VICINITY SKETCH

NORTH
NO SCALE

CENTERLINE CURVE DATA						
CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C1	15°28'04"	150.00'	40.49'	20.37'	40.37	S82°15'58"E
C2	14°09'07"	200.00'	49.40'	24.83'	49.27	S81°36'30"E
C3	21°51'08"	500.00'	190.70'	96.52'	189.54	S03°13'23"E
C4	25°57'44"	200.00'	90.63'	46.10'	89.85	S01°10'05"E
C5	13°12'42"	200.00'	46.12'	23.16'	46.02	S05°12'26"W
C6	28°41'36"	500.00'	250.40'	127.88'	247.79	S12°56'53"W
C7	103°26'06"	100.00'	180.53'	126.70'	156.99	S24°25'21"E
C8	35°00'50"	400.00'	244.44'	126.17'	240.66	S58°37'59"E
C9	2°50'47"	200.00'	9.94'	4.97'	9.93	S42°32'58"E

CURVE TABLE

NUMBER	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C1	21°51'08"	500.00	190.70	96.52	189.54	S03°13'23"E
C2	25°57'44"	200.00	90.63	46.10	89.85	S01°10'05"E
C3	8°18'03"	200.00	28.98	14.51	28.95	S07°39'46"W
C4	13°39'34"	200.00	47.10	23.66	46.99	S50°49'13"E
C5 M.&P.	89°39'15"	25.00	39.12	24.85	35.25	N12°44'23"W
C6 M.&P.	32°05'15"	770.00	431.22	221.43	425.61	N16°02'37"E

BOUNDARY CORNER COORDINATES

CORNER	NORTHING	EASTING
a	4809.80	6479.22
b	4810.10	6620.23
c	4751.37	6630.08
d	4693.21	6621.07
e	4656.13	6618.11
f	4654.11	6617.84
g	4464.86	6628.49
h	4375.03	6630.32
i	4330.76	6621.06
j	4302.07	6617.20
k	4298.08	6759.34
l	3983.62	6702.85
m	3777.05	6919.68
n	3693.97	6840.53
o	3664.28	6876.95
p	3654.11	6892.97
q	3551.01	6799.76
r	3824.50	6369.36
s	3858.88	6361.59
t	4267.92	6479.22

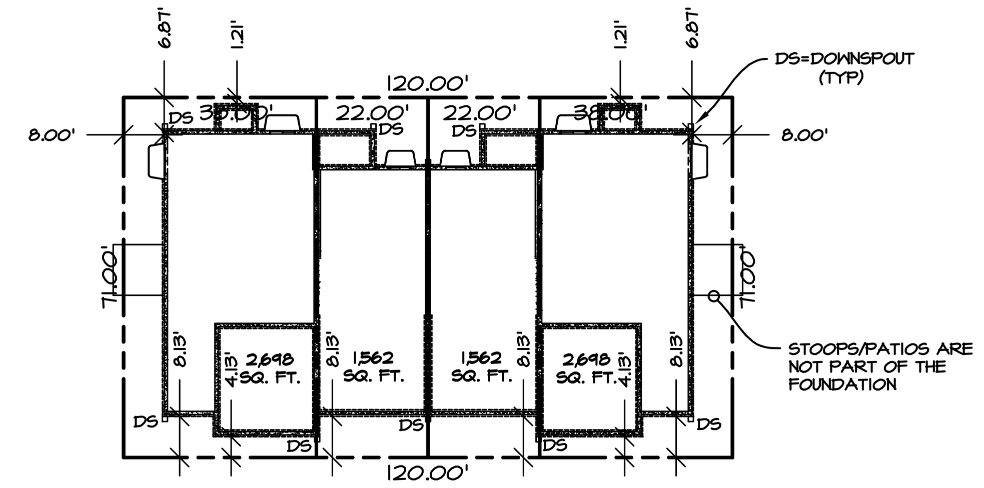
LOT CORNER COORDINATES

NUMBER	CORNER	NORTHING	EASTING
1	NW	4781.74	6513.35
4	NE	4763.99	6627.96
5	NW	4633.07	6502.51
8	SW	4528.07	6503.18
9	NW	4509.60	6502.15
12	SW	4406.85	6523.76
13	NW	4399.45	6520.41
16	SW	4296.06	6502.11
17	NW	4279.66	6512.53
20	SW	4159.66	6512.73
21	NW	4160.01	6506.76
24	SW	4058.12	6481.37
25	NW	4052.66	6483.88
28	SW	3940.35	6441.62
29	NW	3894.48	6438.23
32	SW	3782.21	6480.61
33	SW	3756.90	6522.11
36	SE	3710.38	6632.72
37	SW	3716.47	6641.17
40	SE	3651.64	6742.15
41	SW	3638.18	6737.01
44	SE	3567.76	6814.89
45	NE	3777.05	6919.68
48	NW	3849.48	6843.66
49	NE	3865.31	6824.01
52	NW	3912.52	6730.23
53	NE	3909.681	6716.56
56	NW	3956.80	6606.19
57	SE	3949.57	6673.74
60	NE	4064.04	6709.75
61	SE	4074.92	6719.26
64	NE	4178.27	6737.82
65	SE	4193.32	6731.67
68	NE	4298.28	6734.62

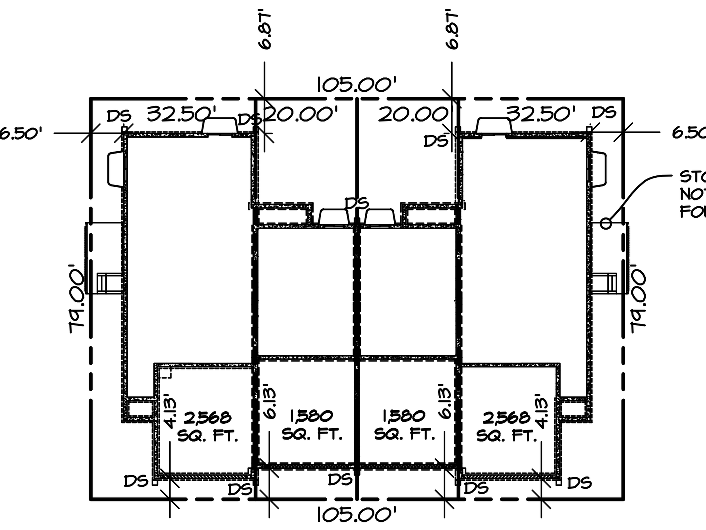
BENCHMARK

200' WEST OF ALICE'S ROAD ON UNIVERSITY AVENUE. N.W. BOLT OF RAILROAD SIGNAL BASE ON NORTH R.O.W. OF UNIVERSITY AVENUE.

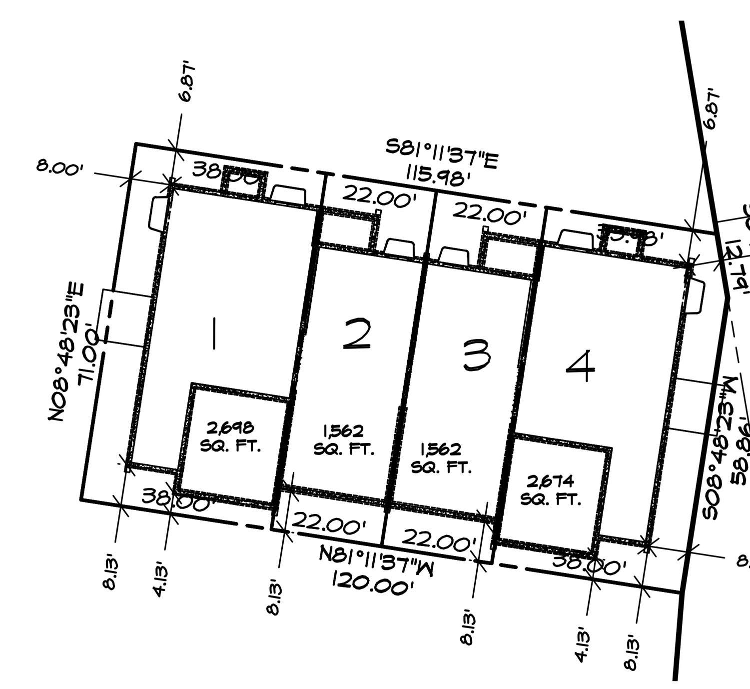
ELEVATION________1047.83



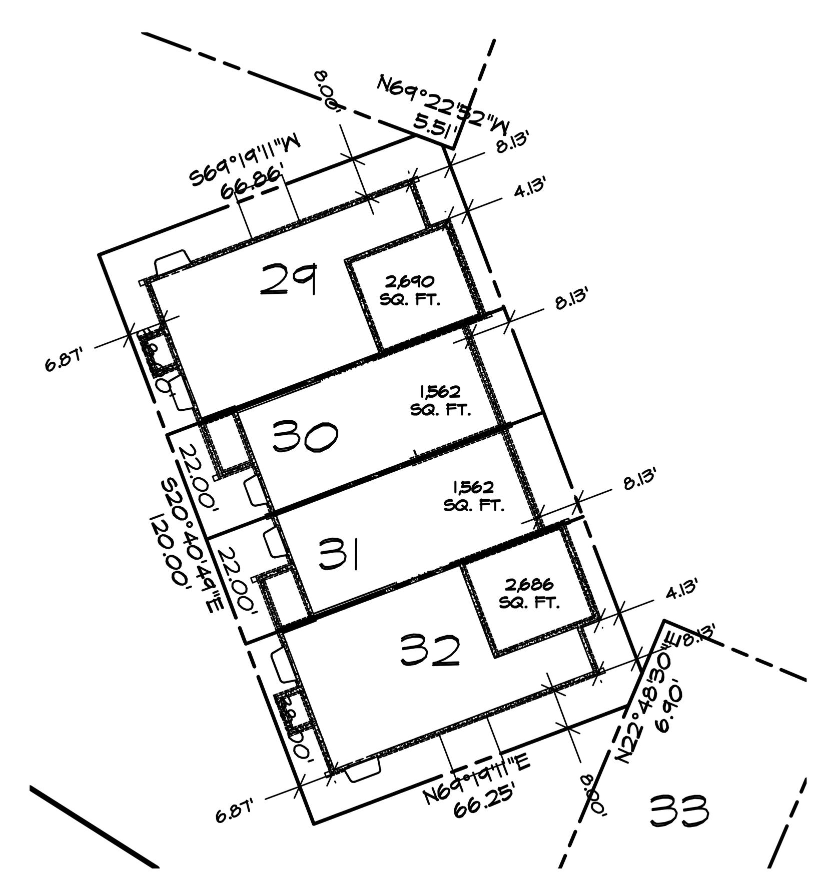
TYPICAL TOWNHOME LOT DIMENSIONS & SQUARE FOOTAGE OF LOTS 17-20, 25-28, 33-40 & 53-60
SCALE: 1"=30'



TYPICAL TOWNHOME LOT DIMENSIONS & SQUARE FOOTAGE OF LOTS 5-16, 21-24, 41-52 & 61-68
SCALE: 1"=30'



TOWNHOME LOT DIMENSIONS & SQUARE FOOTAGE OF LOTS 1-4
SCALE: 1"=30'



TOWNHOME LOT DIMENSIONS & SQUARE FOOTAGE OF LOTS 29-32
SCALE: 1"=30'

SITE PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1
WAUKEE, IOWA

OWNER/DEVELOPER

WINHALL AT WILLIAMS POINTE TOWNHOMES, L.L.C.
6900 WESTOWN PARKWAY
WEST DES MOINES, IA 50266
CONTACT:STEVE NIEBUHR PHONE: 515-280-2048

ZONING

LOTS 1-68 = R4 (MDR)
LOT 'Z' = R4 (MDR)

LEGAL DESCRIPTION

LOTS 101 THROUGH 104, LOTS 165 THROUGH 228, AND A PORTION OF LOT 'Y', WILLIAMS POINTE PLAT 3, AN OFFICIAL PLAT RECORDED IN BOOK 2004, PAGE 1890 IN THE RECORDS OF THE DALLAS COUNTY RECORDER, CITY OF WAUKEE, DALLAS COUNTY, IOWA, THAT IS ALL MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 'Y'; THENCE N89°52'37"E, 141.01 FEET ALONG THE NORTH LINE OF SAID LOT 'Y' TO A POINT; THENCE S09°31'21"E, 59.55 FEET ALONG A LINE INCLUDING A SEGMENT OF THE WEST LINE OF LOT 105 IN SAID WILLIAMS POINTE PLAT 3 TO A POINT ON THE SAID WEST LINE OF LOT 105; THENCE S08°48'23"W, 58.86 FEET TO A POINT; THENCE S04°33'39"W, 37.20 FEET TO A POINT ON THE CENTERLINE OF S.E. WILLIAMS COURT; THENCE S07°42'11"W, 2.04 FEET ALONG SAID CENTERLINE TO A POINT OF CURVATURE; THENCE SOUTHERLY ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 500.00 FEET AND A CHORD BEARING OF S03°13'23"E, AN ARC LENGTH OF 190.70 FEET ALONG SAID CENTERLINE TO A POINT OF REVERSE CURVATURE; THENCE SOUTHERLY ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 200.00 FEET AND A CHORD BEARING OF S01°10'05"E, AN ARC LENGTH OF 90.63 FEET ALONG SAID CENTERLINE TO A POINT OF TANGENCY; THENCE S11°48'47"W, 45.23 FEET ALONG SAID CENTERLINE TO A POINT OF CURVATURE; THENCE SOUTHERLY ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 200.00 FEET AND A CHORD BEARING OF S07°39'46"W, AN ARC LENGTH OF 28.98 FEET ALONG SAID CENTERLINE TO A POINT; THENCE S88°23'32"E, 142.19 FEET ALONG INCLUDING THE NORTH LINE OF SAID LOT 165 TO A POINT; THENCE S10°11'00"W, 314.50 FEET TO A POINT; THENCE S46°23'15"E, 299.47 FEET ALONG A LINE INCLUDING THE NORTHEAST LINE OF SAID LOTS 185 THROUGH 188 TO A POINT; THENCE S43°36'45"W, 114.75 FEET ALONG A LINE INCLUDING THE SOUTHEAST LINE OF SAID LOT 188 TO A POINT ON THE CENTERLINE OF SAID S.E. WILLIAMS COURT; THENCE SOUTHEASTERLY ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 200.00 FEET AND A CHORD BEARING OF S50°49'13"E, AN ARC LENGTH OF 47.10 FEET ALONG SAID CENTERLINE TO A POINT OF TANGENCY; THENCE S57°34'00"E, 18.97 FEET ALONG SAID CENTERLINE TO A POINT; THENCE S42°07'08"W, 138.98 FEET ALONG A LINE INCLUDING THE SOUTHEAST LINE OF SAID LOT 189 TO A POINT ON THE SOUTH LINE OF SAID LOT 'Y' AND THE NORTH RIGHT-OF-WAY LINE OF OLSON DRIVE; THENCE N57°34'00"W, 509.93 FEET ALONG SAID SOUTH LINE AND NORTH RIGHT-OF-WAY LINE TO A POINT OF CURVATURE; THENCE NORTHERLY ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 25.00 FEET AND A CHORD BEARING OF N12°44'23"W, AN ARC LENGTH OF 39.12 FEET ALONG SAID LINE TO A POINT OF REVERSE CURVATURE ON THE WEST LINE OF SAID LOT 'Y' AND THE EAST RIGHT-OF-WAY OF BRICK DRIVE; THENCE NORTHERLY ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 770.00 FEET AND A CHORD BEARING OF N16°02'37"E, AN ARC LENGTH OF 431.22 FEET ALONG SAID WEST LINE AND EAST RIGHT-OF-WAY LINE TO A POINT OF TANGENCY; THENCE N00°00'00"E, 541.88 FEET ALONG SAID LINE TO THE POINT OF BEGINNING AND CONTAINING 6.861 ACRES MORE OR LESS.

AREAS

OPEN SPACE	- 139,555 SQ. FT.	46.7%
BUILDINGS	- 97,776 SQ. FT.	32.7%
PAVEMENT & DRIVES	- 61,527 SQ. FT.	20.6%
TOTAL	- 298,858 SQ. FT. / 6.8608 ACRES	100%

DENSITY

68 UNITS / 6.8608 ACRES = 9.91 U/ACRE

PARKING

REQUIRED 68 UNITS @ 2 SPACES / UNIT = 136 SPACES
+19 VISITOR SPACES
PROVIDED 155 SPACES TOTAL

NOTES

1. ALL PUBLIC SIDEWALKS ADJACENT TO SE BRICK DRIVE AND SE OLSEN DRIVE TO BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY ON ANY UNIT. WALKS ALONG SE BRICK DRIVE AND SE OLSEN DRIVE SHALL BE 5' WIDE (5" THICKNESS).
2. A C-4 MIX TO BE USED IN CONSTRUCTION OF ALL PUBLIC SIDEWALKS.
3. ALL PRIVATE SIDEWALKS PROVIDING ACCESS TO ANY UNIT WITHIN A PROPOSED 4 PLEX TO BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY ON ANY ONE OF THE INDIVIDUAL UNITS WITHIN THE 4 PLEX.
4. THE FRANCHISE UTILITIES ADJACENT TO LOT 44 WILL NEED TO BE LOCATED PRIOR TO BUILDING CONSTRUCTION. IF A CONFLICT EXISTS THE UTILITY WILL NEED TO BE RELOCATED PRIOR TO ISSUANCE OF A BUILDING PERMIT.

CERTIFICATIONS

LICENSED LAND SURVEYOR JERRY P. OLIVER 7844 IOWA	I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA. JERRY P. OLIVER, IOWA REG. NO. 7844 DATE MY LICENSE RENEWAL DATE IS DECEMBER 31, 2014 PAGES OR SHEETS COVERED BY THIS SEAL:
LICENSED PROFESSIONAL ENGINEER JERRY P. OLIVER 7844 IOWA	I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA. JERRY P. OLIVER, IOWA LIC. NO. 7844 DATE MY LICENSE RENEWAL DATE IS DECEMBER 31, 2014 PAGES OR SHEETS COVERED BY THIS SEAL: this sheet only

LEGEND

EXISTING/PROPOSED

- PLAT BOUNDARY
- W 8" — WATER MAIN & SIZE
- SAN 8" — SANITARY SEWER & SIZE
- ST 12" — STORM SEWER & SIZE
- UGE — UNDERGROUND ELECTRIC CABLE
- UGT — UNDERGROUND TELEPHONE CABLE
- CTV — UNDERGROUND CABLE TV
- G 4" — GAS MAIN & SIZE
- MANHOLE
- INTAKE
- HYDRANT
- STREET LIGHT
- UTILITY BOX/TELEPHONE RISER
- SILT FENCE
- CONTOURS
- SECTION CORNER
- FOUND CORNER
- SET CORNER W/ 5/8" I.R. CAP #12265

52 LOT NUMBER
(1302) UNIT ADDRESS
ALL PROPOSED ADDRESSES ARE OFF OF SE WILLIAMS COURT.

IOWA ONE CALL 1-800-292-8989 www.iowaonecall.com 811

DIMENSION PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1

CEC
Civil Engineering Consultants, Inc.
2400 86th Street . Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@ceclac.com

Scale: 1"=60'
0' 20' 40' 60' 120'
NORTH

DATE: MARCH 05, 2013
REVISIONS: MARCH 19, 2013, JUNE 11, 2013, JUNE 25, 2013, JULY 11, 2013, JULY 25, 2013

SHEET 1 OF 4
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E-6954

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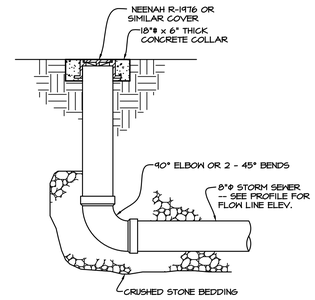
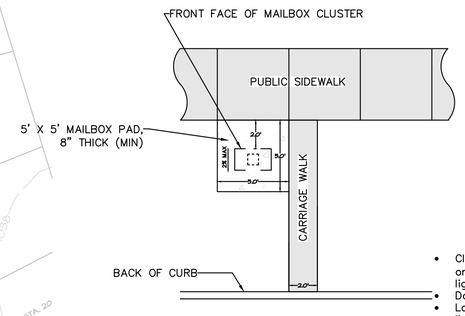
SITE PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1
WAUKEE, IOWA



STORM SEWER CLEANOUT DETAIL
SCALE: NOT TO SCALE

** NOTE: REFER TO THE SWPPP DRAWINGS FOR EROSION AND SEDIMENT CONTROL MEASURES AND REQUIRED MAINTENANCE. **

WAUKEE STANDARD CLUSTER MAILBOX PAD DETAIL



- Cluster Mailbox to be located on the no parking/street light side of street
- Do not locate at intersection
- Locate near shared property line per approved plan

BUILDING DATA

UNIT	G.F.E.	F.F.E.	M.O.E.	M.G.A.S.
1-4	1046.70	1048.20	1041.50	1046.20
5-8	1045.40	1046.90	1041.50	1044.50
9-12	1044.40	1045.90	1041.50	1044.50
13-16	1044.60	1046.10	1041.50	1044.50
17-20	1046.00	1047.50	1041.50	1044.50
21-24	1047.70	1049.20	1041.50	1046.70
25-28	11044.2	1050.70	1041.50	1048.20
29-32	1044.30	1050.80	1041.50	1050.30
33-36	1048.40	1044.90	1041.50	1048.40
37-40	1046.00	1047.50	1041.50	1046.50
41-44	1042.90	1044.40	1041.50	1044.40
45-48	1044.00	1045.50	1041.50	1041.50
49-52	1046.30	1047.80	1041.50	1044.30
53-56	1048.30	1049.80	1041.50	11046.30
57-60	1048.00	1049.50	1041.50	1047.00
61-64	1046.60	1048.10	1041.50	1046.60
65-68	1044.90	1046.90	1041.50	1046.40

G.F.E. - GARAGE FLOOR ELEVATION
F.F.E. - FINISH FLOOR ELEVATION
M.O.E. - MINIMUM OPENING ELEVATION
M.G.A.S. - MINIMUM GRADE AT STRUCTURE

GRADING NOTES

1. STRIP TOPSOIL FROM ALL AREAS WHICH ARE TO BE FILLED OR CUT.
2. STOCKPILE SUFFICIENT TOP RESPREAD A MINIMUM OF 6-INCHES ON UNPAVED AREAS.
3. ALL AREAS TO RECEIVE FILL TO BE BENCHED.
4. PREPARE BOTTOM OF BENCH FOR FILL BY DISCING TO A DEPTH OF 6-INCHES.
5. ALL SITE GRADING FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR.
6. THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL NOT NOT DEVIATE FROM OPTIMUM BY MORE THAN 0% TO +4%.
7. MAINTAIN ALL CUT AND FILL AREAS FOR SURFACE DRAINAGE AT ALL TIMES.
8. FINAL GRADES WITHIN PAVED AREAS SHALL BE WITHIN 0.1' OF PLAN GRADE, ALL OTHER AREAS TO BE WITHIN 0.2' OF PLAN GRADE.
9. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL SILT FENCES.
10. ALL AREAS WHICH ARE DISTURBED WILL BE SEEDED WITH EROSION CONTROL MIX OR SODDED.
11. A MINIMUM OF ONE FOOT OF COMPACTED COHESIVE SUBGRADE SHALL BE PROVIDED BENEATH ALL PAVEMENTS.
12. ALL SPOT ELEVATIONS ARE AT GUTTER ELEVATION.
13. MINIMUM BUILDING OPENING ELEVATION ON ALL UNITS ADJACENT TO THE POND SHALL BE 1041.50.
14. THE SITE AREA = 6.81 ACRES. THE SITE HAS ALREADY BEEN CONSTRUCTED & GRADED, AND HAS BEEN DEEMED STABLE BY IDNR WITH A DISCONTINUED NPDES PERMIT. TOPSOIL WAS RESPREAD UNDER THIS PERMIT #6362-6170. INDIVIDUAL BUILDING SITES WILL DISTURB LESS THAN ONE ACRE. MATERIALS AND EQUIPMENT NEEDED FOR BUILDING CONSTRUCTION WILL BE STORED ADJACENT TO THE BUILDING PAD.

LOT CORNER DATA

NUMBER	CORNER	NORTHING	EASTING	ELEVATION
1	NW	4781.74	6513.35	0
1	SW	4711.58	6502.48	0
4	NE	4763.99	6627.96	0
4	SE	4693.21	6621.07	0
5	NW	4633.07	6502.51	0
5	NE	4633.51	6581.50	0
8	SW	4528.07	6503.18	0
8	SE	4528.58	6582.18	0
9	NW	4504.60	6502.15	0
9	NE	4525.85	6574.45	0
12	SW	4406.85	6523.76	0
12	SE	4423.11	6601.07	0
13	NW	4394.45	6520.41	0
13	NE	4385.67	6548.20	0
16	SW	4246.06	6502.11	0
16	SE	4282.28	6574.90	0
17	NW	4279.66	6512.53	0
17	NE	4279.76	6583.53	0
20	SW	4154.66	6512.73	0
20	SE	4154.78	6583.73	0
21	NW	4160.01	6506.76	0
21	NE	4140.90	6583.41	0
24	SW	4058.12	6481.37	0
24	SE	4034.02	6558.03	0
25	NW	4052.66	6483.88	0
25	NE	4027.66	6550.39	0
28	SW	3940.35	6441.62	0
28	SE	3915.35	6508.07	0
29	NW	3844.48	6438.23	0
29	NE	3818.04	6500.78	0
32	SW	3782.21	6480.61	0
32	SE	3805.61	6542.54	0
33	SW	3756.90	6522.11	0
33	NW	3822.35	6544.63	0
36	SE	3710.38	6632.72	0
36	NE	3715.83	6660.24	0
37	SW	3716.47	6641.17	0
37	NW	3716.21	6679.53	0
40	SE	3651.64	6742.15	0
40	NE	3711.34	6780.51	0
41	SW	3638.18	6737.01	0
41	NW	3646.77	6784.99	0
44	SE	3567.76	6814.84	0
44	NE	3626.35	6867.87	0
45	NE	3777.05	6914.68	0
45	SE	3719.85	6865.19	0
48	NW	3844.48	6843.66	0
48	SW	3742.28	6784.16	0
49	NE	3865.31	6824.01	0
49	SE	3744.74	6788.44	0
52	NW	3912.52	6730.23	0
52	SW	3841.46	6694.70	0
53	NE	3909.681	6716.56	0
53	SE	3844.38	6688.68	0
56	NW	3956.80	6606.19	0
56	SW	3841.44	6578.32	0
57	SE	3944.57	6673.74	0
57	SW	3970.87	6606.02	0
60	NE	4064.04	6709.75	0
60	NW	4085.34	6642.03	0
61	SE	4074.42	6719.26	0
61	SW	4088.88	6641.50	0
64	NE	4178.27	6737.82	0
64	NW	4142.23	6660.06	0
65	SE	4183.32	6731.67	0
65	SW	4146.03	6652.72	0
68	NE	4248.28	6734.62	0
68	NW	4300.94	6655.67	0

LEGEND
EXISTING/PROPOSED

- PLAT BOUNDARY
- W 8" — WATER MAIN & SIZE
- SAN 8" — SANITARY SEWER & SIZE
- ST 12" — STORM SEWER & SIZE
- UGE — UNDERGROUND ELECTRIC CABLE
- UGT — UNDERGROUND TELEPHONE CABLE
- CTV — UNDERGROUND CABLE TV
- G 4" — GAS MAIN & SIZE
- MANHOLE
- INTAKE
- HYDRANT
- STREET LIGHT
- UTILITY BOX/TELEPHONE RISER
- SILT FENCE
- 1062 — CONTOURS
- SECTION CORNER
- FOUND CORNER
- CBU — SET CORNER W/ 5/8" I.R. CAP #12265
- CLUSTER BOX UNIT

BENCHMARK
200' WEST OF ALICE'S ROAD ON UNIVERSITY AVENUE. N.W. BOLT OF RAILROAD SIGNAL BASE ON NORTH R.O.W. OF UNIVERSITY AVENUE.

ELEVATION_____1047.83

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

GRADING PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1

CEC
Civil Engineering Consultants, Inc.
2400 86th Street . Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@ceclac.com

Scale: 1"=60'
0' 20' 40' 60' 120'
NORTH

DATE:	MARCH 05, 2013
REVISIONS:	MARCH 19, 2013
	JUNE 11, 2013 JUNE 25, 2013
	JULY 11, 2013 JULY 25, 2013

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SITE PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1
WAUKEE, IOWA

UTILITY SERVICE DETAIL

BENCHMARK
200' WEST OF ALICE'S ROAD ON UNIVERSITY AVENUE. N.W. BOLT OF RAILROAD SIGNAL BASE ON NORTH R.O.W. OF UNIVERSITY AVENUE.

ELEVATION_____1047.83

UTILITY NOTES
1. THE CONTRACTOR SHALL CALL IOWA ONE CALL (MINIMUM OF 48 HOURS NOTICE). THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY IMMEDIATELY UPON BREAKING OR DAMAGE TO ANY UTILITY LINE OR APPURTENANCE, OR THE INTERRUPTION OF THEIR SERVICE. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS."
3. THE SITE UTILITY CONTRACTOR SHALL COORDINATE THE BUILDING SERVICE CONNECTIONS WITH THE BUILDING MECHANICAL CONTRACTOR.
4. INSPECTION & TESTING IS MANDATORY ON ALL PRIVATE STORM SEWER SYSTEMS.
5. ALL PAVEMENTS SHALL BE 6-INCH NON-REINFORCED P.C.C.
6. CONTRACTOR SHALL NOTIFY WAUKEE PUBLIC WORKS PRIOR TO CONSTRUCTION.
7. ALL RELOCATED OR PROPOSED HYDRANTS WITHIN THE PROJECT AREA TO HAVE A STORZ CONNECTION.
8. ALL UTILITY MAINS BEING USED TO SERVICE THE PROPOSED LOTS ARE TO BE TESTED AND VIDEO TAPED PRIOR TO BEGINNING ANY CONSTRUCTION, WITH RESULTS TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.

UTILITIES SHOWN ARE EXISTING.
DATA BELOW IS FOR REFERENCE ONLY.

STORM SEWER DATA
(REFER TO STORM CLEANOUT DETAIL ON SHEET 2)

ST#1
EXISTING STORM INTAKE
N=4091.78 E=7026.35
RIM = 1039.85 (VERIFY)
INV = 1036.45 (VERIFY)

ST#2
FL 12" RCP = 1036.61 (VERIFY)

ST#3
TYPE 'MB' MANHOLE
W/TYPE 'F' CASTING
STA 1+45, 18' LT OF CL
RIM = 1042.10
IN N = 1037.31
OUT S = 1037.21

ST#4
TYPE 'MC' INTAKE I
W/TYPE 'R' CASTING
STA 3 +25, LT OF CL
GRATE = 1042.35
IN N = 1038.30
OUT S = 1038.03

ST#5 - STA 6+05.46, 42.23' RT OF CL
STORM CLEAN OUT
W/NEENAH R-1976 OR SIMILAR GRATE (SEE DETAIL)
RIM = 1046.00
OUT S = 1041.35

*ST#6
48" RCP FES
FL = 1035.20
PLACE 35 TN CLASS 'D' RIPRAP OVER FABRIC

*ST#7
TYPE 'MB' MANHOLE
W/TYPE 'C' CASTING
N=4427.19 E=6718.85
RIM=1041.00
IN N =1039.00
OUT S = 1035.70

ST #8
TYPE 'MC' INTAKE
W/TYPE 'R' CASTING
STA 7+00, LT OF CL
GRATE = 1043.33
IN N = 1040.20
IN E = 1040.20
OUT S = 1040.02

ST#9
STORM CLEANOUT
W/NEENAH R-1976 COVER
STA 6+25, 16' LT OF CL
RIM = 1044.50
OUT W = 1040.93

ST#10
STORM SEWER CLEANOUT
W/NEENAH R-1976 COVER
STA 8+25, 16 LT OF CL
RIM = 1044.75
IN W = 1040.93
OUT E = 1040.93

ST#11
STORM SEWER CLEANOUT
W/NEENAH R-1976 COVER
STA 9+50, 16' LT OF CL
RIM = 1045.50
OUT E = 1041.64

*ST#13
TYPE 'MC' INTAKE
W/TYPE 'R' CASTING
STA 9+00, RT OF CL
GRATE = 1041.50
IN W = 1036.52
IN N = 1038.50
IN S = 1038.00
OUT E = 1036.22

*ST#14
STORM CLEANOUT
W/NEENAH R-1976 GRATE
STA 10+75, 16' RT OF CL
RIM = 1044.25
OUT S = 1040.23

*ST#15
TYPE 'MB' MANHOLE
W/TYPE 'E' CASTING
STA 8+63.30, 99.67' LT OF CL
RIM = 1043.07
IN W = 1037.06
OUT E = 1036.96

*ST#16
PLACE STEEL PLATE ON END OF 36"X36½" RCAP
FL=1037.28

ST#17
TYPE 'MC' INTAKE
W/TYPE 'R' CASTING
STA 6+75, RT OF CL
GRATE = 1044.05
IN S = 1040.50
OUT N = 1040.25

ST#18
STORM CLEANOUT
STA 5+75, 16' RT OF CL
RIM = 1046.00
IN S = 1041.53
OUT N = 1041.53

ST #19
STORM CLEANOUT
STA 3+75, 16' RT OF CL
RIM = 1048.20
OUT N = 1043.85

ST#20
EXISTING 'MB' MANHOLE
RIM = 1040.60
N=3648.77 E=6860.53
FL INV = 1037.06 (VERIFY)
IN NW = 1037.16

ST#21
TYPE 'MC' INTAKE
W/TYPE 'R' CASTING
STA 1+00, RT OF CL
GRATE = 1042.40
IN NW = 1038.39
OUT SE = 1038.29

ST#22
STORM SEWER CLEANOUT
W/NEENAH R-1976 GRATE
STA 3+25, 22' RT OF CL
RIM = 1048.50
OUT SE = 1041.99

SANITARY SEWER DATA

SAN #1
EXISTING MANHOLE
N= 4057.21
E= 7016.37
RIM=1040.25
FL= 1029.46 (VERIFY)

*SAN #1A
CONNECT TO EXISTING 8" SAN. SEWER
FL= 1030.15

*SAN #2
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 1+44.31, 25.30' LT. OF ℄
RIM= 1042.50
IN N= 1031.06
OUT S= 1031.06

*SAN #3
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 3+25, 22.55' LT. OF ℄
RIM= 1042.64
IN N= 1031.78
OUT S= 1031.78

*SAN #4
TYPE 'A' MANHOLE
W/ TYPE 'B' MANHOLE
STA. 5+75, 14.28' LT. OF ℄
RIM= 1044.45
IN W= 1032.75
OUT S= 1032.75

*SAN #5
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 6+25, 23.22' LT. OF ℄
RIM= 1045.21
IN W= 1032.91
OUT E= 1032.91

*SAN #6
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 7+09.74, 23.71 LT. OF ℄
RIM= 1043.90
IN W= 1033.23
OUT E= 1033.23

*SAN #7
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 8+35.22, 23.52' LT. OF ℄
RIM= 1044.80
IN W= 1033.72
IN S= 1033.82
OUT E= 1033.72

*SAN #8
TYPE 'A' MANHOLE
W/ TYPE 'C' MANHOLE
STA. 9+45.76, 27.94' RT. OF ℄
RIM= 1043.60
IN S= 1034.26
OUT N= 1034.26

*SAN #9
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 9+04.15, 25.99' LT. OF ℄
RIM= 1042.70
IN S= 1034.63
OUT N= 1034.63

*SAN #10
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 5+75, 24.04' LT. OF ℄
RIM= 1046.55
IN S= 1036.63
OUT N= 1036.63

*SAN #11
TYPE 'A' MANHOLE
TYPE 'C' CASTING
STA. 3+70.77, 23.24' RT. OF ℄
RIM= 1048.55
OUT N= 1038.18

SAN #12
EXISTING MANHOLE
N= 3709.32
E= 6856.82
RIM= 1040.39
FL= 1030.09 (VERIFY)

SAN #13
TYPE 'A' MANHOLE
TYPE 'B' CASTING
STA. 1+00, 24.50' RT. OF ℄
RIM= 1043.65
IN W= 1031.24
OUT E= 1031.14

SAN #14
TYPE 'A' MANHOLE
TYPE 'B' CASTING
STA. 3+60.11, 28.67' LT. OF ℄
RIM= 1048.90
OUT E= 1039.44

*SAN #15
WATER TIGHT CAP
STA. 9+49.22, 21.61' LT. OF ℄
FL= 1034.36

WATER MAIN DATA
W #1 - 8-INCH 22½° BEND
STA. 1+00, 15.21' RT. OF ℄
W #2 - 8-INCH 22½° BEND
STA. 1+75, 13.64' RT. OF ℄
W #3 - 8-INCH 22½° BEND
STA. 2+62.84, 22.52' RT. OF ℄
W #4 - HYDRANT, TEE, AND 6" VALVE
STA. 2+25, 17.50' RT. OF ℄
BASE HYDRANT ELEV. = 1042.55
W #5 - 8-INCH VALVE
STA. 3+30, 18.24' RT. OF ℄
W #6 - 8"X8"X8" TEE
STA. 3+43, 18.62' RT. OF ℄
W #8 - CONNECT TO EXISTING 8" VALVE
STA. 0+42.58, 21.58' LT. OF ℄
W #9 - 8-INCH 11¼° BEND
STA. 4+00, 15.52' RT. OF ℄
W #10 - 8-INCH 22½° BEND
STA. 5+43, 20.54' RT. OF ℄
W #11 - 8-INCH 45° BEND
STA. 5+48, 24.24' RT. OF ℄
W #12 - HYDRANT, TEE, AND 6" VALVE
STA. 5+25, 16.68' RT. OF ℄
BASE HYDRANT ELEV. = 1044.50
W #13 - 8-INCH 22½° BEND
STA. 7+26.71, 20.66' RT. OF ℄
W #14 - 8-INCH 11¼° BEND
STA. 7+66.05, 16.50' RT. OF ℄
W #16 - 8"X8"X8" TEE
STA. 8+76.53, 21.50' RT. OF ℄
W #18 - HYDRANT, TEE, AND 6" VALVE
STA. 8+25, 27.48' RT. OF ℄
BASE HYDRANT ELEV. = 1045.60
W #19 - 8-INCH 11¼° BEND
STA. 11+06.85, 16.50' LT. OF ℄
W #20 - 8-INCH 11¼° BEND
STA. 9+40.99, 16.50' LT. OF ℄
W #21 - 8-INCH 11¼° BEND
STA. 8+50.37, 16.50' LT. OF ℄
W #22 - 8-INCH 11¼° BEND
STA. 7+82.28, 17.48' LT. OF ℄
W #23 - HYDRANT, TEE, AND 6" VALVE
STA. 6+00, 16.50' LT. OF ℄
BASE HYDRANT ELEV. = 1045.85
W #24 - 8-INCH 45° BEND
STA. 3+88, 30.61' LT. OF ℄
W #25 - HYDRANT, TEE, AND 6" VALVE
STA. 3+80, 26.46' LT. OF ℄
BASE HYDRANT ELEV. = 1048.80
W #26 - 8-INCH 45° BEND
STA. 3+05, 24.68' LT. OF ℄
W #27 - 8-INCH 22½° BEND
STA. 1+25, 16.73' LT. OF ℄
W #28 - 8-INCH 11¼° BEND
STA. 0+00, 22.22' LT. OF ℄
W #29 - CONNECT TO EXISTING 8" MAIN
N= 3673.60, E= 6832.46 (VERIFY LOCATION)
W #30 - REMOVE EXISTING BLOWOFF HYD. AND CONNECT
N= 4088.32, E= 7036.31 (VERIFY LOCATION)
W #32 - 8-INCH VALVE
STA. 6+45, 16.50' LT. OF ℄
W #33 - CONNECT TO EXISTING 8" VALVE
STA. 11+ 16.50' LT OF ℄
W #34 - 8-INCH VALVE
STA. 0+50, 24.34' LT. OF ℄
W #35 - HYDRANT, TEE, AND 6" VALVE
STA. 2+00, 24.24' LT. OF ℄
BASE HYDRANT ELEV. = 1046.30
W #36 - 8-INCH VALVE
STA. 3+84, 28.40' LT. OF ℄
W #37 - HYDRANT, TEE, AND 6" VALVE
STA. 8+75, 20.23' LT. OF ℄
BASE HYDRANT ELEV. = 1042.80
W #38 - 8-INCH VALVE
STA. 8+75, 17.54' RT. OF ℄
W #39 - 8-INCH VALVE
STA. 7+05, 17.30' RT. OF ℄

STORM PIPE DATA

ST#2 TO ST#3	ST#3 TO ST#4	ST#4 TO ST#5	ST#7 TO ST#8	ST#8 TO ST#9	ST#8 TO ST#10
149 LF. 12-INCH RCP. @ 0.40%	179 LF. 12-INCH RCP. @ 0.40%	305 LF. 8-INCH SWR. @ 0.88%	230 LF. 15-INCH RCP. @ 0.88%	73 LF. 8-INCH SWR @ 1.00%	121 LF. 8-INCH RCP. @ 0.60%
ST#10 TO #11	*ST#7 TO ST#13	ST#13 TO ST#14	*ST#13 TO ST#15	*ST#15 TO ST#16	*ST#13 TO ST#17
126 LF. 8-INCH RCP. @ 0.60%	130 LF. 48-INCH RCP. @ 0.40%	173 LF. 8-INCH SWR. @ 1.00%	111 LF. 36"X36½" RCAP. @ 0.40%	55 LF. 36"X36½" RCAP. @ 0.40%	225 LF. 12-INCH RCP. @ 1.00%
ST#17 TO ST#18	ST#18 TO ST#19	ST#20 TO ST#21	ST#21 TO ST#22	*ST#16 TO ST#7	
103 LF. 8-INCH SWR. @ 1.00%	193 LF. 8-INCH SWR. @ 1.20%	113 LF. 12-INCH RCP. @ 1.00%	214 LF. 8-INCH SWR. @ 1.68%	125 LF. 48-INCH RCP. @ 0.40%	

SANITARY PIPE DATA

SAN1 TO SAN2*	SAN2 TO SAN3*	SAN3 TO SAN4*	SAN4 TO SAN5*	SAN5 TO SAN 6*
151 LF. 8-INCH SAN. @ 0.60%	179 LF. 8-INCH SAN. @ 0.40%	242 LF. 8-INCH SAN. @ 0.40%	34 LF. 8-INCH SAN. @ 0.40%	122 LF. 8-INCH SAN. @ 0.40%
SAN6 TO SAN7*	SAN7 TO SAN8*	SAN8 TO SAN9	SAN9 TO SAN10	SAN10 TO SAN11
122 LF. 8-INCH SAN. @ 0.40%	154 LF. 8-INCH SAN. @ 0.40%	111 LF. 8-INCH SAN. @ 0.40%	93 LF. 8-INCH SAN. @ 0.40%	334 LF. 8-INCH SAN. @ 0.60% INCLUDES 1 LENGTH OF 8" DUCTILE IRON GOING SOUTH OUT OF SAN #9 (SEE PIPE SUPPORT DETAIL)
SAN11 TO SAN12	SAN12 TO SAN13	SAN13 TO SAN14		
114 LF. 8-INCH SAN. @ 0.80%	105 LF. 8-INCH SAN. @ 1.00%	275 LF. 8-INCH SAN. @ 3.00%		

LEGEND
EXISTING/PROPOSED

- PLAT BOUNDARY
- W 8" — WATER MAIN & SIZE
- SAN 8" — SANITARY SEWER & SIZE
- ST 8" — STORM SEWER & SIZE
- UGE — UNDERGROUND ELECTRIC CABLE
- UGT — UNDERGROUND TELEPHONE CABLE
- CTV — UNDERGROUND CABLE TV
- G 4" — GAS MAIN & SIZE
- MANHOLE
- INTAKE
- HYDRANT
- STREET LIGHT
- UTILITY BOX/TELEPHONE RISER
- SILT FENCE
- 1047 — CONTOURS
- SECTION CORNER
- FOUND CORNER
- SET CORNER W/ 5/8" I.R. CAP #12265

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

UTILITY PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1

CEC
Civil Engineering Consultants, Inc.
2400 86th Street . Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@ceclac.com

Scale: 1"=60'
0' 20' 40' 60' 120'
NORTH
DATE: MARCH 05, 2013
REVISIONS: MARCH 19, 2013 JUNE 11, 2013 JUNE 25, 2013 JULY 11, 2013 JULY 25, 2013
SHEET 3 OF 4
DWG. BY
E-6934

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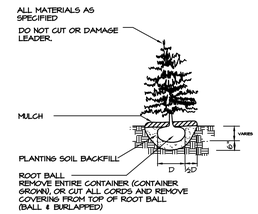
SITE PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1
WAUKEE, IOWA

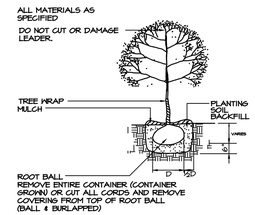
BENCHMARK
200' WEST OF ALICE'S ROAD ON UNIVERSITY AVENUE. N.W. BOLT OF RAILROAD SIGNAL BASE ON NORTH R.O.W. OF UNIVERSITY AVENUE.

ELEVATION_____1047.83



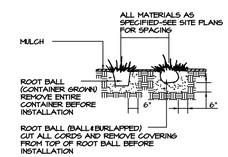
EVERGREEN TREE PLANTING AND STAKING DETAIL

NO SCALE



DECIDUOUS TREE PLANTING AND STAKING DETAIL

NO SCALE



SHRUB PLANTING DETAIL

NO SCALE

PLANTING NOTES

1. ONE WEEK PRIOR TO INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT CIVIL ENGINEERING CONSULTANTS, INC. (515/276-4884).
2. ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-1986).
3. THE LOCATIONS AND DIMENSIONS SHOWN ON PLAN FOR EXISTING FACILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE PLAN DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL PUBLIC AND/OR PRIVATE UTILITIES SERVING THE AREA TO DETERMINE THE PRESENT EXTENT AND EXACT LOCATION OF THEIR FACILITIES BEFORE BEGINNING WORK.
4. ALL SITEWORK, SODDING, AND LANDSCAPING SHALL BE IN ACCORDANCE WITH "WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS."
5. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
6. NO PLANT MATERIAL SHALL BE SUBSTITUTED WITHOUT AUTHORIZATION OF LANDSCAPE ARCHITECT.
7. DECIDUOUS TREES SHALL BE STAKED (2 STAKES) AND WRAPPED IMMEDIATELY AFTER PLANTING.
8. ALL TREES, SHRUBS, BEDS & GROUND COVERS SHALL BE MULCHED WITH AT LEAST 3" OF SHREDDED BARK MULCH.
9. PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, DRAWING SHALL PREVAIL WHERE CONFLICT OCCURS.
10. ALL DECIDUOUS TREES SHALL BE PLANTED AT LEAST 5' FROM ROW AND CONIFEROUS TREES AT LEAST 10' FROM ROW.
11. ALL DISTURBED AREAS SHALL BE SODDED UNLESS NOTED OTHERWISE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF IDENTIFICATION TAGS, CONTAINERS, AND BURLAP CORDS ON ALL PLANT MATERIAL PRIOR TO COMPLETION OF THE CONTRACT.
13. NOTHING SHALL BE ERECTED, PLACED, OR PLANTED OR ALLOWED TO GROW IN SUCH A MANNER TO IMPEDE VISION BETWEEN A HEIGHT OF 2½' & 10' ABOVE THE CENTERLINE GRADES OF THE VISION CLEARANCE TRIANGLES.
14. THERE SHALL BE 2 SHRUBS PER ELECTRICAL TRANSFORMER, A/C UNIT OR METER CLUSTER.

PLANTING SCHEDULE

KEY	QUANTITY	BOTANICAL/ COMMON NAME	SIZE	CONDITION	REMARKS
AR	18	Acer rubrum RED SUNSET MAPLE	2 1/2" CAL.	TS/ B&B	SEE PLAN
TA	15	Tilia americana AMERICAN LINDEN	2 1/2" CAL.	TS/ B&B	SEE PLAN
GT	11	Gleditsia triacanthos SKYLINE HONEYLOCUST	1 1/2" CAL.	TS/ B&B	SEE PLAN
MP	17	Malus x 'Prairie Fire' PRAIRIE FIRE CRAB	1 1/2" CAL.	TS/ B&B	SEE PLAN
MS	17	Malus x 'Spring Snow' SPRING SNOW CRAB	1 1/2" CAL.	TS/ B&B	SEE PLAN
PW	2	Pinus strobus WHITE PINE	6-7HT.	TS/ B&B	SEE PLAN
AC	16	Abies concolor WHITE FIR	6-7HT.	TS/ B&B	SEE PLAN
PP	16	Picea pungens glauca COLORADO BLUE SPRUCE	6-7HT.	TS/ B&B	SEE PLAN
LP	110	Spiraea japonica 'Little Princess' LITTLE PRINCESS SPIREA	18"-24" HT.	CONT.	SEE PLAN
EA	110	Euonymus alatus 'Compactus' COMPACT BURNING BUSH	18"-24" HT.	CONT.	SEE PLAN
VT	110	Viburnum trilobum AMERICAN CRANBERRYBUSH	18"-24" HT.	CONT.	SEE PLAN

LEGEND
EXISTING/PROPOSED

- PLAT BOUNDARY
- W 8" — WATER MAIN & SIZE
- SAN 8" — SANITARY SEWER & SIZE
- ST 24" — STORM SEWER & SIZE
- UGE — UNDERGROUND ELECTRIC CABLE
- UGT — UNDERGROUND TELEPHONE CABLE
- CTV — UNDERGROUND CABLE TV
- G 4" — GAS MAIN & SIZE
- MANHOLE
- INTAKE
- HYDRANT
- STREET LIGHT
- UTILITY BOX/TELEPHONE RISER
- SILT FENCE
- CONTOURS
- SECTION CORNER
- FOUND CORNER
- SET CORNER W/ 5/8" I.R. CAP #12265
- APPROXIMATE LOCATION OF EXISTING TREES (NOT INCLUDED IN PLANT SCHEDULE)
- TRANSFORMER LOCATION

PLANTING REQUIREMENTS

68 UNITS X 2 TREES PER UNIT	=	136 TREES
PLUS 1 OVERSTORY TREE PER PARKING ISLAND	=	8 TREES
TOTAL REQUIRED	=	144 TREES

THERE SHALL BE 2 SHRUBS FOR EACH A/C UNIT, METER CLUSTER AND TRANSFORMER.

2	X	10	TRANSFORMERS	= 20
2	X	136	A/C UNITS	= 136
2	X	17	METER CLUSTERS	= 34
			TOTAL SHRUBS REQUIRED	= 326

PLANTINGS PROVIDED

TREES:

50% OVERSTORY DECIDUOUS (34 NEW + 34 EXISTING)	=	68
25% UNDERSTORY	=	34
25% CONIFERS	=	34
PARKING ISLAND TREES	=	8
TREES		144 TREES

SHRUBS:

TOTAL SHRUBS PROVIDED	=	330

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

LANDSCAPE PLAN
WILLIAMS POINTE TOWNHOMES PLAT 1

CEC
Civil Engineering Consultants, Inc.
2400 86th Street . Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@ceclac.com

Scale: 1"=60'
0' 20' 40' 60' 120'
NORTH

DATE:	MARCH 05, 2013	SHEET 4 OF 4
REVISIONS:	MARCH 19, 2013	
JUNE 11, 2013	JUNE 25, 2013	
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DWG.BY
E-6934

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