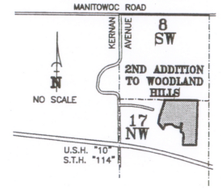
WOODLAND HILLS 2ND ADDITION: PRELIMINARY DRAINAGE PLAN

PRINTED ON FEB 10 2009



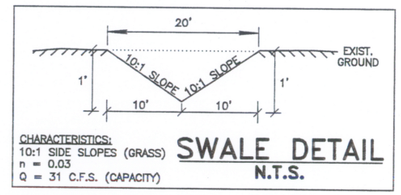
LOCATION MAP

SECTION 17
T 19 N, R 18 E
CITY OF MENASHA
CALUMET COUNTY, WISCONSIN



DRAINAGE PLAN LEGEND

- STORM MANHOLE
- STORM INLET
- Y.D. STORM YARD DRAIN
- 796.08 PROPOSED ELEVATION
- EXISTING ELEVATION
- 796.1 GROUND AT FOUNDATION ELEVATION
- (824.00) PERTINENT DITCH OR SWALE ELEV.
- DIRECTION OF DRAINAGE
- 797 EXISTING CONTOUR
- STORM SEWER
- LOT LINE GRADING
- CONSERVATION EASEMENT



CHARACTERISTICS:
10:1 SIDE SLOPES (GRASS)
n = 0.03
Q = 31 C.F.S. (CAPACITY)

SWALE DETAIL
N.T.S.

DRAINAGE PLAN NOTES:

1. THIS FINAL DRAINAGE PLAN INDICATES DRAINAGE ALONG LOT LINES, MAJOR DRAINAGE SWALES AND CONCEPTUAL DRAINAGE FOR EACH LOT. THE SITE PLANNER FOR EACH INDIVIDUAL HOME SITE SHOULD DESIGN DETAILED DRAINAGE FOR THE INTERIOR OF THE LOT BASED ON THIS INFORMATION. GRADE AT FOUNDATION ELEVATIONS MAY VARY SIGNIFICANTLY DEPENDING UPON ARCHITECTURE. THE SITE PLANNER SHOULD CONSULT AN ENGINEER TO DETERMINE GRADE AT FOUNDATION ELEVATION.

2. THE PROPOSED ELEVATIONS SHOWN ON THE DRAINAGE PLANS THAT ARE ADJACENT TO ABUTTING PROPERTIES MAY VARY FROM 5' TO 10' FROM THE PROPERTY CORNERS.

3. THE LANDSCAPER SHALL UTILIZE THE PROPOSED ELEVATIONS. THE LANDSCAPER SHALL NOT GRADE UP TO ANY PEDESTAL OR ANY OTHER STRUCTURE TO DETERMINE ELEVATION.

4. THE LOCATION OF EXISTING UTILITIES FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL HAVE ALL FACILITIES LOCATED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF A CONFLICT WITHIN THE WORK IS DISCOVERED.

5. UNLESS OTHERWISE NOTED, SIDE LOT LINE BREAKS IN ELEVATION MEASURE 60'.

TOPOGRAPHIC LEGEND

- 1" x 18" IRON PIPE SET
- 1-1/4" x 30" REBAR SET
- CHISELED "X" SET
- 3/4" REBAR FOUND
- 1" IRON PIPE FOUND
- 1-1/4" REBAR FOUND
- 2" IRON PIPE FOUND
- CHISELED "X" FOUND
- GOVERNMENT CORNER
- RECORDED AS
- CONIFEROUS TREE
- DECIDUOUS TREE
- EXIST. WOODS LINE
- WETLANDS
- SOIL BORING
- OVERHEAD POWER LINES
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- UNDERGROUND FIBEROPTIC
- UNDERGROUND GAS
- UNDERGROUND CABLE TV
- EXIST. FENCE LINE
- SIGN
- POWER POLE
- GUY
- LIGHT POLE
- TELEPHONE PEDESTAL
- ELECTRIC PEDESTAL
- CABLE PEDESTAL
- EXIST. HYDRANT
- WATER VALVE
- WATER STOP BOX
- GAS VALVE
- EXIST STORM MANHOLE
- STORM INLET
- YARD DRAIN
- EXIST SANITARY MANHOLE
- EXIST. SAN. SEWER
- EXIST. STD. SEWER
- EXIST. WATER MAIN
- 800.00 EXIST. SPOT ELEVATION
- 800 CONTOUR W/ ELEVATION
- 800.00te EXIST. TOP OF CURB ELEV.
- 800.00fl EXIST. FLOW LINE ELEV.
- FF = 800.00 FIRST FLOOR = 800.00
- TOPSOIL DEPTH
- INFILTRATION SOIL BORING

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920.731.0381 1.800.236.0381

DRAWN BY	CHECKED	APPROVED	REVISION
CRC	BCO		

NO.	DATE

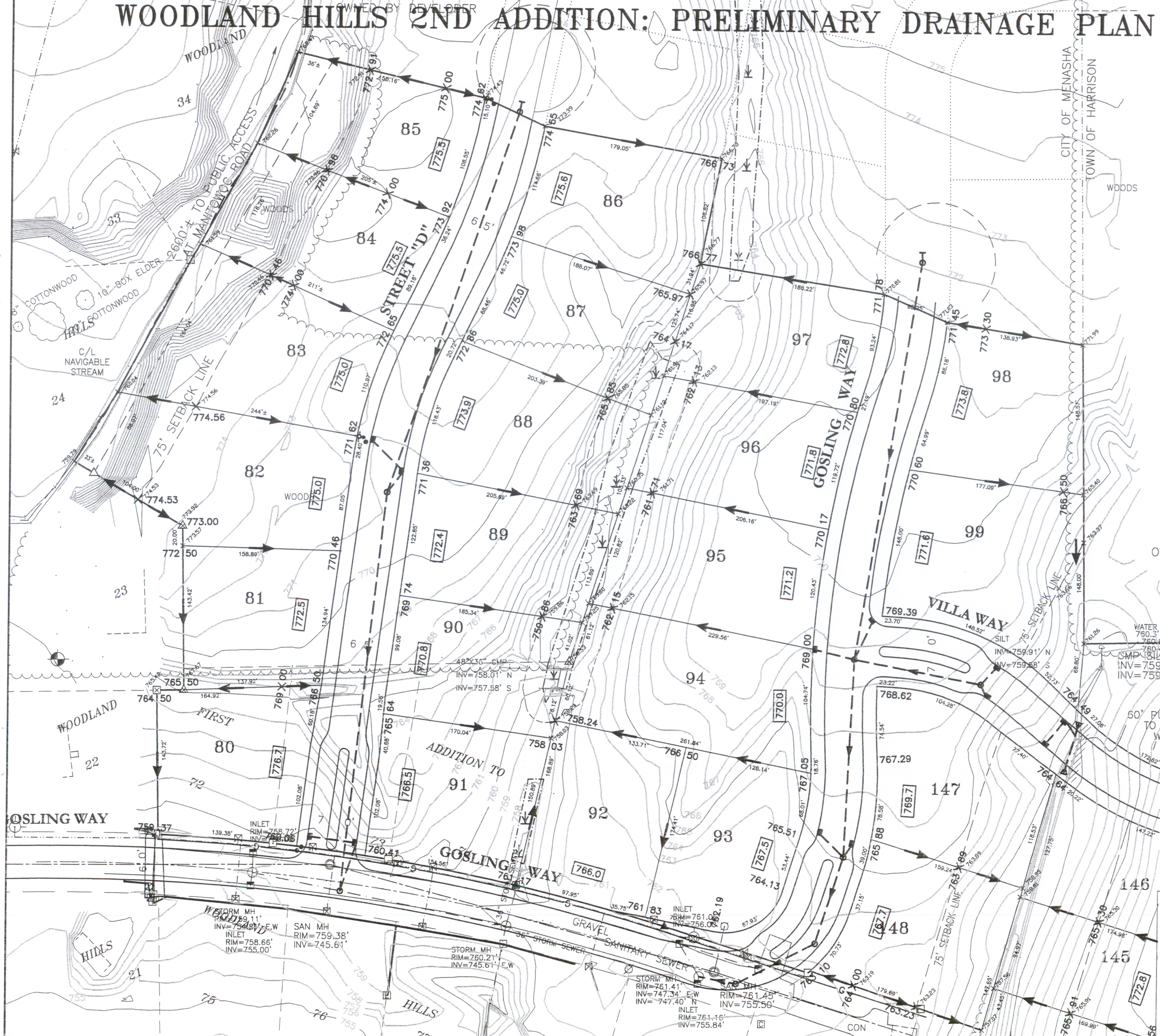
DRAINAGE PLAN (OVERALL)
WOODLAND HILLS 2ND ADDITION
CITY OF MENASHA, CALUMET COUNTY, WISCONSIN

SCALE	DATE
1"=100'	02/09/09

COMPUTER FILE
632010de.dwg

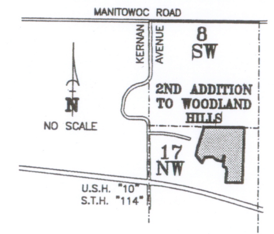
DRAWING NO.

WOODLAND HILLS 2ND ADDITION: PRELIMINARY DRAINAGE PLAN (NW)



LOCATION MAP

SECTION 17
T 19 N, R 18 E
CITY OF MENASHA
CALUMET COUNTY, WISCONSIN

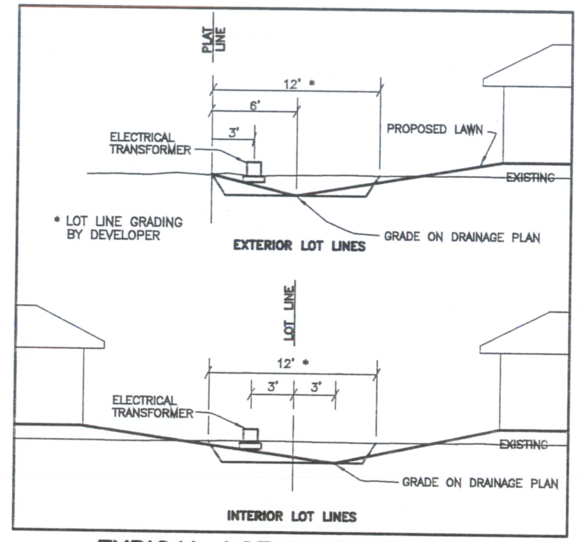


N

1" = 50'

0 50 100

SCALE IN FEET



TYPICAL LOT LINE GRADING CROSS SECTION

TOPOGRAPHIC LEGEND

1" x 18" IRON PIPE SET
1-1/4" x 30" REBAR SET
CHISELED "X" SET
3/4" REBAR FOUND
1" IRON PIPE FOUND
1-1/4" REBAR FOUND
2" IRON PIPE FOUND
CHISELED "X" FOUND
GOVERNMENT CORNER
RECORDED AS
CONIFEROUS TREE
DECIDUOUS TREE
EXIST. WOODS LINE
WETLANDS
SOIL BORING
OVERHEAD POWER LINES
UNDERGROUND ELECTRIC
UNDERGROUND TELEPHONE
UNDERGROUND FIBEROPTIC
UNDERGROUND GAS
UNDERGROUND CABLE TV
EXIST. FENCE LINE
SIGN
POWER POLE
GUY
LIGHT POLE
TELEPHONE PEDESTAL
ELECTRIC PEDESTAL
CABLE PEDESTAL
EXIST. HYDRANT
WATER VALVE
WATER STOP BOX
GAS VALVE
EXIST STORM MANHOLE
STORM INLET
YARD DRAIN
EXIST. SANITARY MANHOLE
EXIST. SAN. SEWER
EXIST. STD. SEWER
EXIST. WATER MAIN
EXIST. SPOT ELEVATION
CONTOUR W/ ELEVATION
EXIST. TOP OF CURB ELEV.
EXIST. FLOW LINE ELEV.
FIRST FLOOR = 800.00
TOPSOIL DEPTH
INFILTRATION SOIL BORING

Martenson & Eisele, Inc.
1377 Midway Road
Menasha, WI 54952
www.martenson-eisele.com
info@martenson-eisele.com
920.731.0381 1.800.236.0381

Planning
Environmental
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Engineering
Architecture

NO.	DATE	REVISION	DRAWN BY	CHECKED	APPROVED
			CRC	BCO	

DRAINAGE PLAN (NORTHWEST)

WOODLAND HILLS 2ND ADDITION

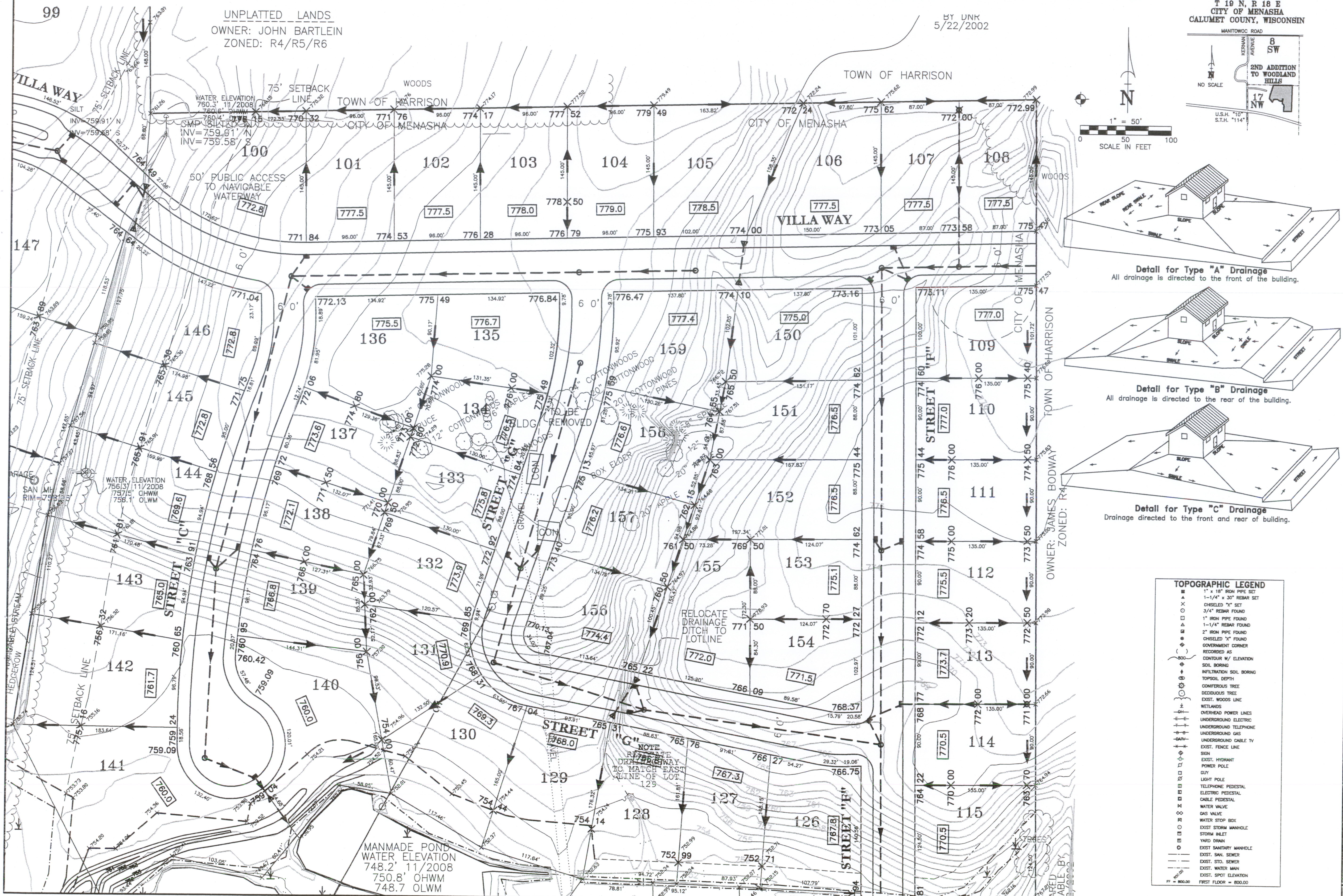
CITY OF MENASHA, CALUMET COUNTY, WISCONSIN

SCALE	DATE
1"=50'	02/09/09

COMPUTER FILE
632010de.dwg

DRAWING NO.

WOODLAND HILLS 2ND ADDITION: PRELIMINARY DRAINAGE PLAN (EAST)



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DRAWN BY: CRC
CHECKED: BCO
APPROVED

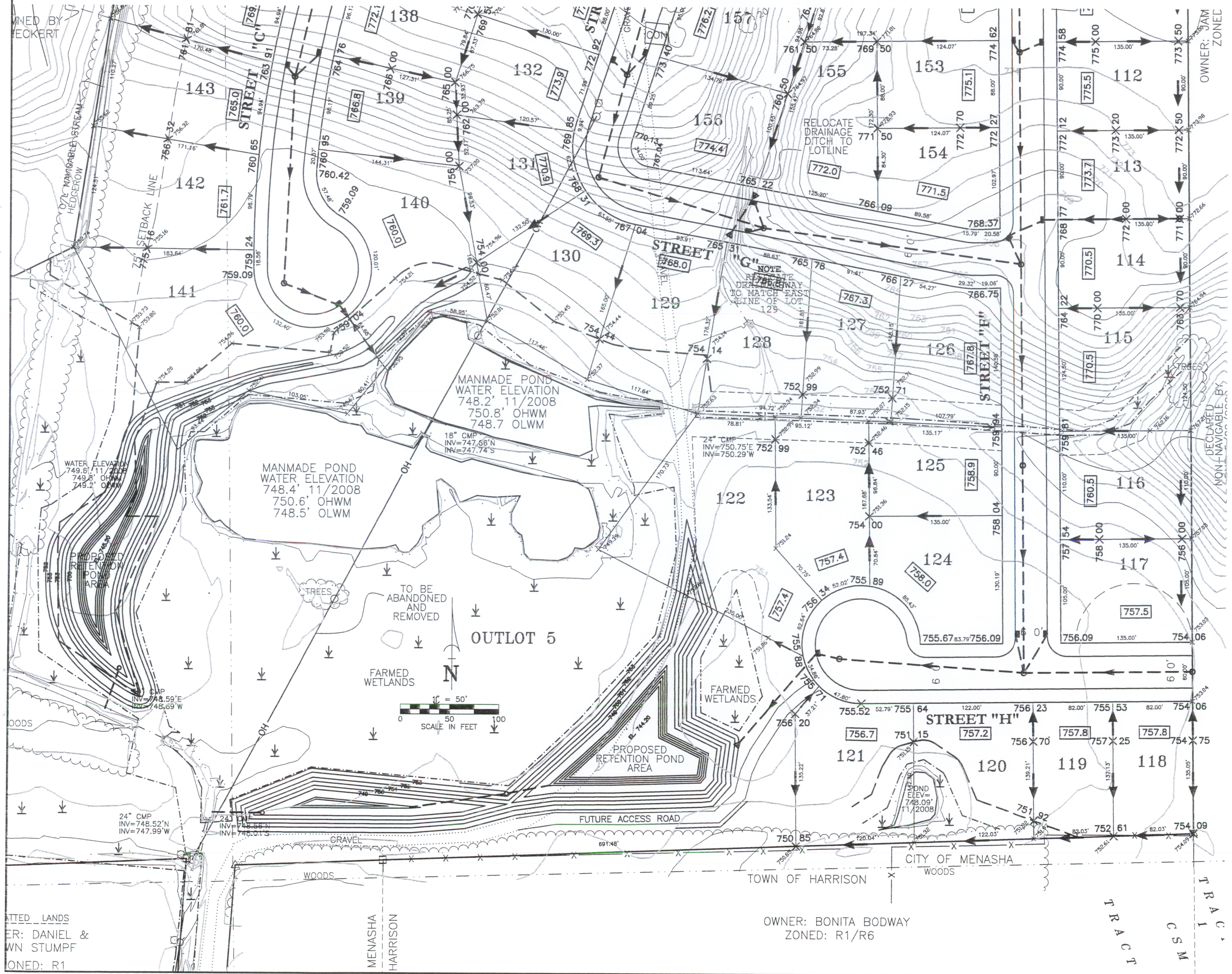
DRAINAGE PLAN (EAST)
WOODLAND HILLS 2ND ADDITION
CITY OF MENASHA, CALUMET COUNTY, WISCONSIN

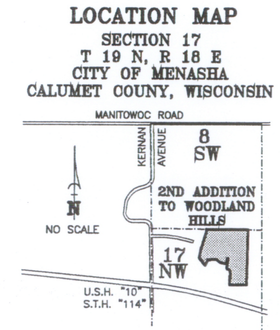
SCALE	DATE
1"=50'	02/09/09

COMPUTER FILE
632010de.dwg

DRAWING NO.

WOODLAND HILLS 2ND ADDITION: PRELIMINARY DRAINAGE PLAN (SOUTH)





TOPOGRAPHIC LEGEND

- 1" x 18" IRON PIPE SET
- 1-1/4" x 30" REBAR SET
- CHISELED "X" SET
- 3/4" REBAR FOUND
- 1" IRON PIPE FOUND
- 1-1/4" REBAR FOUND
- 2" IRON PIPE FOUND
- CHISELED "X" FOUND
- GOVERNMENT CORNER
- ( ) RECORDED AS
- 800 CONTOUR W/ ELEVATION
- SOIL BORING
- INFILTRATION SOIL BORING
- TOPSOIL DEPTH
- CONIFEROUS TREE
- DECIDUOUS TREE
- EXIST. WOODS LINE
- WETLANDS
- OH OVERHEAD POWER LINES
- E UNDERGROUND ELECTRIC
- T UNDERGROUND TELEPHONE
- G UNDERGROUND GAS
- CATV UNDERGROUND CABLE TV
- EXIST. FENCE LINE
- SIGN
- EXIST. HYDRANT
- POWER POLE
- GUY
- LIGHT POLE
- TELEPHONE PEDESTAL
- ELECTRIC PEDESTAL
- CABLE PEDESTAL
- WATER VALVE
- GAS VALVE
- WATER STOP BOX
- EXIST STORM MANHOLE
- STORM INLET
- YARD DRAIN
- EXIST SANITARY MANHOLE
- EXIST. SAN. SEWER
- EXIST. STO. SEWER
- EXIST. WATER MAIN
- 800.00 EXIST. SPOT ELEVATION
- FF = 800.00 FIRST FLOOR = 800.00

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EAE	BCO	

NO.	DATE	REVISION

DRAINAGE PLAN (SOUTH)

WOODLAND HILLS 2ND ADDITION

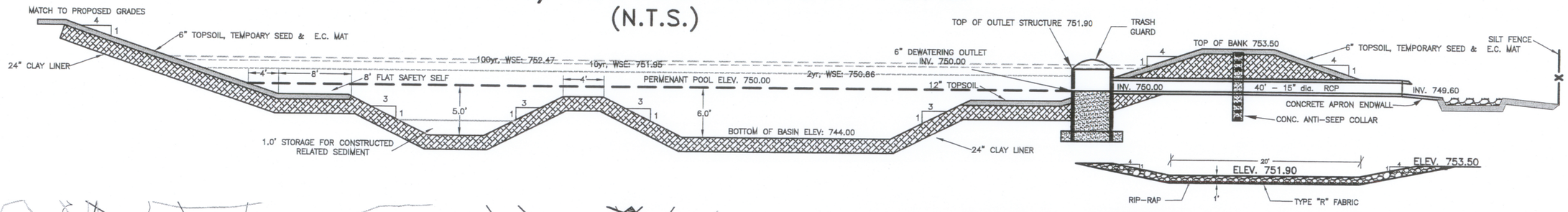
CITY OF MENASHA, CALUMET COUNTY, WISCONSIN

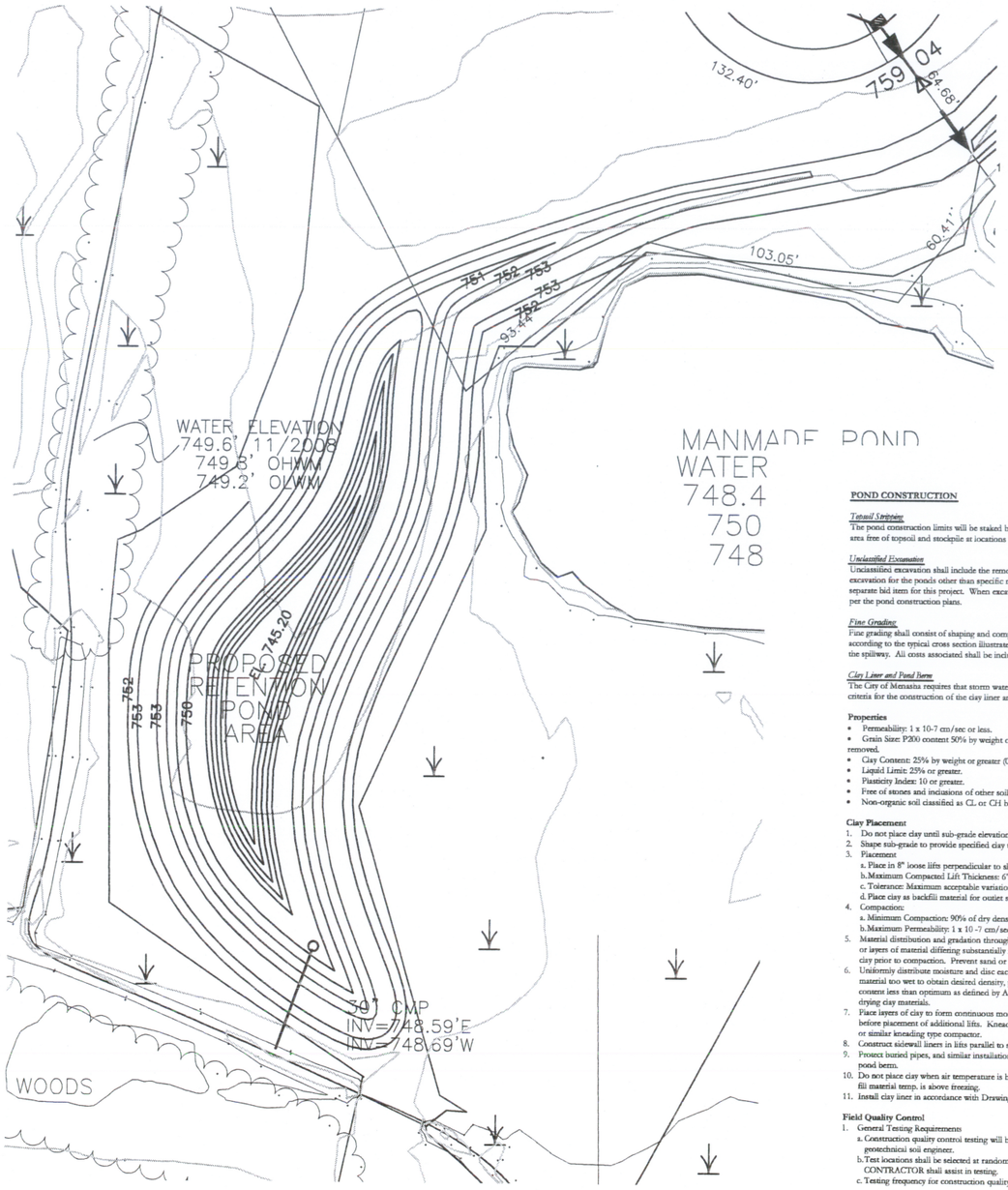
SCALE	DATE
1"=50'	02/09/09

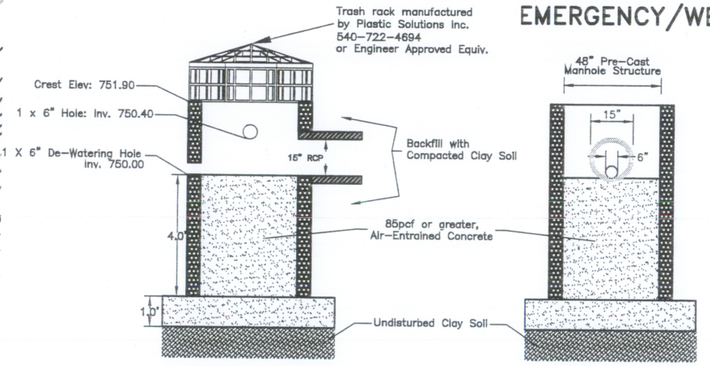
COMPUTER FILE: 632010de.dwg

DRAWING NO. 632-010 DP (S)

DETENTION/SEDIMENTATION POND
(N.T.S.)







EMERGENCY/WEIR OUTLET STRUCTURE
(N.T.S.)

	Post (Prop. Control)	Post-Develop. W.S. Elev.
Q_{peak} (2yr Storm Event)	1.33 cfs	
Q_{peak} (10yr Storm Event)	2.31 cfs	
Q_{peak} (100yr Storm Event)	15.06 cfs	
Detention (2yr Storm Event)	0.22 ac-ft	750.96
Detention (10yr Storm Event)	0.51 ac-ft	751.95
Detention (100yr Event)	0.71 ac-ft	752.47

OUTLET STRUCTURE

POND CONSTRUCTION

Topsoil Stripping
The pond construction limits will be staked by Martenson & Eisele, Inc. The contractor shall strip the area free of topsoil and stockpile at locations as indicated on the Erosion Control Plan.

Unclassified Excavation
Unclassified excavation shall include the removal and disposal of all materials encountered in the excavation for the ponds other than specific materials which have been classified and bid upon as a separate bid item for this project. When excavating for the ponds, the excavation limits shall be the limits per the pond construction plans.

Fine Grading
Fine grading shall consist of shaping and compacting the total cross section and limits of the ponds according to the typical cross section illustrated on the plans. Fine Grading shall include the grading of the spillway. All costs associated shall be included in the unit price bid.

Clay Liner and Pond berm
The City of Menasha requires that storm water ponds be entirely clay lined. The following items are the criteria for the construction of the clay liner and pond berm.

Properties
- Permeability: 1 x 10-7 cm/sec or less.
- Grain Size: P200 content 50% by weight or greater. Larger than 2 in. in longest dimension shall be removed.
- Clay Content: 25% by weight or greater (0.02mm).
- Liquid Limit 25% or greater.
- Plasticity Index: 10 or greater.
- Free of stones and inclusions of other soil types larger than 2 in. in largest dimension.
- Non-organic soil classified as CL or CH by United Soil Classification System.

Clay Placement
1. Do not place clay until sub-grade elevation is documented and approved by Engineer.
2. Shape sub-grade to provide specified clay thickness smooth and free from loose stones.
3. Placement
   a. Place in 8" loose lifts perpendicular to slope, in designated thickness shown on Drawings.
   b. Maximum Compacted Lift Thickness: 6" but not greater than depth of sheepsfoot.
   c. Tolerance: Maximum acceptable variation for each lift thickness is 1".
   d. Place clay as backfill material for outlet structure and associated piping within pond berm.
4. Compaction:
   a. Minimum Compaction: 90% of dry density, ASTM D1557 Modified Proctor.
   b. Maximum Permeability: 1 x 10 -7 cm/sec, laboratory falling head permeability test.
5. Material distribution and gradation throughout clay material shall be free from lenses, pockets, streaks or layers of material differing substantially in texture or gradation from surrounding material. Blend clay prior to compaction. Prevent sand or other soil types from mixing into clay or forming seams.
6. Uniformly distribute moisture and disc each lift of clay material prior to compaction. Dry clay material too wet to obtain desired density, proper moisture content. Do not place clay at moisture content less than optimum as defined by ASTM D1557. No additional payment will be made for drying clay materials.
7. Place layers of clay to form continuous monolithic material. Condition excessively dry or wet soil before placement of additional lifts. Knead each lift into previously placed lift with sheepsfoot roller, or similar kneading type compactor.
8. Construct sidewall liners in lifts parallel to side slope.
9. Protect buried pipes, and similar installations when constructing overlying portions of liner system or pond berm.
10. Do not place clay when air temperature is below of 32 °F, unless CONTRACTOR can demonstrate fill material temp, is above freezing.
11. Install clay liner in accordance with Drawings.

Field Quality Control
1. General Testing Requirements
   a. Construction quality control testing will be performed throughout project by the Contractor's geotechnical soil engineer.
   b. Test locations shall be selected at random be the Contractor's geotechnical soil engineer. CONTRACTOR shall assist in testing.
   c. Testing frequency for construction quality control shall be as indicated below by OWNER or ENGINEER
1. Initial Sampling
   a. Contractor shall assist geotechnical soil engineer in collecting two representative bulk samples within 7 days of receiving Notice to Proceed, or as weather permits after that week, of import clay borrow location and onsite clay material.
   b. Test to be performed on each bulk sample collected and tested by geotechnical soil engineer shall include:
1. Grain size Analysis (ASTM D422).
2. Atterberg Limits (ASTM D422).
3. Constant Head Permeability Test (ASTM D5084).
4. Modified Proctor Compaction Test (ASTM D1557, Method D).
2. Compaction:
   a. Contractor's geotechnical soil engineer will perform one compaction test per each 200 CY on in-place material.
   b. Degree of Compaction: 90% Modified Proctor, ASTM D1557, Method D
3. Thickness Verification:
   a. Thickness of clay liner shall be verified by surveying sub-grade elevation and surveying elevation of clay surface, after completion of testing of in-place clay. Survey will be performed by OWNER's retained ENGINEER.
4. Final Acceptance of Surface:
   a. Thickness of clay liner and surface elevations shall conform to Drawings.
   b. Finish surface with smooth-drum roller.
   c. Assist geotechnical soil engineer in collecting minimum of four in-place clay liner samples (Shelby Tube Method) per pond. Test to be performed by Contractor's geotechnical soil engineer on each tube.
      1. Dry Density.
      2. Atterberg Limits (ASTM D4318).
      3. Grain Size Analysis (ASTM D422).
      4. Constant Head Permeability (ASTM D5084).
   a. Rework areas that fail testing as follows:
      1. Define rework area.
      2. Disc.
      3. Condition soil for moisture content.
      4. Compact.
      5. Retest.
   b. Notify OWNER and ENGINEER when area(s) are ready for retest.
   c. Areas that fail testing shall have material removed and replaced at no cost to OWNER

Excess Material
1. Clay material not suitable for backfilling and excess material shall be hauled offsite, to location specified by OWNER.

Geo-textile Fabric:
The geo-textile fabric for under the riprap shall consist of Type "R" porous non-woven fabric with multiple layers of randomly arranged fibers. The Engineer shall inspect fabric prior to placement of riprap and during placement of riprap. Damaged filter fabric shall be replaced at Contractor's expense.

Manufacturers
- Mirafi 140N by Mirafi, Inc.
- Typar 3401 by Dupont
- Supac 5P by Phillips Fibers Corporation
- Propex 4545 by Amoco Fabrics Company

Riprap:
The Contractor shall trim and shape the bed for the fabric prior to the placement of the riprap as indicated on the plan. The riprap shall be clean washed riprap measuring 12" thick measured perpendicular to the slope. (24" total depth)

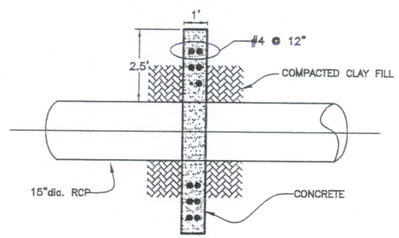
All equipment, labor, and materials used to install and maintain the riprap shall be included in the unit price bid for Medium Rip-Rap & Type R Filter Fabric, square yards.

Outlet Structure/ Pipes/ Etc.
Construction of the Outlet Structures with trash guards, pipe, concrete apron endwalls with trash guard, and spillways shall be in accordance with the details on the plans. All costs associated with the supply, installation and construction of all items involved with the outlet structures, pipe, concrete apron endwalls, and spillways shall be included in the price bid.

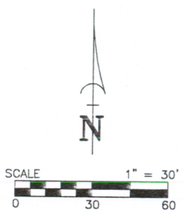
Restoration
The Contractor shall seed, fertilize and mulch the pond only above the normal water surface. Restoration of the pond shall be in accordance with Section 2.5.C.2.C (Temporary Seed).

Erosion Control Vegetative Mat
The area above the normal water surface shall be matted with Class I, Type B Cutlex, or equal, erosion control vegetative mats as listed in the Product Acceptability List (PAL) for Multi-Model Applications published by the Wisconsin Department of Transportation, current edition.

Topsoil
Topsoil shall conform to the requirements of the Wisconsin Department of Transportat ion Standard Specifications for Highway and Structure Construction, 2003 Edition, Section 625.



ANTI-SEEP COLLAR
(N.T.S.)



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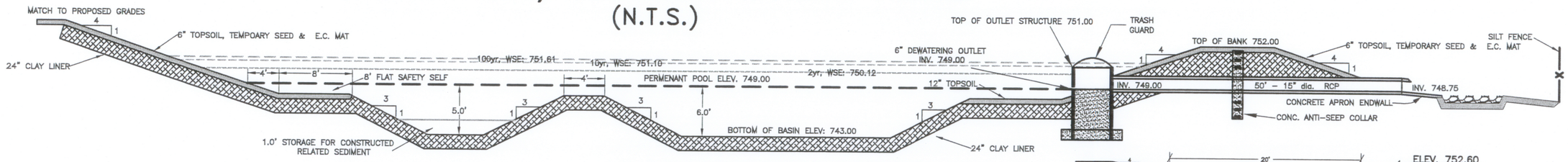
NO.	DATE	REVISION	APPROVED
			SCM

CHECKED BCO
DRAWN BY CRC

WEST POND DETAIL SHEET
WOODLAND HILLS 2ND ADDITION
CITY OF MENASHA, CALUMET COUNTY, WISCONSIN.

SCALE 1"=30'
DATE 02-09-09
COMPUTER FILE Q:\632010\design\632010de.dwg
DRAWING NO.

DETENTION/SEDIMENTATION POND
(N.T.S.)



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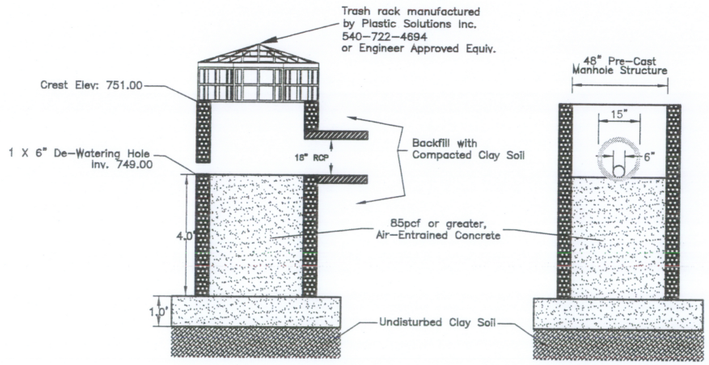
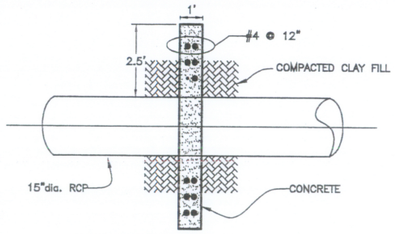


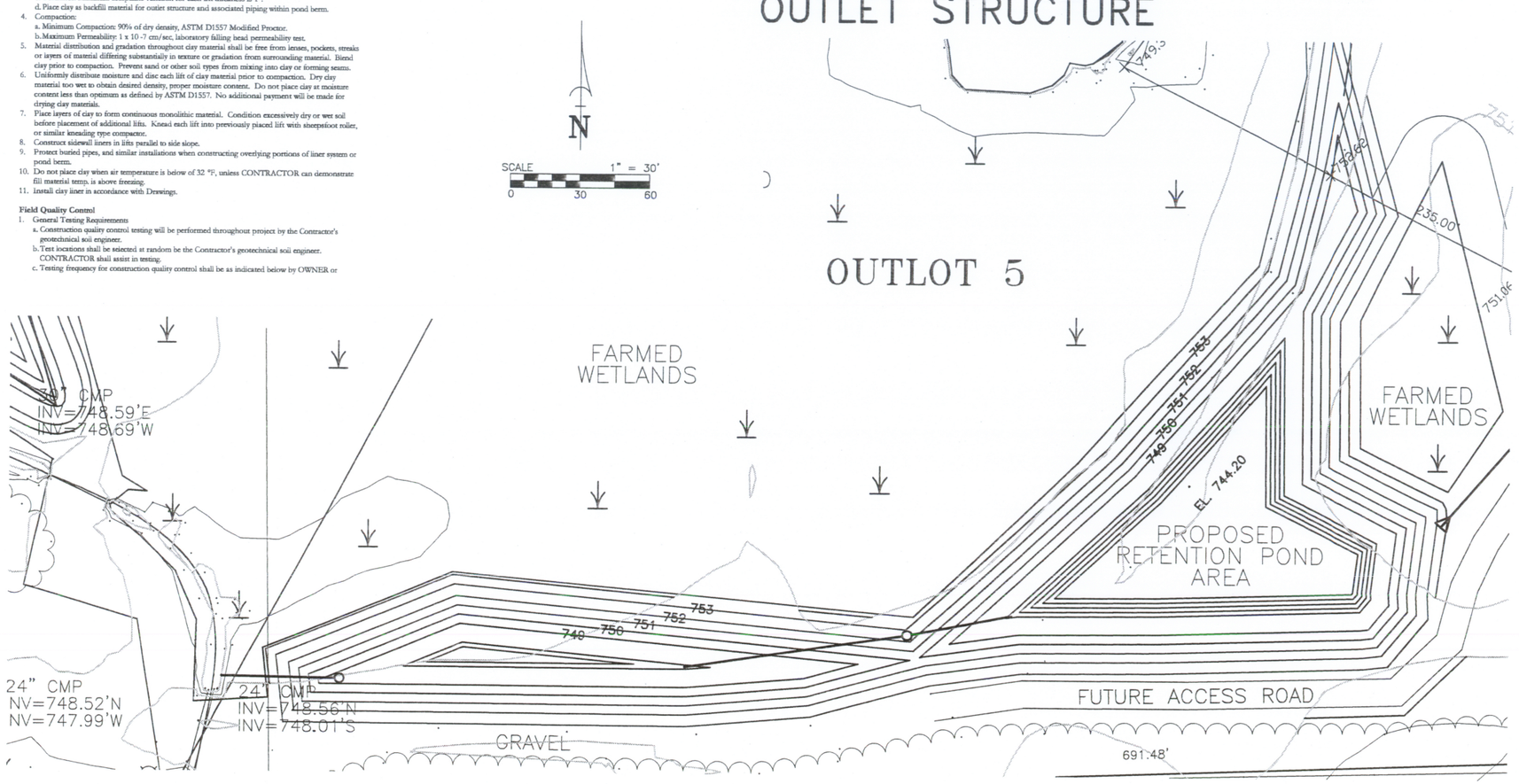
EMERGENCY/WEIR OUTLET STRUCTURE
(N.T.S.)



ANTI-SEEP COLLAR
(N.T.S.)

	Post (Prop. Control)	Post-Develop. W.S. Elev.
Q_{peak} (2yr Storm Event)	2.95 cfs	
Q_{peak} (10yr Storm Event)	9.04 cfs	
Q_{peak} (100yr Storm Event)	36.94 cfs	
Detention (2yr Storm Event)	0.53 ac-ft	750.12
Detention (10yr Storm Event)	1.10 ac-ft	751.10
Detention (100yr Storm Event)	1.44 ac-ft	751.61

OUTLET STRUCTURE



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NO.	REVISION	APPROVED	CHECKED	DRAWN BY
		SCM	BCO	CRC
				DATE

EAST POND DETAIL SHEET
WOODLAND HILLS 2ND ADDITION
CITY OF MENASHA, CALUMET COUNTY, WISCONSIN.

SCALE	DATE
1"=30'	02-09-09

COMPUTER FILE
Q:\632010\design\632010de.dwg

DRAWING NO.
632-010 Pond(E)