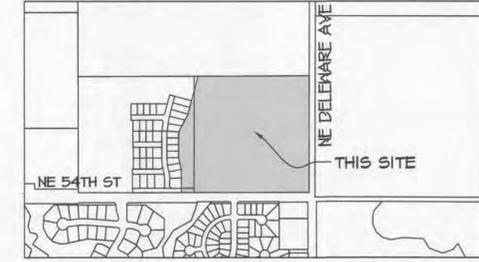


PRELIMINARY PLAT / SITE PLAN NORTHGATE EAST

ANKENY, IOWA

PROPERTY OWNER:
JERRY'S HOMES, INC.
10430 NEW YORK AVE STE C
URBANDALE, IOWA 50322
515.278.5442, FAX# 515.278.0661
CONTACT: JAY COWAN

PREPARED FOR:
JERRY'S HOMES, INC.
10430 NEW YORK AVE STE C
URBANDALE, IOWA 50322
515.278.5442, FAX# 515.278.0661
CONTACT: JAY COWAN



VICINITY SKETCH

LEGAL DESCRIPTION

A PARCEL OF LAND IN THE S1/4 SE1/4 AND SE1/4 SE1/4 OF SECTION 36, TOWNSHIP 61 NORTH, RANGE 24 WEST OF THE 5TH P.M., CITY OF ANKENY, POLK COUNTY, IOWA THAT IS PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SE CORNER OF SAID SECTION 36; THENCE S89°51'52"W, 1304.40 FEET ALONG THE SOUTH LINE OF SAID SE1/4 SE1/4 TO THE SE CORNER OF SAID S1/4 SE1/4; THENCE S84°51'52"W, 146.87 FEET ALONG THE SOUTH LINE OF SAID S1/4 SE1/4 TO A POINT; THENCE N00°08'08"W, 266.90 FEET ALONG A LINE THAT COINCIDES WITH THE EAST LINE OF NORTHGATE PLAT 1, AN OFFICIAL PLAT RECORDED IN BOOK 14454, PAGE 184 AT THE POLK COUNTY RECORDER'S OFFICE TO THE NE CORNER OF LOT 2 OF SAID NORTHGATE PLAT 1; THENCE N12°10'10"W, 130.77 FEET ALONG SAID EAST LINE OF NORTHGATE PLAT 1 TO THE NE CORNER OF LOT 4 OF SAID NORTHGATE PLAT 1; THENCE N00°08'08"W, 246.54 FEET ALONG SAID EAST LINE TO THE NE CORNER OF SAID NORTHGATE PLAT 1; SAID NE CORNER ALSO BEING THE SE CORNER OF NORTHGATE PLAT 2, AN OFFICIAL PLAT RECORDED IN BOOK 14454, PAGE 134 AT THE POLK COUNTY RECORDER'S OFFICE; THENCE N26°36'12"E, 144.80 FEET ALONG THE EAST LINE OF SAID NORTHGATE PLAT 2 TO THE NE CORNER OF LOT 6 OF SAID NORTHGATE PLAT 2; THENCE N15°00'00"E, 513.66 FEET ALONG A LINE THAT COINCIDES WITH THE EAST LINE OF SAID NORTHGATE PLAT 2 TO A POINT ON THE NORTH LINE OF SAID SE1/4 SE1/4; THENCE N84°44'34"E, 1286.64 FEET ALONG THE NORTH LINE OF SAID SE1/4 SE1/4 TO THE NE CORNER OF SAID SE1/4 SE1/4; THENCE S00°06'05"W, 1324.11 FEET ALONG THE EAST LINE OF SAID SE1/4 SE1/4 TO THE POINT OF BEGINNING AND CONTAINING 43.43 ACRES MORE OR LESS.

CURRENT ZONING

P.U.D. NORTHGATE EAST

PROPOSED ZONING

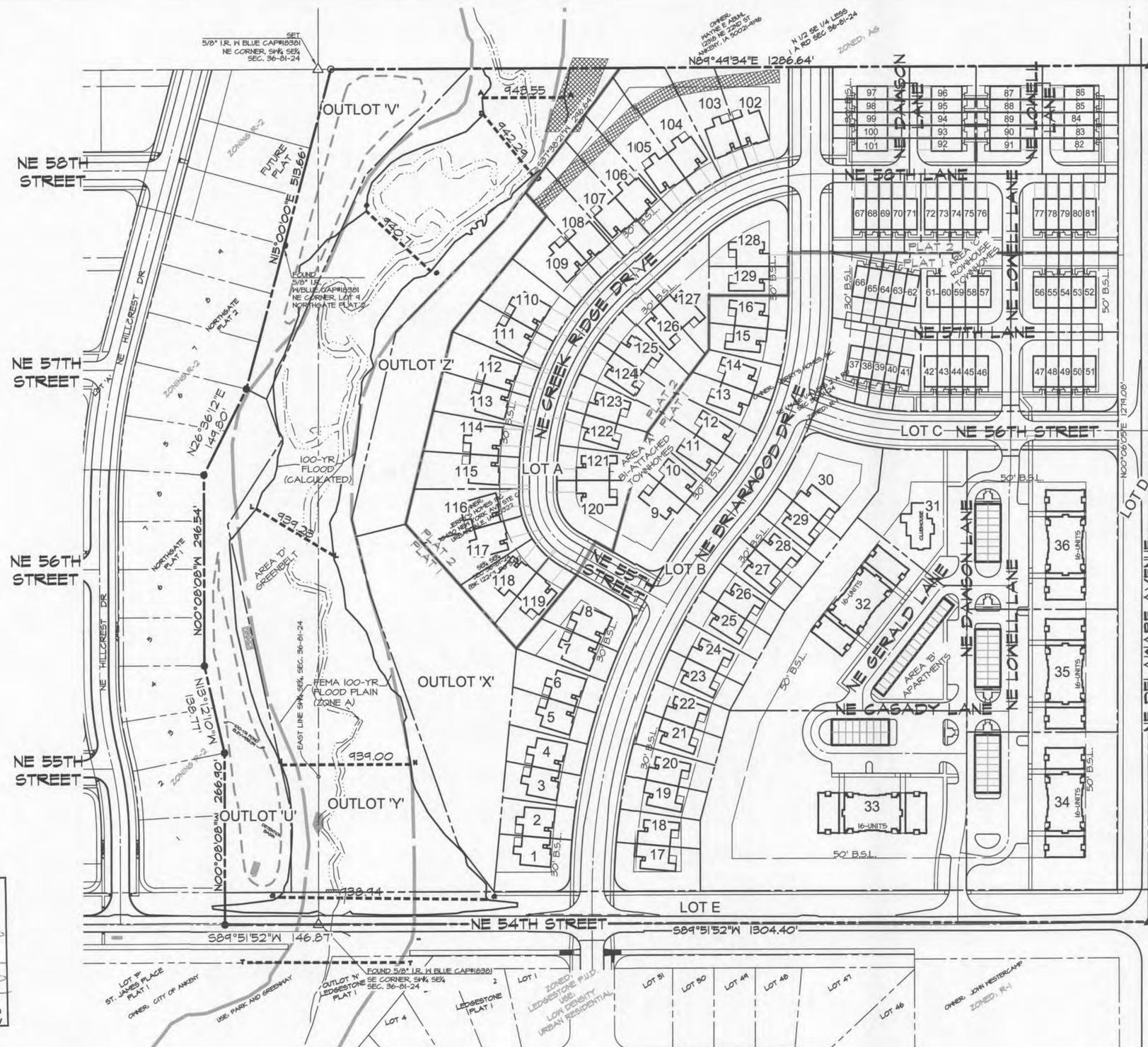
P.U.D. NORTHGATE EAST

FLOOD ZONE DESIGNATION

FEMA FLOOD INSURANCE RATE MAP, PANEL 180401-0034-B REVISED MARCH 1, 1984

GENERAL LEGEND

PROPOSED	EXISTING
▲ FOUND SECTION CORNER	○ LOT LINE
△ SET SECTION CORNER	○ X SANITARY/STORM MANHOLE
● FOUND CORNER	○ WATER VALVE
○ SET CORNER	○ FIRE HYDRANT
--- PLAT BOUNDARY	○ STORM SEWER SINGLE INTAKE
--- SECTION LINE	○ STORM SEWER DOUBLE INTAKE
--- LOT LINE	○ STORM SEWER ROUND INTAKE
--- CENTERLINE	○ FLARED END SECTION
--- EASEMENT LINE	○ DECIDUOUS TREE
▭ FLARED END SECTION	○ CONIFEROUS TREE
○ TYPE S14-501 STORM INTAKE	○ SHRUB
○ TYPE S14-502 STORM INTAKE	○ POWER POLE
○ TYPE S14-503 STORM INTAKE	○ STREET LIGHT
○ TYPE S14-504 STORM INTAKE	○ GUY ANCHOR
○ TYPE S14-505 STORM INTAKE	○ ELECTRIC TRANSFORMER
○ TYPE S14-506 STORM INTAKE	○ GAS METER
○ TYPE S14-511 STORM INTAKE	○ TELEPHONE RISER
○ TYPE S14-512 STORM INTAKE	○ SIGN
○ TYPE S14-513 STORM INTAKE	○ CATV UNDERGROUND TELEVISION
○ TYPE S14-401 STORM MANHOLE	○ UGE UNDERGROUND ELECTRIC
○ TYPE S14-402 STORM MANHOLE	○ -G- UNDERGROUND GAS
○ TYPE S14-403 STORM MANHOLE	○ -UGF- UNDERGROUND FIBER OPTIC
○ TYPE S14-403 STORM MANHOLE	○ -UGT- UNDERGROUND TELEPHONE
○ TYPE S14-301 SANITARY MANHOLE	○ -OH- OVERHEAD ELECTRIC
○ TYPE S14-302 SANITARY MANHOLE	○ -SAN- SANITARY SEWER WITH SIZE
○ TYPE S14-304 SANITARY MANHOLE	○ -ST- STORM SEWER WITH SIZE
○ STORM/SANITARY CLEANOUT	○ -M- WATER MAIN WITH SIZE
○ WATER VALVE	○ -926- EXISTING CONTOUR
○ FIRE HYDRANT ASSEMBLY	○ TREELINE
○ BLOW-OFF HYDRANT	○ B.S.L. BUILDING SETBACK LINE
○ DETECTABLE WARNING PANEL	○ P.U.E. PUBLIC UTILITY EASEMENT
○ SANITARY SEWER WITH SIZE	○ M.O.E. MINIMUM OPENING ELEVATION
○ -SAN- SANITARY SERVICE	○ P.V.T. PRIVATE INFRASTRUCTURE
○ -ST- STORM SEWER WITH SIZE	
○ -ST- STORM SERVICE	
○ -W- WATER SEWER WITH SIZE	
○ -W- WATER SERVICE	
○ PROPOSED CONTOUR	
○ SILT FENCE	
○ RIP RAP	
○ ADDRESS	



ROLL CALL
Plan & Zoning Commission
Ankeny, IA

Date	Present	Absent
10-15-2016	Anderson	Pass
	Fack	Pass
	Hunter	Pass
	Mollenhauer	Pass
	Osion	Pass
	Ripper	Pass
	Sherman	Pass
	West	Pass
	Whiting	Pass
	Ayco	Pass

APPROVED
Chairperson: T. Fack
Secretary: S. Ferguson

BENCHMARK
BURY BOLT ON HYDRANT @ THE NW CORNER OF NE HILLCREST DRIVE & NE 55TH STREET
ELEVATION = 451.10

BURY BOLT ON HYDRANT @ THE NW CORNER OF NE HILLCREST DRIVE & NE 56TH STREET
ELEVATION = 459.10

DENSITY SCHEDULE

AREA	PROPOSED LAND USE	ACRES	MAXIMUM DENSITY (Units/Ac)	MAXIMUM # OF UNITS	PROPOSED # OF UNITS	PROPOSED DENSITY (Units/Ac)
A	BIATTACHED TOWNHOMES	13.30	6.00	67	58	4.36
B	APARTMENTS	8.61	15.00	118	80	9.29
C	TOWNHOMES	5.54	15.00	80	65	11.73
D	CITY GREENBELT	8.68				
E	RIGHT-OF-WAY	7.30				
TOTAL		43.43	7.27	265	203	4.67

PROPERTY OWNER LIST

Name of Property Owner	Legal Description	Mailing Address
KEVIN M & LYNN SHANAHAN	LOT 51 LEDGESTONE PLAT 1	902 NE 53RD CT ANKENY, IA 50021-6794
KEVIN J HAUKSH	LOT 50 LEDGESTONE PLAT 1	906 NE 53RD CT ANKENY, IA 50021-6794
TODD R HOFFMAN	LOT 49 LEDGESTONE PLAT 1	910 NE 53RD CT ANKENY, IA 50021-6794
PHILLIP T & ERIN M RAMSEY	LOT 48 LEDGESTONE PLAT 1	914 NE 53RD CT ANKENY, IA 50021-6794
RYAN L & ANDREA D MAXSON	LOT 47 LEDGESTONE PLAT 1	918 NE 53RD CT ANKENY, IA 50021-6794
JOHN W & AMBER D BIGA	LOT 46 LEDGESTONE PLAT 1	922 NE 53RD CT ANKENY, IA 50021-6794
JOHN S & CAROL D WESTERCAMP	N 22ND E 37TH NE FRL 1/4 LESS 48A RD SEC 1-80-24	5250 NE DELAWARE AVE ANKENY, IA 50021-7419
TIMOTHY G & KIMBERLY A MANNING	PARCEL B BOOK 8244 PAGE 389 REG 229F S OF NE COR THN S 337 SF W 370F N 337 08F E 370F TO POB NE FRL 1/4 LESS 35A RD SEC 1-80-24	5290 NE DELAWARE AVE ANKENY, IA 50021-7418
WAYNE E & KATHRYN L ABULH	N 1/2 SE 1/4 LESS 1 A RD SEC 36-81-24	12318 NE 22ND ST ANKENY, IA 50021-8196
LEDGESTONE HOMEOWNERS ASSOC	OUTLOT N LEDGESTONE PLAT 1	POB 42 ANKENY, IA 50021-0042
LEDGESTONE HOMEOWNERS ASSOC	OUTLOT P LEDGESTONE PLAT 1	POB 42 ANKENY, IA 50021-0042
LOSHAK J & STEFANIE L BOYD	LOT 4 LEDGESTONE PLAT 1	3218 NE HILLCREST DR ANKENY, IA 50021-6827
JEFFREY D BENNETT	LOT 3 LEDGESTONE PLAT 1	3222 NE HILLCREST DR ANKENY, IA 50021-6827
MICHAEL W & NANCY A WILSON	LOT 2 LEDGESTONE PLAT 1	3226 NE HILLCREST DR ANKENY, IA 50021-6827
STEPHEN W & JESSICA L LEVERETT	LOT 1 LEDGESTONE PLAT 1	3230 NE HILLCREST DR ANKENY, IA 50021-6827

SHEET INDEX

SHEET NO SHEET TITLE

- 01 SITE PLAN COVER
- 02 NOTES, DETAILS & EXISTING CONDITIONS
- 03 DIMENSION TABLES
- 04 APARTMENTS - DIMENSIONS
- 05 ROYHOUSE - DIMENSION
- 06 TOWNHOUSE - SOUTH DIMENSION
- 07 TOWNHOUSE - NORTH DIMENSION
- 08 APARTMENTS - UTILITY
- 09 ROYHOUSE - UTILITY
- 10 TOWNHOUSE - SOUTH UTILITY
- 11 TOWNHOUSE - NORTH UTILITY
- 12 SITE PLAN SOUTH GRADING
- 13 SITE PLAN NORTH GRADING
- 14 APARTMENT SOUTH DETAIL
- 15 APARTMENT NORTH DETAIL
- 16 GRADING NOTES & DETAIL
- 17 APARTMENTS - LANDSCAPING
- 18 ROYHOUSE - LANDSCAPING

CONSTRUCTION SCHEDULE

04/30/16 TO 10/15/16 - UTILITY CONSTRUCTION
10/15/16 TO 11/15/16 - PAVING
11/15/16 TO 11/31/16 - FINAL GRADING/SEEDING

CERTIFICATIONS

MELISSA M HILLS 16023
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.
DATE: 11-1-2016
PAGES OR SHEETS COVERED BY THIS SEAL: 1-18

JEFFREY A GADDIS 18381
I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.
DATE: 11-1-2016
PAGES OR SHEETS COVERED BY THIS SEAL: 1-7



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

CEC

NORTHGATE EAST
ANKENY, IOWA

PRELIMINARY PLAT / SITE PLAN COVER

CITY OF ANKENY DESIGN APPROVAL DATE:

CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE:

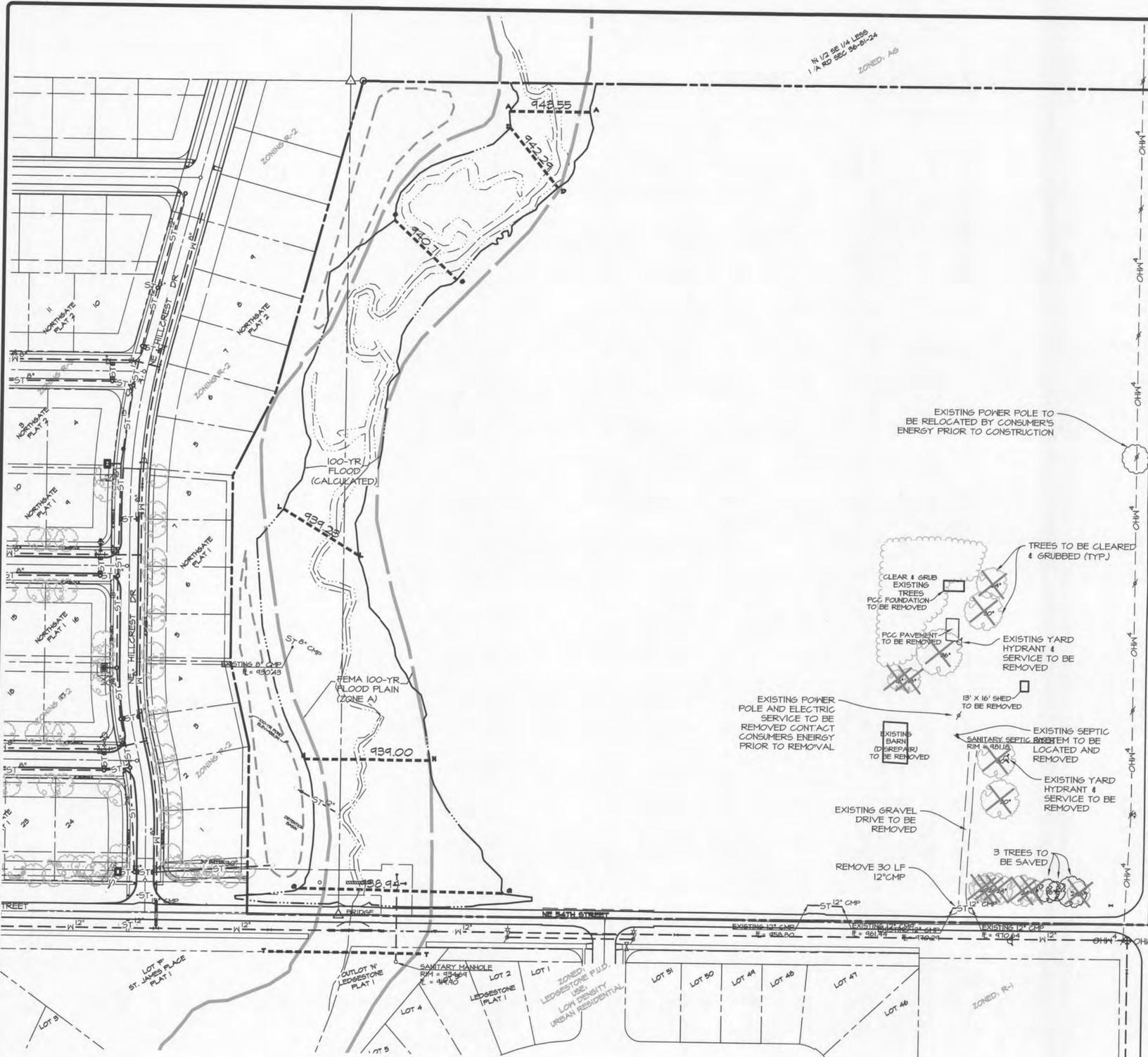
REVISIONS

DATE	REVISIONS	COMMENTS
07-18-2016	1	05-26-2016
	2	04-28-2016
	3	10-07-2016
	4	10-17-2016
	5	10-27-2016
	6	11-01-2016

DATE OF SURVEY: 05-05-2015
DESIGNED BY: MHH
DRAWN BY: CH

SHEET 01 OF 18

E6970



DEMOLITION NOTES

- ALL DEMOLITION SHALL ADHERE TO THE CURRENT SUDAS SPECIFICATIONS FOR DEMOLITION FOUND IN SECTION III.0. PLEASE REFER TO SECTION III.0, 3.03 SPECIFICALLY FOR REMOVAL OF ANY FUEL STORAGE TANKS.
- CONTRACTOR MUST FOLLOW POLK COUNTY PUBLIC HEALTH GUIDELINES FOR SEPTIC AND WELL REMOVALS.
- ALL RECYCLED CONCRETE USED FOR FES PROTECTION MUST BE BROKEN INTO PIECES, NO PIECE MAY BE LARGER THAN 30" ACROSS, AND ALL PIECES MUST AVERAGE NO MORE THAN 14" ACROSS. ALL REINFORCEMENT MATERIAL MUST BE COMPLETELY REMOVED OR CUT FLUSH WITH THE SURFACE OF THE CONCRETE. RECYCLED CONCRETE SHALL NOT BE USED ALONG THE STREAM BANK.

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ANKENY STANDARD SPECIFICATIONS FOR STREET AND UTILITY IMPROVEMENTS AND CURRENT EDITION OF SUDAS IN EFFECT AT THE TIME OF CONSTRUCTION.
- CONTRACTOR SHALL ARRANGE FOR TESTING AND INSPECTION AND NOTIFY THE FOLLOWING AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION:
 - CITY OF ANKENY ENGINEER'S OFFICE
 - JERRY'S HOMES, INC.
 - CIVIL ENGINEERING CONSULTANTS, INC.
 - IOWA ONE-CALL
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND RELEASES NEEDED TO CONSTRUCT THIS PROJECT.
- THE LOCATION OF EXISTING FACILITIES AND APPURTENANCES SHOWN ON THIS PLAN ARE BASED ON AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING TO DETERMINE EXACT FACILITIES LOCATIONS. CIVIL ENGINEERING CONSULTANTS, INC. DOES NOT GUARANTEE THE ACCURACY OF EXISTING FACILITIES AS SHOWN OR THAT ALL EXISTING FACILITIES ARE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL PUBLIC AND PRIVATE UTILITY PROVIDERS SERVING THIS AREA, AND IOWA ONE CALL, TO DETERMINE THE EXTENT AND PRECISE LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION BEGINS.
- IF THERE IS A DISCREPANCY BETWEEN THE DETAILED PLANS AND QUANTITIES SUMMARY PLEASE CONTACT CIVIL ENGINEERING CONSULTANTS, INC.
- MANHOLE AND CASTING TYPES ARE FROM SUDAS SPECS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND RECONNECTING ANY FARM TILE DAMAGED DURING CONSTRUCTION & FOR RECORDING THE LOCATION OF TILE.
- ALL TRENCH BACKFILL SHALL BE 95% STANDARD PROCTOR DENSITY.
- FOLLOW SUDAS SOIL COMPACTION SPECIFICATIONS FOR SANITARY TRENCHES AND MANHOLE EXCAVATIONS.
- A GEOTECHNICAL REPORT FOR THIS PROJECT CAN BE OBTAINED BY CONTACTING THE ENGINEER AND ASKING FOR GEOTECHNICAL EXPLORATION REPORT. THE CONTRACTOR SHALL REFER TO AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECH INC'S REPORT NO. 021608700, DATED AUGUST 11, 2016.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ASBUILT LOCATIONS OF ALL SANITARY SEWER SERVICES & PROVIDING THIS INFORMATION TO THE ENGINEER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR INSPECTIONS.
- GRADING IS PERMITTED AT THE OWNER'S RISK WITH THE SUBMITTAL OF THE SNIFFP & COSESCO PERMIT APPLICATIONS. NO GRADING OR CONSTRUCTION IS ALLOWED WITHIN THE FLOODPLAIN UNTIL A JOINT 404 PERMIT IS APPROVED BY THE IDNR AND ARMY CORP OF ENGINEERS. INSTALL CONSTRUCTION FENCE TO DELINEATE THE FLOODPLAIN & KEEP CONSTRUCTION OUT OF THE FLOODPLAIN. DISTURBED AREAS SHALL BE STABILIZED PRIOR TO FREEZING CONDITIONS.
- OUTLOT 'Y' IS TO BE DEDICATED TO THE CITY AS GREENBELT & FLOOD PLAIN.
- OUTLOT 'X' & OUTLOT 'Z' SHALL BE USED FOR STORM WATER DETENTION, STORM SEWER AND DRAINAGE EASEMENT. THESE AREAS WILL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
- LOTS A, B, C, D, & E SHALL BE DEDICATED TO THE CITY FOR STREET R.O.W.
- THE RESTRICTIVE COVENANTS FOR LOTS 31-36 SHALL ADDRESS INGRESS/EGRESS BETWEEN THESE LOTS.

STORM NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT LOCATIONS OF ALL STORM SEWER SERVICES AND PROVIDE THIS INFORMATION TO THE ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY FARM TILE DAMAGE DURING CONSTRUCTION AND RECORDING LOCATION OF TILE.
- MANHOLE INTAKE & CASTING TYPES LISTED ARE PER THE CURRENT EDITION OF THE IOWA S.U.D.A.S. SPECS.
- PROVIDE APRON GUARDS PER SUDAS SECTION 4030.204 & CONCRETE FOOTINGS PER SUDAS FIGURE 4030.221 ON ALL FLARED END SECTIONS. CONTRACTOR SHALL TIE THE LAST THREE PIPE JOINTS AT THE FLARED END SECTION PER SUDAS SECTION 4030.302.
- FABRIC WRAP JOINTS & DO NOT APPLY SEALANT PER SUDAS FIGURE 4020.211. FOLLOW SUDAS FIGURE 4020.231, CASE D, TYPE 2 INSTALLATION FOR PIPE BACKFILL. POROUS BACKFILL TO EXTEND 6-INCH ABOVE TOP OF PIPE.
- PLACE ANIMAL GUARD AT INLET END OF 8-INCH A2000 STUB OUT.
- RECYCLED CONCRETE FROM THE FOUNDATION DEMOLITION MAY BE USED IN LIEU OF RIPRAP IF IT DOES NOT CONTAIN METAL REINFORCING. RECYCLED CONCRETE SHALL NOT BE PLACED ON THE STREAM BANK.
- PROVIDE STEPS IN PUBLIC STORM MANHOLES.

SANITARY NOTES

- MANHOLE AND CASTING TYPES ARE FROM SUDAS SPECS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ASBUILT LOCATIONS OF ALL SANITARY SEWER SERVICES & PROVIDING THIS INFORMATION TO THE ENGINEER.
- ALL TRENCH BACKFILL SHALL BE 95% STANDARD PROCTOR DENSITY.
- FOLLOW SUDAS SOIL COMPACTION SPECIFICATIONS FOR SANITARY TRENCHES AND MANHOLE EXCAVATIONS.
- ALL SANITARY SEWER MANHOLES SHALL INCLUDE 1 AND 1 BARRIERS IN THEM. CASTINGS SHALL BE TYPE 'A' OR 'C', NO THREE PIECE CASTINGS ARE ALLOWED.
- CONNECTION TO EXISTING MANHOLE SHALL BE CORE DRILLED.

WATER NOTES

- ALL FIRE HYDRANTS SHALL BE 3 FEET FROM THE MAIN EXCEPT WHERE CONFLICTS WITH SIDEWALKS OCCUR.
- HYDRANTS, MANHOLE COVERS AND VALVE BOXES SHALL BE SET TO CONFORM TO FINISHED PAVEMENT ELEVATIONS.
- WATER MAIN TO HAVE 5.5 FEET BURY (TYPICAL) EXCEPT AT CRITICAL CROSSINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING THE AS-BUILT LOCATIONS OF ALL WATER SERVICES AND PROVIDING THAT INFORMATION TO THE ENGINEER.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

PAVING NOTES

- ALL ELEVATIONS ARE PROPOSED FINISHED GRADE AT TOP OF SLAB UNLESS OTHERWISE NOTED.
- ALL STREETS SHALL HAVE 6-INCH CURBS. DROP CURB WILL BE PROVIDED AT SIDEWALK RAMPS AND ACCESSIBLE LOCATIONS WHERE NOTED. THE DRIVEWAY APPROACH FROM THE EDGE OF THE STREET THROUGH THE BACKSIDE OF THE SIDEWALK SHALL BE MINIMUM 7-INCH THICKNESS.
- PROVIDE CURB DROPS FOR SIDEWALKS AT INTERSECTIONS.
- PLACE DEAD END SIGNS AT THE END OF ALL STREETS.
- ALL REINFORCED STEEL SHALL BE EPOXY COATED.
- COMPACT PAVEMENT SUBGRADE TO 95% STANDARD PROCTOR DENSITY FOR A DEPTH OF 1-FOOT. MOISTURE CONTENT SHALL BE -1% TO +4% OF OPTIMUM. SUBGRADE TO BE COMPACTED IN 6-INCH LIFTS.
- USE IDOT C-4 MIX ON ALL STREETS.
- DURING SUBGRADE PREPARATION, IN FILL AREAS, GRADE SHALL BE PROOF-ROLLED PRIOR TO PLACEMENT OF ONE FOOT SUBGRADE & COMPACTION. NOTIFY SOILS ENGINEER TO PROVIDE ON-SITE INSPECTION OF PROCESS.
- TRAIL TO BE INSTALLED BY THE DEVELOPER. ALL OTHER WALKS TO BE INSTALLED BY THE HOME BUILDER.
- ALL HANDICAP STALLS SHALL BE AFFIXED WITH VERTICAL SIGNAGE WITH THE INTERNATIONAL SYMBOL FOR ACCESSIBILITY (WHITE ON BLUE) AND INDICATING THE FINE FOR IMPROPER USE.

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



DATE:	REVISIONS	COMMENTS
07-18-2016	1	08-26-2016
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NORTHGATE EAST
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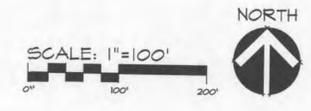
NOTES, DETAILS & EXISTING CONDITIONS

CITY OF ANKENY DESIGN APPROVAL DATE: _____

CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____

SHEET
02
 OF
 15

E6410



016-FILE1516-60016079L_CADD Drawing/Construction Document/02 SF DDM.dwg, 11/13/16 11:23:06 AM, autocad, L1

LINE #	DIRECTION	LENGTH
L1	N71°08'28"W	6.58'
L2	N84°53'55"W	10.45'
L3	N84°53'55"W	26.00'
L4	N84°53'55"W	20.00'
L5	N84°53'55"W	20.00'
L6	N84°53'55"W	20.00'
L7	N84°53'55"W	55.50'
L8	N84°53'55"W	55.50'
L9	N84°53'55"W	20.00'
L10	N84°53'55"W	20.00'
L11	N84°53'55"W	20.00'
L12	N84°53'55"W	24.50'
L13	N00°06'05"E	48.50'
L14	S00°06'05"W	123.50'
L15	S00°06'05"W	123.50'
L16	S00°06'05"W	123.50'
L17	S00°06'05"W	123.50'
L18	N00°06'05"E	123.50'
L19	S00°06'05"W	123.50'
L20	S00°06'05"W	123.50'

LINE #	DIRECTION	LENGTH
L21	S00°06'05"W	123.50'
L22	S00°06'05"W	123.50'
L23	S00°06'05"W	123.50'
L24	S04°18'28"W	127.05'
L25	S04°18'28"W	127.88'
L26	S04°18'28"W	127.63'
L27	S04°18'28"W	126.24'
L28	N80°41'32"W	45.01'
L29	N80°41'32"W	56.02'
L30	N80°41'32"W	20.00'
L31	N80°41'32"W	20.00'
L32	N80°41'32"W	20.00'
L33	N80°41'32"W	20.00'
L34	N80°41'32"W	20.00'
L35	N80°41'32"W	20.00'
L36	N80°41'32"W	32.77'
L37	N80°41'32"W	21.76'
L38	S84°53'55"E	3.18'
L39	S84°53'55"E	26.00'
L40	S84°53'55"E	30.00'

LINE #	DIRECTION	LENGTH
L41	S84°53'55"E	20.00'
L42	S84°53'55"E	20.00'
L43	S84°53'55"E	20.00'
L44	S84°53'55"E	20.00'
L45	S84°53'55"E	20.00'
L46	S84°53'55"E	20.00'
L47	S84°53'55"E	55.50'
L48	S84°53'55"E	51.50'
L49	S84°53'55"E	55.50'
L50	S84°53'55"E	20.00'
L51	S84°53'55"E	20.00'
L52	S84°53'55"E	20.00'
L53	S84°53'55"E	54.50'
L54	N00°06'05"E	122.78'
L55	N00°06'05"E	122.78'
L56	S00°06'05"W	122.78'
L57	S00°06'05"W	122.78'
L58	S00°06'05"W	122.78'
L59	N00°06'05"E	122.78'
L60	S00°06'05"W	122.78'

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C11	88°30'28"	25.00'	38.62'	24.36'	34.84'	N45°36'38"E
C12	3°24'54"	935.00'	55.73'	27.87'	55.72'	N03°03'51"E
C13	3°05'16"	935.00'	50.34'	25.20'	50.38'	N06°18'56"E
C14	3°05'16"	935.00'	50.34'	25.20'	50.38'	N04°24'12"E
C15	3°05'16"	935.00'	50.34'	25.20'	50.38'	N12°24'28"E
C16	3°05'16"	935.00'	50.34'	25.20'	50.38'	N15°34'44"E
C17	3°05'16"	935.00'	50.34'	25.20'	50.38'	N18°40'00"E
C18	3°05'16"	935.00'	50.34'	25.20'	50.38'	N21°45'17"E
C19	2°56'52"	935.00'	48.10'	24.06'	48.10'	N24°46'20"E
C10	86°42'56"	25.00'	37.84'	23.61'	34.33'	N17°06'42"W
C11	6°34'07"	935.00'	107.14'	53.66'	107.14'	N24°31'50"E
C12	86°42'56"	25.00'	37.84'	23.61'	34.33'	N16°10'22"E
C13	5°34'21"	935.00'	92.30'	46.14'	92.26'	N35°38'34"E
C14	2°26'10"	935.00'	34.76'	14.88'	34.75'	N34°41'20"E
C15	0°34'21"	465.00'	5.32'	2.66'	5.32'	N40°34'45"E
C16	6°54'34"	465.00'	56.08'	28.07'	56.04'	N36°47'47"E
C17	6°40'34"	465.00'	54.14'	27.13'	54.16'	N30°00'11"E
C18	6°58'21"	465.00'	56.54'	28.33'	56.55'	N23°10'41"E
C19	6°52'34"	465.00'	58.81'	27.44'	58.77'	N16°51'33"E
C20	6°51'04"	465.00'	55.60'	27.83'	55.57'	N04°23'24"E

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C21	5°51'46"	465.00'	47.58'	23.81'	47.56'	N03°01'54"E
C22	91°42'20"	25.00'	40.01'	25.76'	35.88'	S44°16'58"E
C23	3°21'55"	865.00'	50.81'	25.41'	50.80'	N03°15'04"E
C24	3°26'58"	865.00'	52.08'	26.05'	52.07'	N06°34'36"E
C25	3°26'58"	865.00'	52.08'	26.05'	52.07'	N10°06'34"E
C26	3°24'40"	865.00'	51.50'	25.76'	51.44'	N13°32'23"E
C27	3°25'24"	865.00'	51.68'	25.85'	51.68'	N16°57'25"E
C28	3°26'14"	865.00'	51.84'	25.45'	51.88'	N20°23'14"E
C29	3°26'14"	865.00'	51.84'	25.45'	51.88'	N23°44'28"E
C30	3°27'40"	865.00'	52.25'	26.13'	52.25'	N27°16'25"E
C31	3°26'56"	865.00'	52.07'	26.04'	52.06'	N30°43'43"E
C32	3°26'56"	865.00'	52.08'	26.05'	52.07'	N34°10'41"E
C33	3°26'14"	865.00'	51.84'	25.45'	51.88'	N37°31'16"E
C34	1°34'02"	865.00'	23.66'	11.83'	23.66'	N40°07'24"E
C35	2°30'43"	535.00'	23.46'	11.73'	23.45'	N34°34'04"E
C36	5°04'44"	535.00'	48.22'	24.12'	48.20'	N35°48'48"E
C37	8°44'01"	535.00'	81.57'	40.87'	81.50'	N28°51'48"E
C38	11°16'22"	535.00'	105.26'	52.80'	105.04'	N18°51'32"E
C39	10°13'34"	535.00'	95.41'	47.87'	95.36'	N08°06'34"E
C40	2°53'42"	535.00'	27.03'	13.52'	27.03'	N01°32'56"E

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C41	84°21'50"	25.00'	36.81'	22.65'	33.57'	S66°40'38"W
C42	12°17'51"	430.00'	42.24'	46.32'	42.11'	N77°17'23"W
C43	6°27'36"	430.00'	48.48'	24.27'	48.46'	N86°40'07"W
C44	84°58'50"	25.00'	34.27'	25.00'	35.36'	N44°53'55"W
C45	90°00'13"	25.00'	34.27'	25.00'	35.36'	N45°06'12"E
C46	5°16'35"	370.00'	34.07'	17.05'	34.06'	N87°15'37"W
C47	3°06'00"	370.00'	20.02'	10.01'	20.02'	N83°04'14"W
C48	3°05'52"	370.00'	20.00'	10.00'	20.00'	N74°58'23"W
C49	3°06'16"	370.00'	20.05'	10.03'	20.04'	N76°52'14"W
C50	4°10'44"	370.00'	26.44'	13.50'	26.48'	N73°13'50"W
C51	84°21'44"	25.00'	36.81'	22.65'	33.57'	S28°57'33"E
C52	78°17'41"	25.00'	34.16'	20.35'	31.57'	N34°14'56"E
C53	7°45'42"	330.00'	44.70'	22.34'	44.67'	N74°30'56"E
C54	8°02'06"	330.00'	46.28'	23.18'	46.24'	N66°37'02"E
C55	8°02'06"	330.00'	46.28'	23.18'	46.24'	N58°34'56"E
C56	6°18'53"	330.00'	36.37'	18.20'	36.35'	N51°24'27"E
C57	2°36'04"	430.00'	14.53'	4.77'	14.53'	N46°56'56"E
C58	8°04'13"	430.00'	61.14'	30.65'	61.14'	N41°34'15"E
C59	8°23'06"	430.00'	62.83'	31.52'	62.87'	N33°18'06"E
C60	6°18'26"	430.00'	47.34'	23.64'	47.31'	N25°57'14"E

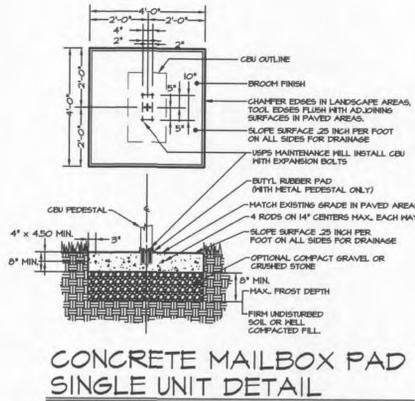
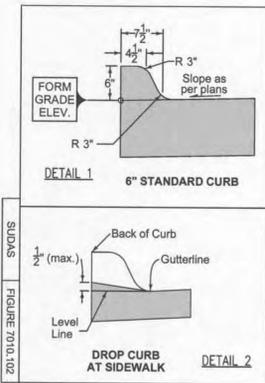
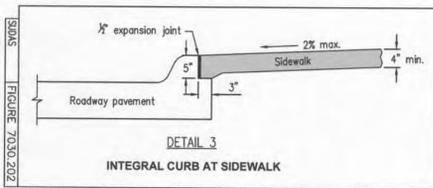
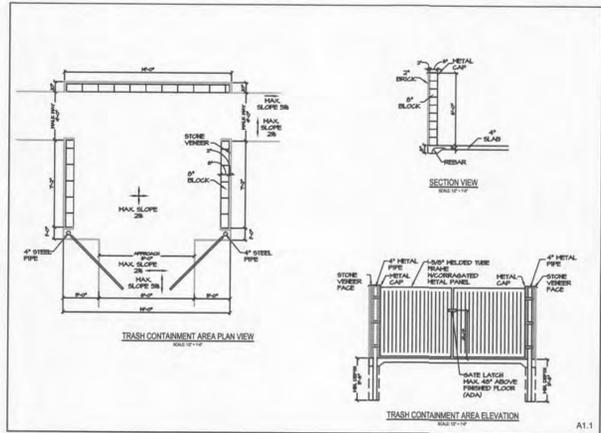
LINE #	DIRECTION	LENGTH
L61	S00°06'05"W	122.78'
L62	S00°06'05"W	122.78'
L63	S00°06'05"W	122.78'
L64	S00°06'05"W	122.78'
L65	S04°18'28"W	119.07'
L66	S04°18'28"W	115.83'
L67	S04°18'28"W	112.54'
L68	S04°18'28"W	104.35'
L69	N00°06'05"E	73.72'
L70	N84°53'55"W	61.24'
L71	N84°53'55"W	52.50'
L72	N84°53'55"W	20.00'
L73	N84°53'55"W	20.26'
L74	N84°53'55"W	20.00'
L75	N84°53'55"W	20.26'
L76	N84°53'55"W	20.00'
L77	N84°53'55"W	20.26'
L78	N84°53'55"W	26.00'
L79	N84°53'55"W	16.48'
L80	N84°53'55"W	26.00'

LINE #	DIRECTION	LENGTH
L81	N84°53'55"W	30.00'
L82	N84°53'55"W	20.00'
L83	N84°53'55"W	20.00'
L84	N84°53'55"W	20.00'
L85	N84°53'55"W	20.00'
L86	N84°53'55"W	20.00'
L87	N84°53'55"W	20.00'
L88	N84°53'55"W	55.50'
L89	N84°53'55"W	51.50'
L90	N84°53'55"W	55.50'
L91	N84°53'55"W	20.00'
L92	N84°53'55"W	20.00'
L93	N84°53'55"W	20.00'
L94	N84°53'55"W	54.50'
L95	N00°06'05"E	122.50'
L96	N00°06'05"E	122.50'
L97	N00°06'05"E	122.50'
L98	N00°06'05"E	122.50'
L99	N00°06'05"E	122.50'
L100	N00°06'05"E	122.50'

LINE #	DIRECTION	LENGTH
L101	N00°06'05"E	122.50'
L102	N00°06'05"E	122.50'
L103	N00°06'05"E	122.50'
L104	N00°06'05"E	122.50'
L105	S00°06'05"W	122.50'
L106	N00°06'05"E	122.50'
L107	N00°06'05"E	122.50'
L108	N00°06'05"E	122.50'
L109	N00°06'05"E	122.50'
L110	N00°06'05"E	122.50'
L111	S84°53'55"E	52.50'
L112	S84°53'55"E	120.50'
L113	S84°53'55"E	20.00'
L114	S84°53'55"E	20.00'
L115	S84°53'55"E	20.00'
L116	S84°53'55"E	26.00'
L117	S84°53'55"E	26.00'
L118	S84°53'55"E	20.00'
L119	S84°53'55"E	104.50'
L120	S84°53'55"E	20.00'

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C61	6°18'26"	430.00'	47.34'	23.64'	47.31'	N14°38'53"E
C62	6°21'10"	430.00'	47.68'	23.86'	47.65'	N13°19'05"E
C63	6°21'10"	430.00'	47.68'	23.86'	47.65'	N06°57'55"E
C64	3°47'21"	430.00'	28.44'	14.22'	28.43'	N01°53'40"E
C65	15°25'31"	130.00'	35.00'	17.61'	34.90'	S07°42'48"E
C66	17°20'20"	130.00'	34.34'	14.82'	34.14'	S24°05'47"E
C67	17°24'30"	130.00'	34.64'	20.00'	34.53'	S41°30'42"E
C68	10°12'44"	130.00'	23.17'	11.62'	23.14'	S55°21'48"E
C69	60°28'10"	70.00'	73.88'	40.80'	70.50'	S30°14'05"E
C70	7°21'58"	370.00'	47.57'	23.82'	47.54'	N03°40'54"E
C71	8°53'40"	370.00'	57.44'	28.78'	57.38'	N11°48'48"E
C72	9°01'56"	370.00'	58.33'	24.22'	58.27'	N20°46'36"E
C73	9°01'56"	370.00'	58.33'	24.22'	58.27'	N24°48'32"E
C74	9°12'34"	370.00'	54.47'	24.80'	54.41'	N38°55'47"E
C75	4°42'51"	370.00'	30.45'	15.23'	30.44'	N45°53'32"E
C76	2°16'28"	270.00'	10.72'	5.36'	10.72'	N44°23'14"E
C77	22°28'54"	270.00'	105.44'	53.66'	105.26'	N61°45'55"E
C78	10°10'54"	25.00'	46.73'	33.84'	40.22'	N53°26'46"W

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C200	41°02'33"	900.00'	64.70'	336.88'	631.00'	N20°23'04"E
C201	24°34'58"	900.00'	465.44'	238.35'	460.81'	S14°41'51"W
C202	11°22'33"	900.00'	178.70'	84.65'	178.41'	S35°13'08"W
C203	40°48'20"	500.00'	356.10'	185.48'	348.62'	N20°30'15"E
C204	22°02'53"	500.00'	142.41'	47.41'	141.22'	N24°52'54"E
C205	18°45'27"	500.00'	163.64'	82.58'	162.46'	N04°28'44"E
C206	18°45'27"	400.00'	130.45'	66.07'	130.37'	N80°31'11"W
C207	60°28'10"	100.00'	105.54'	58.28'	100.71'	N30°14'05"W
C208	48°15'00"	400.00'	336.85'	174.14'	326.48'	N24°07'30"E



NOTE:

1. PROVIDE DROP CURB AT MAILBOX & TRASH ENCLOSURE LOCATIONS FOR HANDICAP ACCESSIBILITY. SEE CURB DETAILS (THIS SHEET). PAVEMENT GRADES IN THESE AREAS SHALL NOT EXCEED 150% & SHALL SLOPE AWAY FROM THE GARAGE.
2. SPOT ELEVATIONS SHOWN ARE PROPOSED GRADE @ GUTTERS OR TOP OF SLAB UNLESS NOTED OTHERWISE. (SEE SHEET 7 FOR DETAILS)

NOT TO SCALE

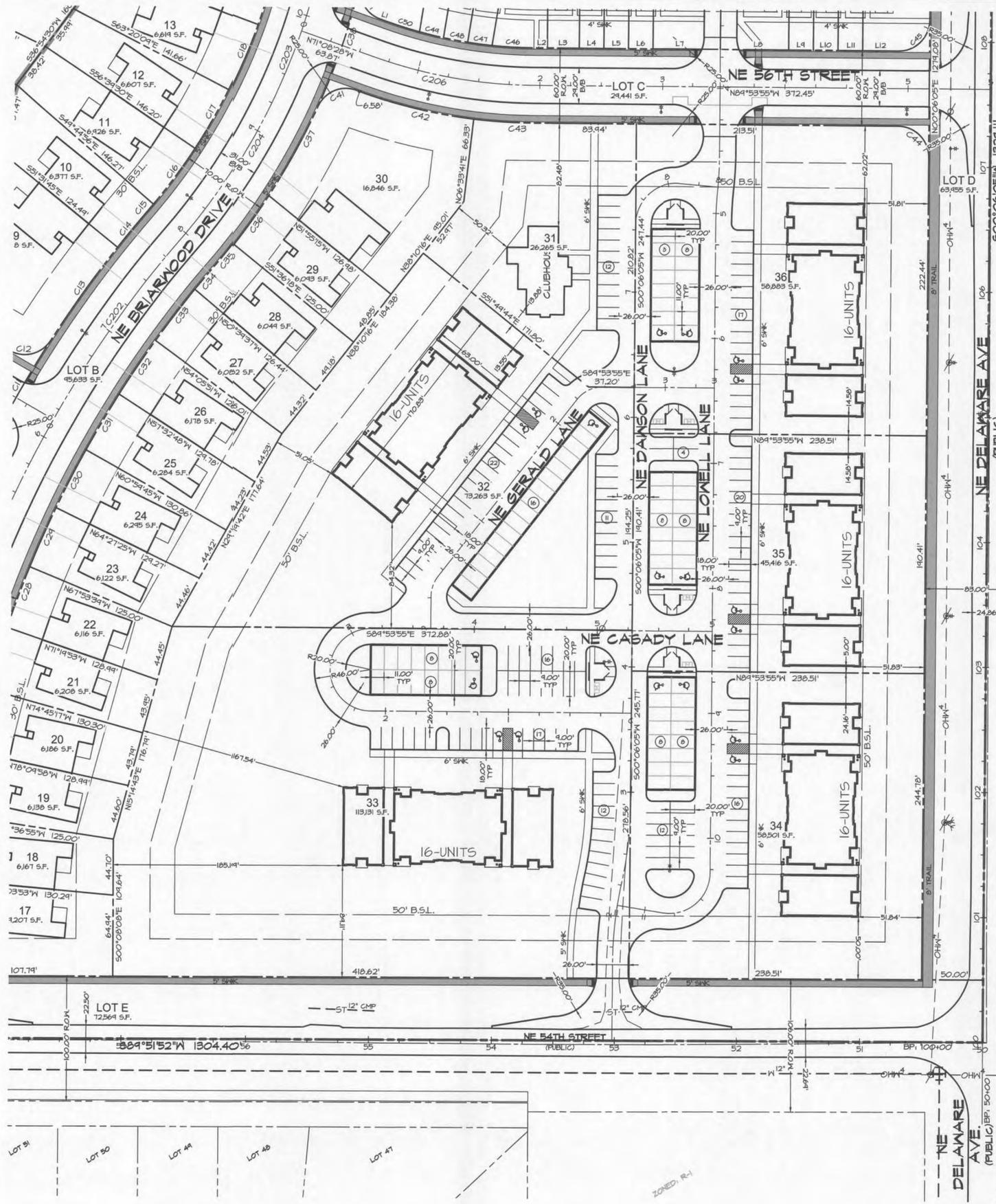
NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 48 MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301.
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
3. USFS MAINTENANCE WILL USE EXPANSION BOLTS TO INSTALL CURB.

PARKING REQUIREMENTS

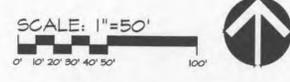
REQUIRED: 20 UNITS X 2 SPACES/UNIT = 160 SPACES
 PROVIDED: 294 SPACES (151 SURFACE STALLS + 80 GARAGE STALLS)

REQUIRED HANDICAP SPACES: 7 PER BUILDING
 PROVIDED: 14 HANDICAP SPACES (10- HANDICAP SURFACE STALLS) (4- HANDICAP GARAGED)



5 3/4" DIA. PRL 1/4" LESS 1/2" DIA. @ 80' ROW
 4 1/4" DIA. @ 60' ROW
 BEIC 51-21-23

LOT 2
 OTHER CREEK
 REPAIR/DEVELOPMENT
 PLAN 2



CEC

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

DATE	REVISIONS	COMMENTS
07-18-2016	1	08-26-2016
	2	04-23-2016
	3	10-07-2016
	4	10-17-2016
	5	10-27-2016
	6	11-01-2016

DATE OF SURVEY: 05-05-2015
 DESIGNED BY: MHH
 DRAWN BY: CH

NORTHGATE EAST
 ANKENY, IOWA

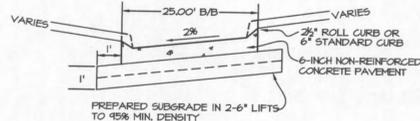
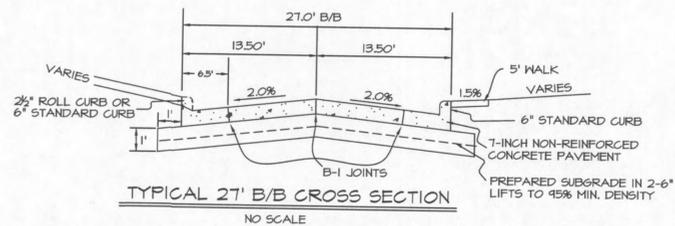
APARTMENTS - DIMENSIONS

CITY OF ANKENY DESIGN APPROVAL DATE: _____

CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____

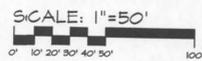
SHEET 04 OF 10

E6410



2 1/2" ROLL CURB
ADJACENT TO
DRIVENWAYS ONLY
(AS SHOWN ON PLANS)

6" STANDARD CURB
(UNLESS LABELED
OTHERWISE ON PLAN)



NORTHGATE EAST
ANKENY, IOWA

ROWHOUSE - DIMENSION

SHEET
05
OF
16

E6410

DATE:	REVISONS	COMMENTS
07-18-2016	1	08-26-2016
	2	04-23-2016
	3	10-07-2016
	4	10-17-2016
	5	10-27-2016
	6	11-01-2016

DATE OF SURVEY: 05-05-2015
DESIGNED BY: MHH
DRAWN BY: CM

Civil Engineering Consultants, Inc.



2400 86th Street . Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@cecinc.com

CITY OF ANKENY DESIGN APPROVAL DATE: _____ CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____



CITY OF ANKENY DESIGN APPROVAL DATE: _____ **CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE:** _____

NORTHGATE EAST
ANKENY, IOWA

TOWNHOUSE - SOUTH DIMENSION

SHEET
06
OF
18

E6410

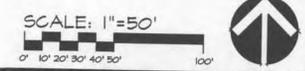
CEC
Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12, Des Moines, Iowa 50322
515.276.4884 • Fax: 515.276.7084 • mail@cecinc.com

REVISIONS	DATE	COMMENTS
1	02-26-2016	
2	04-29-2016	
3	10-07-2016	
4	10-17-2016	
5	10-27-2016	
6	11-01-2016	

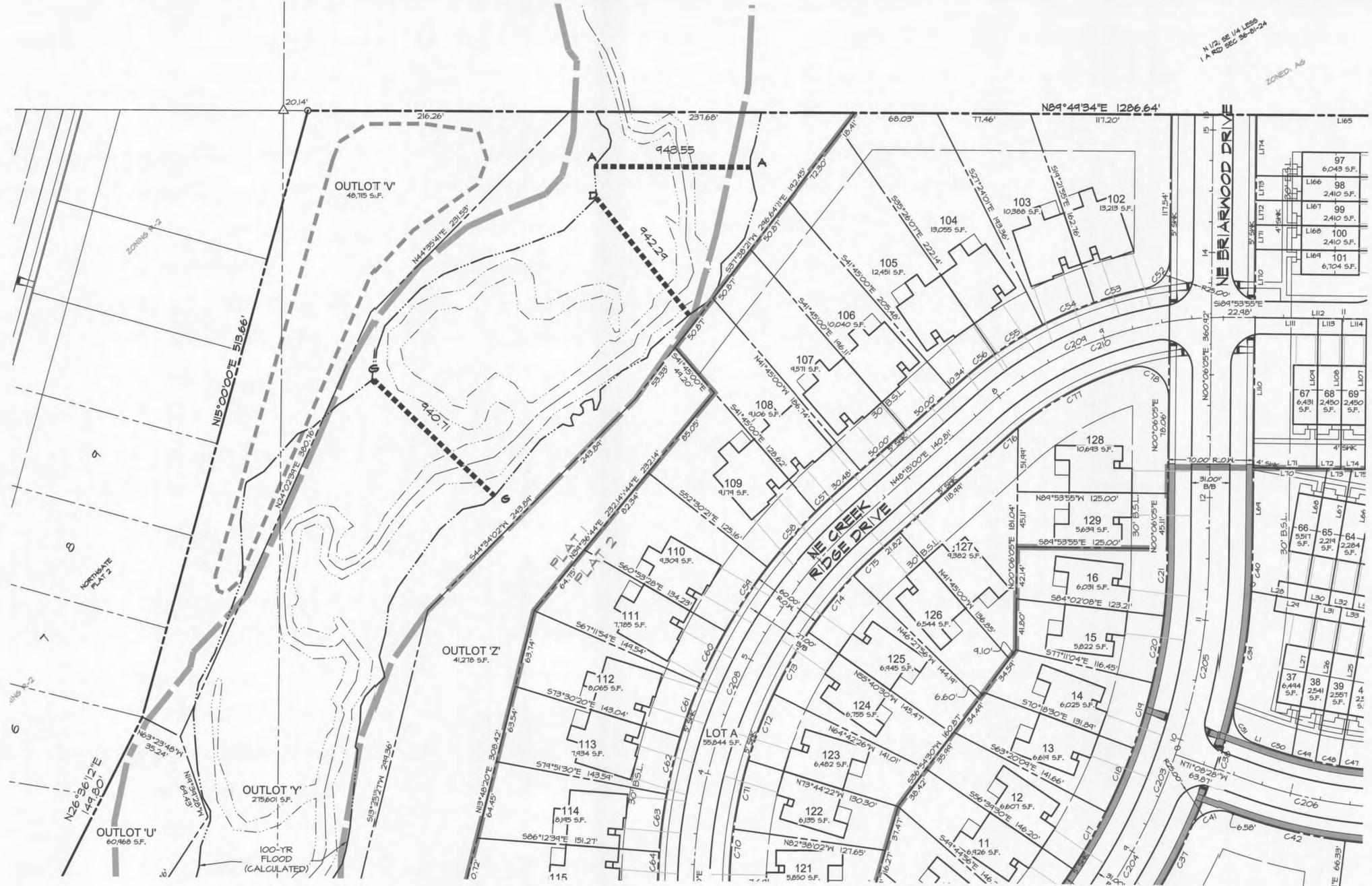
DATE: 07-10-2016

DESIGNED BY: MPH
DRAWN BY: GM

DATE OF SURVEY: 05-05-2015



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PLAT I PRIVATE STORM SEWER

NAME	LOCATION	DETAILS
STR27	48" x 48" SM-513	STA. 2411.68, 226.26' RT. & INLET = 962.65 IN NE = 961.40 OUT SM = 953.39
STR34	48" x 48" SM-513	STA. 2480.62, 646.03' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR41	24" x 36" SM-512	STA. 6426.76, 631.03' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR43	24" x 36" SM-512	STA. 4025.70, 522.01' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR65	18" x 18" SM-512	STA. 5420.70, 441.84' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR66	B CLEANOUT	STA. 4455.50, 516.61' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12

OPEN ON EAST, NORTH & WEST SIDES

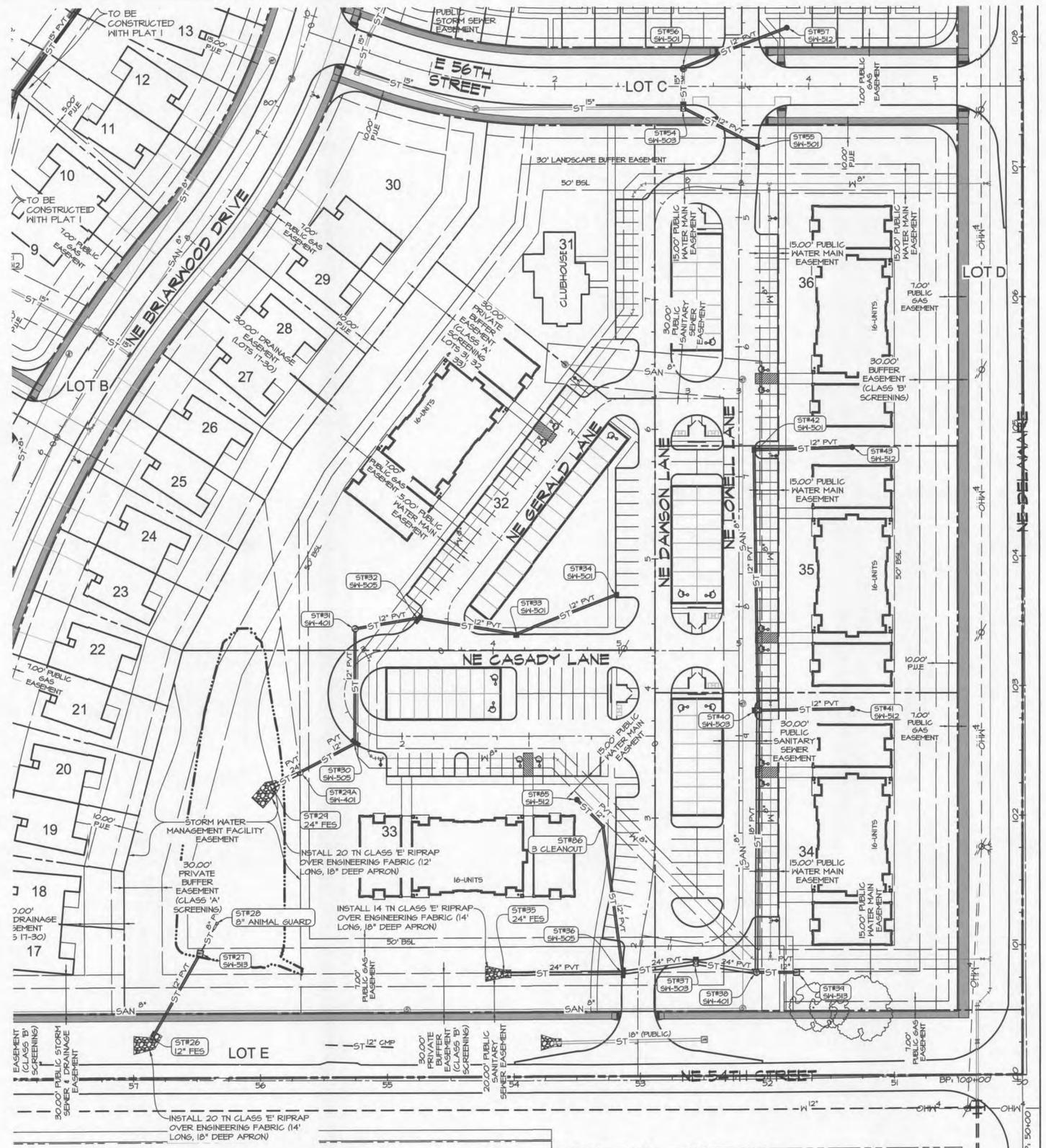
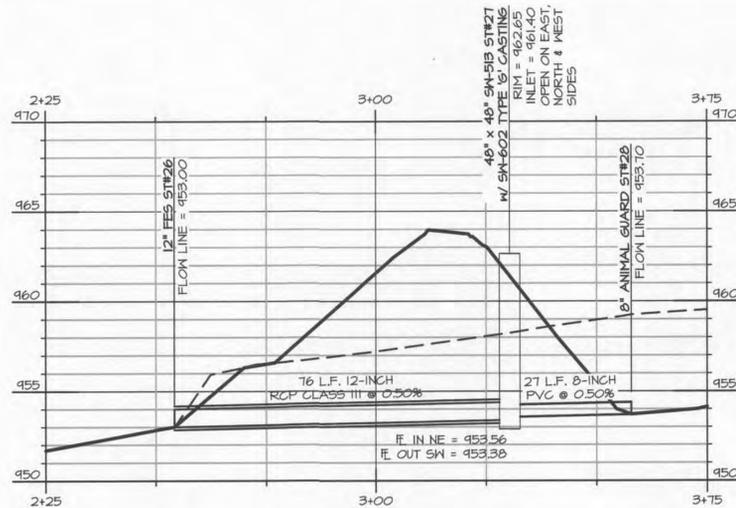
NAME	LOCATION	DETAILS
STR30	24" x 36" SM-505	STA. 2431.13, 13.00' LT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51
STR32	24" x 36" SM-505	STA. 6442.41, 344.93' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR33	24" x 36" SM-501	STA. 6444.10, 387.04' RT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR34	24" x 36" SM-501	STA. 4172.30, 31.00' LT. & INLET = 976.00 INLET = 974.75 OUT M = 972.12
STR36	24" x 36" SM-505	STA. 1474.01, 13.00' LT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51
STR37	36" x 12" SM-503	STA. 10474.23, 15.00' LT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51
STR40	36" x 12" SM-503	STA. 8405.42, 573.51' RT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51
STR42	24" x 36" SM-501	STA. 8406.05, 456.45' RT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51
STR44	36" x 12" SM-503	STA. 4415.28, 46.00' RT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51
STR45	24" x 36" SM-501	STA. 10404.65, 365.14' RT. & INLET = 976.00 IN NE = 961.40 OUT SM = 969.51

NAME	LOCATION	DETAILS
STR29A	48" x 48" SM-401	STA. 4123.08, 278.82' RT. & INLET = 966.43 IN NE = 961.26 OUT SM = 954.26
STR31	48" x 48" SM-401	STA. 5485.37, 276.21' RT. & INLET = 976.54 IN NE = 972.14 OUT SM = 972.04
STR38	48" x 48" SM-401	STA. 2463.68, 664.78' RT. & INLET = 977.13 IN NE = 971.66 OUT M = 971.96

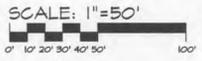
NAME	LOCATION	DETAILS
STR26	12" FES	STA. 1430.37, 184.42' RT. & INLET = 959.00
STR28	8" ANIMAL GUARD	STA. 2445.16, 238.01' RT. & INLET = 953.70
STR24	24" FES	STA. 2411.95, 83.11' LT. & INLET = 959.00
STR35	24" FES	STA. 1474.10, 107.03' LT. & INLET = 970.00

PIPE	DIA.	LENGTH	SLOPE
STR27 TO STR26	12" RCP CLASS III	76 L.F.	0.50%
STR28 TO STR27	8" PVC	21 L.F.	0.50%
STR29A TO STR29	24" RCP CLASS III	26 L.F.	1.00%
STR30 TO STR29A	12" RCP CLASS III	48 L.F.	11.02%
STR31 TO STR30	12" RCP CLASS III	84 L.F.	2.30%
STR32 TO STR31	12" RCP CLASS III	50 L.F.	2.20%
STR33 TO STR32	12" RCP CLASS III	74 L.F.	1.00%
STR34 TO STR33	12" RCP CLASS III	85 L.F.	2.88%
STR36 TO STR35	24" RCP CLASS III	44 L.F.	0.42%
STR37 TO STR36	24" RCP CLASS III	54 L.F.	0.60%
STR38 TO STR37	24" RCP CLASS III	48 L.F.	0.12%
STR39 TO STR38	12" RCP CLASS III	32 L.F.	0.50%
STR40 TO STR39	18" RCP CLASS III	202 L.F.	1.08%
STR41 TO STR40	12" RCP CLASS III	74 L.F.	0.60%
STR42 TO STR41	12" RCP CLASS III	201 L.F.	1.24%
STR43 TO STR42	12" RCP CLASS III	76 L.F.	0.60%
STR44 TO STR43	12" RCP CLASS III	67 L.F.	1.20%
STR45 TO STR44	12" RCP CLASS III	24 L.F.	1.00%
STR46 TO STR45	12" RCP CLASS III	113 L.F.	1.28%

*** UTILITIES BOLD IN PLAN VIEW ARE PRIVATE STORM SEWER
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5/8" x 1/4" RCP PER 1/4" LEAD PER 1/4" RCP SEC 91-30-28



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DATE	REVISIONS	COMMENTS
07-18-2016	1	08-26-2016
	2	04-23-2016
	3	10-07-2016
	4	10-11-2016
	5	10-27-2016
	6	11-01-2016

DATE OF SURVEY: 05-05-2015
DESIGNED BY: MHR
DRAWN BY: CR

NORTHGATE EAST
ANKENY, IOWA
APARTMENTS - UTILITY
CITY OF ANKENY DESIGN APPROVAL DATE:

CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE:

PLAT 2 PRIVATE STORM SEWER

GREEN SPACE INTAKE TABLE		
NAME	LOCATION	DETAILS
STR46	STA. 12+35.05, 42.51' RT. &	GRATE = 471.32 OUT M = 468.17
STR50	STA. 11+22.02, 35.44' LT. &	GRATE = 471.03 OUT M = 473.94

PAVEMENT INTAKE TABLE		
NAME	LOCATION	DETAILS
STR16	STA. 10+34.50, 15.53' LT. &	GRATE = 472.35 IN S = 468.03 OUT M = 467.03
STR17	STA. 10+34.51, 13.51' RT. &	GRATE = 472.32 OUT N = 468.32
STR81	STA. 0+40.48, 15.44' RT. &	GRATE = 471.75 IN E = 473.21 OUT N = 473.01
STR82	STA. 0+40.44, 13.50' LT. &	GRATE = 471.66 OUT M = 473.50

STORM F.E.S. TABLE		
NAME	LOCATION	E
STR80	STA. 13+82.65, 470.00' RT. &	E = 471.14

STORM PIPE TABLE			
PIPE	DIA.	LENGTH	SLOPE
STR46 TO STR45	15" RCP CLASS III	62 L.F.	0.60%
STR50 TO STR51	15" RCP CLASS III	52 L.F.	0.60%
STR16 TO STR17	15" RCP CLASS III	24 L.F.	1.00%
STR16 TO STR18	15" RCP CLASS III	256 L.F.	1.74%
STR18 TO STR19	12" RCP CLASS III	152 L.F.	2.24%
STR18 TO STR81	15" RCP CLASS III	61 L.F.	0.60%
STR80 TO STR81	12" RCP CLASS III	23 L.F.	3.16%
STR18 TO STR19	15" RCP CLASS III	70 L.F.	0.60%
STR81 TO STR82	12" RCP CLASS III	24 L.F.	1.00%

STORM MANHOLE TABLE		
NAME	LOCATION	DETAILS
STR45	STA. 12+35.05, 14.50' LT. &	RIM = 471.84 IN S = 467.30 IN E = 467.20 OUT N = 466.40
STR51	STA. 11+23.33, 16.38' RT. &	RIM = 478.65 IN E = 473.63 OUT N = 473.53
STR19	STA. 12+40.34, 22.50' LT. &	RIM = 477.37 IN S = 472.34 IN E = 472.64 OUT M = 472.44
STR14	STA. 14+42.34, 22.50' LT. &	RIM = 480.25 IN NE = 476.27 OUT M = 476.17

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PLAT 1 PRIVATE STORM SEWER

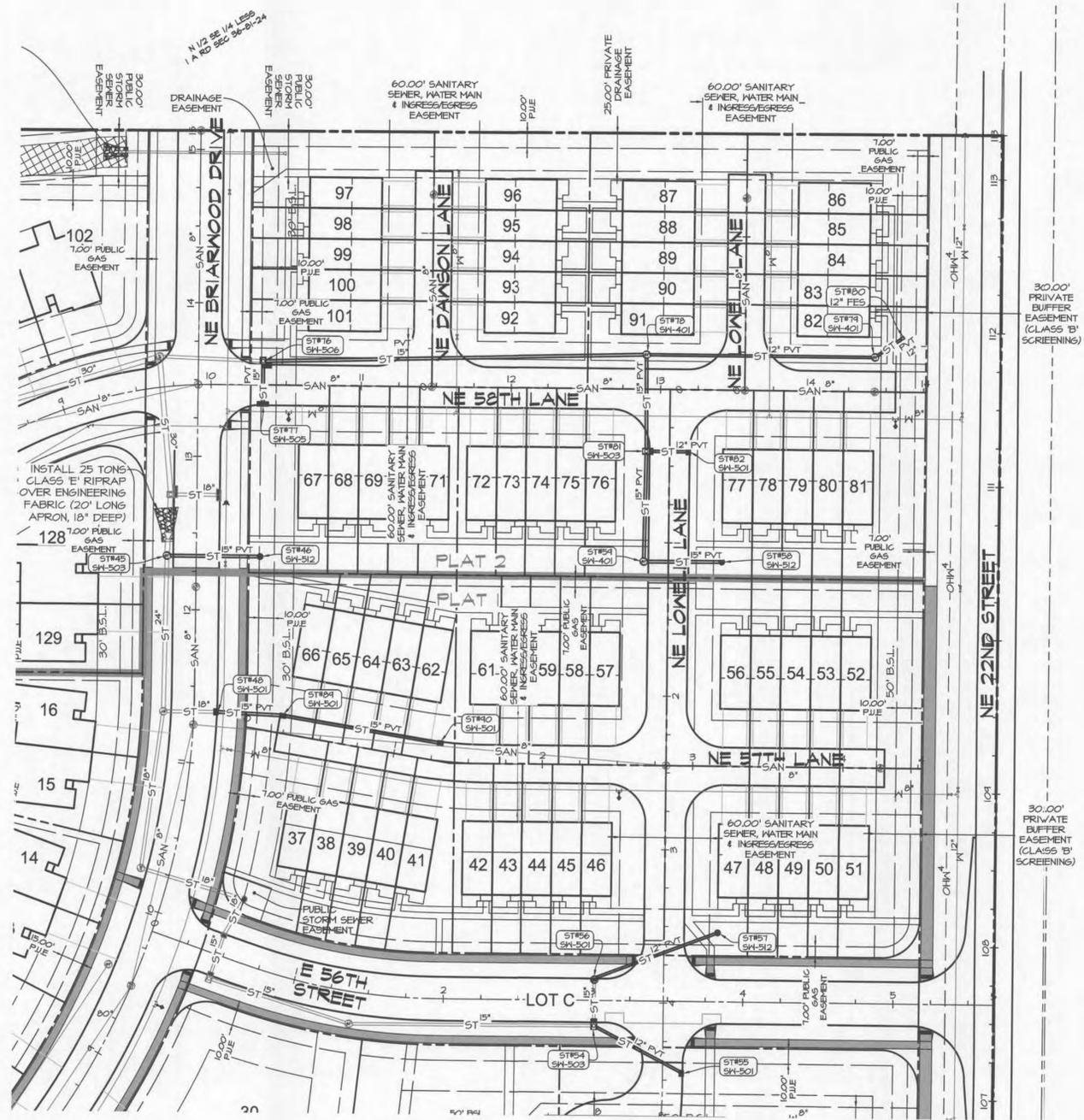
STORM PIPE TABLE			
PIPE	DIA.	LENGTH	SLOPE
STR45 TO STR44	30" RCP CLASS III	15 L.F.	0.84%
STR46 TO STR45	15" RCP CLASS III	62 L.F.	0.60%
STR51 TO STR50	12" RCP CLASS III	87 L.F.	0.60%
STR50 TO STR54	15" RCP CLASS III	52 L.F.	0.60%
STR18 TO STR16	15" RCP CLASS III	64 L.F.	2.54%
STR16 TO STR17	15" RCP CLASS III	24 L.F.	1.00%
STR16 TO STR18	15" RCP CLASS III	256 L.F.	1.74%
STR18 TO STR19	12" RCP CLASS III	152 L.F.	2.24%
STR18 TO STR81	15" RCP CLASS III	61 L.F.	0.60%
STR80 TO STR81	12" RCP CLASS III	23 L.F.	3.16%
STR81 TO STR82	12" RCP CLASS III	24 L.F.	1.00%
STR84 TO STR83	12" RCP CLASS III	112 L.F.	0.60%
STR84 TO STR85	15" RCP CLASS III	44 L.F.	4.58%
STR80 TO STR84	15" RCP CLASS III	106 L.F.	1.64%

STORM F.E.S. TABLE		
NAME	LOCATION	E
STR44	STA. 12+50.16, 18.74' LT. &	E = 471.76
STR80	STA. 13+82.65, 470.00' RT. &	E = 471.14
STR83	STA. 14+47.85, 54.64' LT. &	E = 470.00
STR84	STA. 14+48.01, 57.00' RT. &	E = 471.67

GREEN SPACE INTAKE TABLE		
NAME	LOCATION	DETAILS
STR46	STA. 12+35.05, 42.51' RT. &	GRATE = 471.32 OUT M = 468.17
STR50	STA. 11+22.02, 35.44' LT. &	GRATE = 471.03 OUT M = 473.94

PAVEMENT INTAKE TABLE		
NAME	LOCATION	DETAILS
STR45	STA. 11+34.00, 13.50' RT. &	GRATE = 473.56 IN E = 464.35 OUT M = 464.15
PUBLIC STR56	STA. 3+84.28, 46.00' RT. &	GRATE = 481.74 IN E = 471.78 OUT S = 471.58
STR57	STA. 10+54.20, 36.44' RT. &	GRATE = 481.08 OUT M = 478.30
STR16	STA. 10+34.50, 15.53' LT. &	GRATE = 472.35 IN S = 468.03 OUT M = 467.03
STR17	STA. 10+34.51, 13.51' RT. &	GRATE = 472.32 OUT N = 468.32
STR81	STA. 0+40.48, 15.44' RT. &	GRATE = 471.75 IN E = 473.21 OUT N = 473.01
STR82	STA. 0+40.44, 13.50' LT. &	GRATE = 471.66 OUT M = 473.50
STR84	STA. 11+34.37, 54.32' RT. &	GRATE = 475.28 IN E = 471.45 OUT M = 471.35
STR80	STA. 11+24.50, 164.45' RT. &	GRATE = 471.23 OUT M = 473.14

STORM MANHOLE TABLE		
NAME	LOCATION	DETAILS
PUBLIC STR45	STA. 12+35.05, 14.50' LT. &	RIM = 471.84 IN S = 467.30 IN E = 467.20 OUT N = 466.40
STR54	STA. 11+23.33, 16.38' RT. &	RIM = 478.65 IN E = 473.63 OUT N = 473.53
PUBLIC STR19	STA. 12+40.34, 20.04' LT. &	RIM = 472.16 IN S = 465.38 IN E = 466.08 OUT M = 465.28
STR19	STA. 12+40.34, 22.50' LT. &	RIM = 477.37 IN S = 472.34 IN E = 472.64 OUT M = 472.44
STR14	STA. 14+42.34, 22.50' LT. &	RIM = 480.25 IN NE = 476.27 OUT M = 476.17

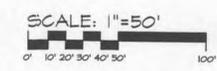


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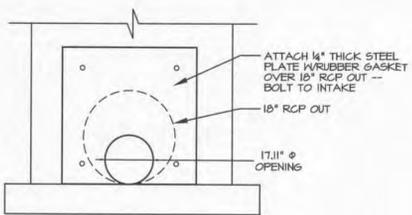


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	4	10-17-2016
	5	10-27-2016
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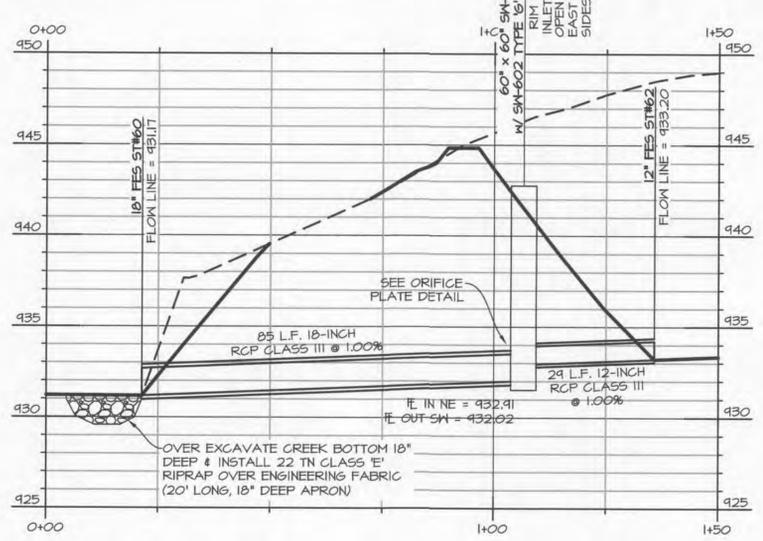
NORTHGATE EAST
ANKENY, IOWA
ROWHOUSE - UTILITY
CITY OF ANKENY DESIGN APPROVAL DATE: _____
CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____



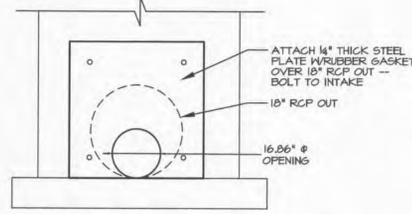
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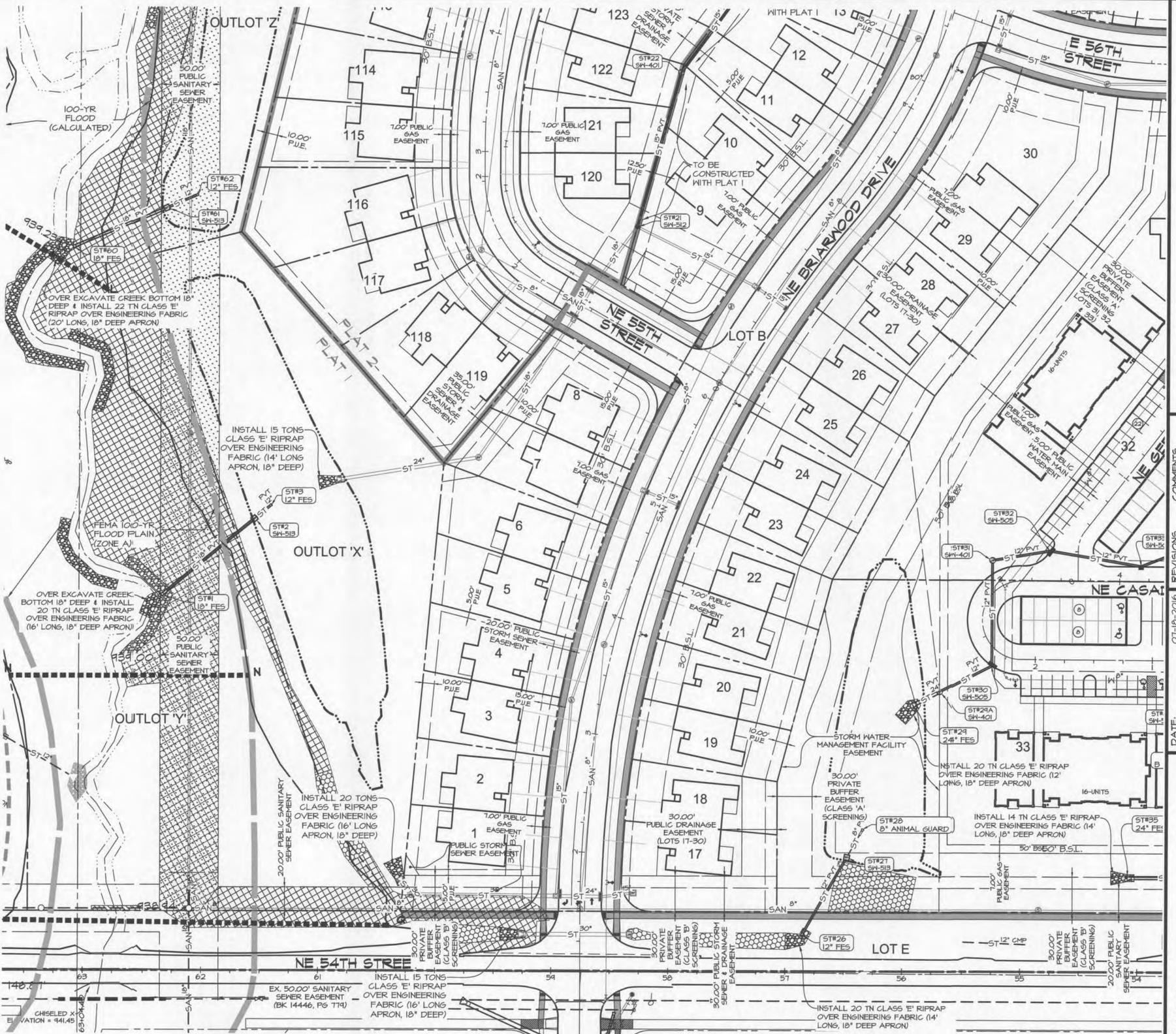
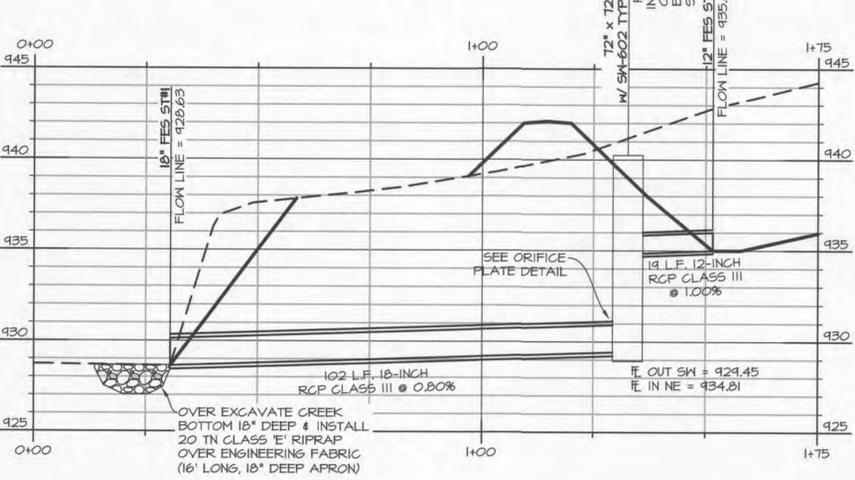
ORIFICE DETAIL: INTAKE ST#61
NO SCALE



*** UTILITIES BOLD IN PLAN VIEW ARE PRIVATE STORM SEWER
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ORIFICE DETAIL: INTAKE ST#2
NO SCALE



PLAT I PRIVATE STORM SEWER

NAME	LOCATION	DETAILS
ST#2	STA. 1+32.67, 0.00' E.	GRATE = 9140.25 IN NE = 934.81 OUT SM = 9124.45
ST#21	STA. 6+05.16, 128.81' LT. E.	GRATE = 4160.74 IN N = 4571.00 IN SE = 4571.00 OUT SM = 4156.80
ST#22	STA. 7+42.46, 178.39' LT. E.	GRATE = 4163.44 IN NE = 4571.91 OUT S = 4571.81
ST#61	STA. 1+06.61, 0.00' E.	GRATE = 9142.75 IN NE = 452.91 OUT SM = 452.02

NAME	LOCATION	ELEVATION
ST#1	STA. 0+30.52, 0.00' E.	E. = 426.63
ST#3	STA. 1+51.26, 0.00' E.	E. = 435.00
ST#6	STA. 0+21.88, 0.00' E.	E. = 431.7
ST#62	STA. 1+35.76, 0.00' E.	E. = 433.20

PIPE	DIA.	LENGTH	SLOPE
ST#2 TO ST#1	18" RCP CLASS III	102 L.F.	0.80%
ST#3 TO ST#2	12" RCP CLASS III	14 L.F.	1.00%
ST#22 TO ST#21	15" RCP CLASS III	135 L.F.	0.60%
ST#61 TO ST#60	18" RCP CLASS III	85 L.F.	1.00%
ST#62 TO ST#61	12" RCP CLASS III	24 L.F.	1.00%

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07-18-2016	1	08-26-2016
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	3	10-07-2016
	4	10-17-2016
	5	05-05-2015
	6	11-01-2016

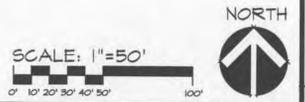
DATE OF SURVEY: 05-05-2015
DESIGNED BY: MHH
DRAWN BY: CM

NORTHGATE EAST
ANKENY, IOWA

TOWNHOUSE - SOUTH UTILITY

CITY OF ANKENY DESIGN APPROVAL DATE: _____
CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____

SHEET 10 OF 18
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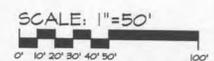
*** UTILITIES BOLD IN PLAN VIEW ARE PRIVATE STORM SEWER

REFER TO PUBLIC IMPROVEMENT PLANS FOR PUBLIC SANITARY AND WATER CONSTRUCTION.

FLAT 2 PRIVATE STORM SEWER

GREEN SPACE INTAKE TABLE		
NAME	LOCATION	DETAILS
ST#23 18" Ø SH-S12	STA. 9+41.30, TTL#4' LT. E.	GRATE = 461.50 OUT SM = 458.50

STORM PIPE TABLE			
PIPE	DIA.	LENGTH	SLOPE
ST#23 TO ST#22	15" RCP CLASS III	48 L.F.	0.60%



NORTHGATE EAST
ANKENY, IOWA

TOWNHOUSE - NORTH UTILITY

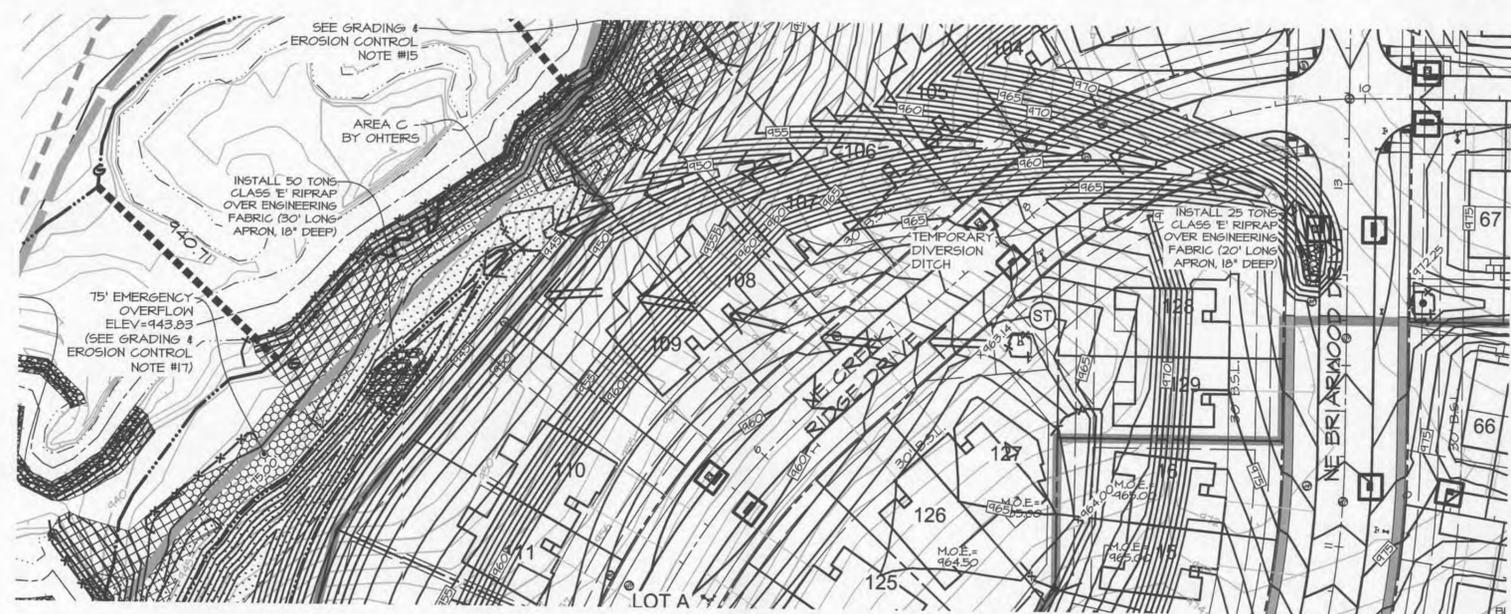
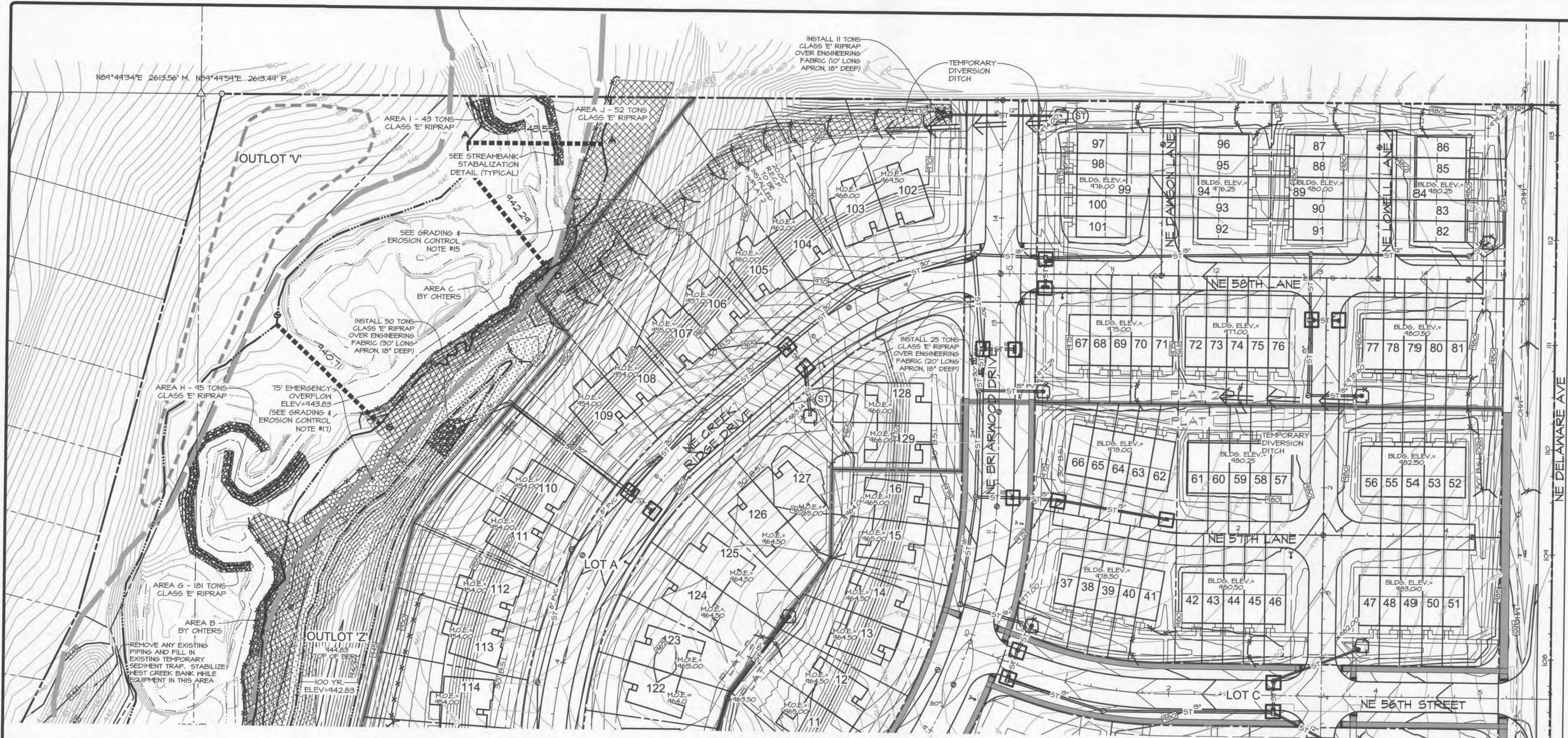
SHEET
OF 18
E6910

DATE:	REVISIONS	COMMENTS
07-15-2016	1	08-26-2016
	2	09-23-2016
	3	10-07-2016
	4	10-11-2016
	5	10-27-2016
	6	11-01-2016

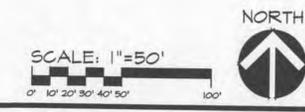
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515.276.4884, Fax: 515.276.7084, mail@cecinc.com

CITY OF ANKENY DESIGN APPROVAL DATE: _____ CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____

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REFER TO SHEET #14 FOR GRADING NOTES, DETAILS, GRADING LEGEND AND MINIMUM PROTECTION ELEVATIONS



DATE:	07-18-2016	REVISIONS	COMMENTS
		1	08-26-2016
		2	09-23-2016
		3	10-07-2016
		4	10-17-2016
		5	10-27-2016
		6	11-01-2016
DATE OF SURVEY:	05-05-2015	DESIGNED BY:	MMH
DRAWN BY:	CM		

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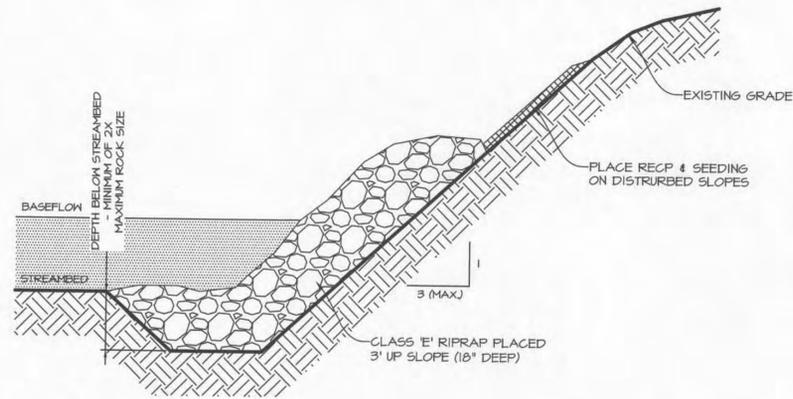
NORTHGATE EAST
ANKENY, IOWA

SHEET
9 of 10

E6410

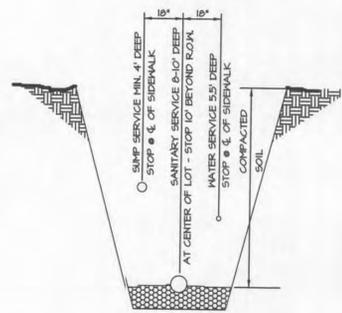
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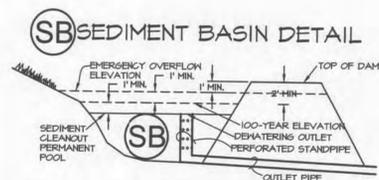
STREAMBANK STABILIZATION DETAIL

- NO SCALE
1. STRIP VEGETATION AND GRADE STREAMBANKS AT A 3:1 SLOPE AS SHOWN.
 2. PLACE CLASS 1" RIPRAP 18" DEEP (NO FABRIC) AND 3 FOOT UP THE STREAMBANK SLOPE. DISTURBED AREAS ABOVE THIS ELEVATION SHALL BE PROTECTED WITH TYPE 4 RECP. INSTALL PER MANUFACTURER'S SPECS. RECP AREAS SHALL BE SEEDED WITH SUDAS TYPE 2 PERMANENT SEED MIX.

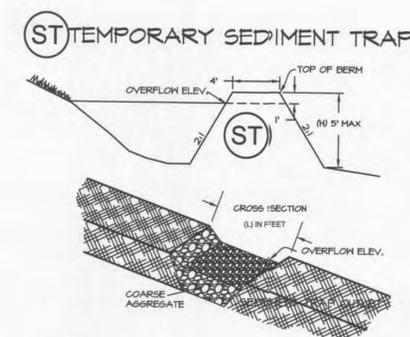


SERVICE LOCATION DETAIL

- NO SCALE
1. PLACE ONE 6' FOOT STEEL POST BURIED 3 FEET AT WATER CURB BOX
 2. STOP ROCK BEDDING FOR SANITARY SERVICE AT THE R.O.M.



NOTE: SEDIMENT RISER SIZE SHALL MATCH THE OUTLET PIPE SIZE FOR EACH FOND. RISERS SHALL BE WRAPPED AT THE BASE FOR STABILITY. SEDIMENT AGGREGATE SHALL BE PLACED WITH FILTER FABRIC AND COARSE AGGREGATE SHALL BE CLEANED OUT AND RISERS ARE TO BE REMOVED ONCE VEGETATION HAS BEEN ESTABLISHED.



GRADING AND EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL PROTECT EXISTING ON-SITE FACILITIES FROM DAMAGE RESULTING FROM THE CONTRACTOR'S WORK. IF DAMAGE, BREAKAGE, INTERRUPTION OF SERVICE, ETC. OF EXISTING FACILITIES DOES OCCUR THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE UTILITY'S OWNER.
2. CONTRACTOR SHALL STRIP TOPSOIL FROM ALL AREAS TO BE CUT OR FILLED.
3. STOCKPILE SUFFICIENT TOPSOIL TO BE RESPREAD ON LAWN AREAS TO 6-INCH DEPTH.
4. UNLESS GRADING FOR A DESIGNED SUMP OR LOW POINT AREA, GRADE ALL SITE AREAS TO DRAIN WITHOUT TRAPPING OR PONDING SURFACE WATER WHEN SITE GRADING IS COMPLETE.
5. FINAL GRADE ELEVATIONS OF ALL PAVED AREAS SHALL BE WITHIN 0.10 FEET OF PLAN GRADE. LAWN AREAS SHALL BE WITHIN 0.20 FEET OF PLAN GRADE.
6. SPOT ELEVATIONS ON PAVED SURFACES ARE TOP OF SLAB ELEVATIONS UNLESS NOTED OTHERWISE.
7. CIVIL ENGINEERING CONSULTANTS, INC. IS NOT A GEOTECHNICAL ENGINEER.
8. A GEOTECHNICAL REPORT FOR THIS PROJECT CAN BE OBTAINED BY CONTACTING THE OWNER.
9. PREPARE BOTTOM OF BENCH FOR FILL BY DISCING TO A DEPTH OF 6-INCHES.
10. ALL SITE FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR DENSITY.
11. THE GRADING CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL SILT FENCES & EROSION CONTROL.
12. ALL DISTURBED AREAS OUTSIDE OF THE R.O.M. & OUTLOT 'Y' SHALL BE SEEDED WITH EROSION CONTROL MIX, FERTILIZED AND MULCHED. OUTLOT 'Y' & DITCHES ALONG NE DELAWARE AVE & NE 54TH ST SHALL BE SEEDED WITH TYPE 2 PERMANENT SEED MIX. R.O.M. AREAS WITHIN THE PLAT SHALL BE SEEDED WITH TYPE 4 PERMANENT SEED MIX.
13. INSTALL SILT FENCES AS SHOWN. ADDITIONAL SILT FENCES MAY BE REQUIRED UPON INSPECTIONS.
14. THE CONTRACTOR SHALL RECONNECT ALL FIELD TILE INTERCEPTED DURING CONSTRUCTION.
15. INSTALL TYPE 4, VEGETATED, ROLLED EROSION CONTROL (RECP) MATTING ON ALL AREAS WEST OF THE DETENTION BASINS THAT SURFACE FLOW TO THE CREEK. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
16. STABILIZE CREEK BANKS, DITCHES AND DETENTION BASINS WITH NATIVE VEGETATION OR A SUDAS TYPE 2 SEED MIX.
17. INSTALL TYPE 3 TURF REINFORCEMENT MAT (TRM) ON ALL EMERGENCY OVERFLOW SPILLWAYS AND IN DITCHES WHERE INDICATED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
18. OVERFLOW SPILLWAY ELEVATIONS TO BE ASBUILT POST CONSTRUCTION.

EROSION CONTROL QUANTITIES

- 7473 L.F. SILT FENCE
- 34 EA. INLET PROTECTION (FILTER SOCK)
- 270 TN. CLASS 1" RIP RAP OVER ENGINEERING FABRIC FOR OUTLET PROTECTION @ PES'S (183 TN. F.E.S. PLAT 1 + 81 TN. F.E.S. PLAT 2)
- 620 TN. CLASS 1" RIPRAP WITHOUT ENGINEERING FABRIC FOR STREAMBANKS (RECYCLED CONCRETE CAN BE USED IF IT DOES NOT CONTAIN ANY METAL REINFORCING)
- 6118 SY. SUDAS TYPE 4 ROLLED EROSION CONTROL PRODUCT (EX. NORTH AMERICAN GREEN G125 COCONUT BLANKET)
- 917 SY. SUDAS TYPE 3 TURF REINFORCEMENT MAT (TRM) (EX. NORTH AMERICAN GREEN VMAX G350)
- 2.52 AC. SUDAS TYPE 2 PERMANENT COOL-SEASON MIXTURE FOR DITCHES AND DETENTION AREAS
- 29.4 AC. SUDAS TYPE 4 URBAN TEMPORARY EROSION CONTROL MIX

BENCHMARK
BURY BOLT ON HYDRANT @ THE NW CORNER OF NE HILLCREST DRIVE & NE 55TH STREET -----ELEVATION = 451.170

BURY BOLT ON HYDRANT @ THE NW CORNER OF NE HILLCREST DRIVE & NE 56TH STREET -----ELEVATION = 450.810

MINIMUM PROTECTION ELEVATIONS

LOT NUMBERS	M.P.E.
LOTS 1-8 & 116-119	943.00
LOTS 9-10 AND 120-122	962.21
LOTS 11-15 AND 123-127	964.50
LOT 16 AND 128-129	964.14
LOTS 17-24	948.50
LOTS 25-36	965.41
LOTS 37-46	978.00
LOTS 47-51	983.00
LOTS 52-56 AND 77-81	979.60
LOTS 57-66	976.35
LOTS 67-76	973.25
LOTS 82-86	980.25
LOTS 87-101	975.00
LOTS 102-115	945.83



VICINITY SKETCH

SCALE: 1" = 1000'

LEGEND

- EXISTING/PROPOSED
- PLAT BOUNDARY
- SAN 18" SANITARY SEWER & SIZE
- W 18" WATER MAIN & SIZE
- ST 18" STORM SEWER & SIZE
- MANHOLE
- STORM INTAKE
- FIRE HYDRANT
- VALVE
- M.O.E. MINIMUM OPENING ELEVATION
- M.P.E. MINIMUM PROTECTION ELEVATION
- EXISTING TREES TO BE REMOVED
- EDGE OF WATER
- 100-YR ELEVATION
- INLET PROTECTION (FILTER SOCK)
- ROLLED EROSION CONTROL (RECP) MATTING
- SILT FENCE
- TURF REINFORCEMENT MATTING (TRM)
- DIVERSION DITCH
- RIP RAP
- TEMPORARY SEDIMENT BASIN
- SEDIMENT TRAP
- GRADING LIMITS



SCALE: 1" = 50'



NORTHGATE EAST
ANKENY, IOWA

GRADING NOTES & DETAIL

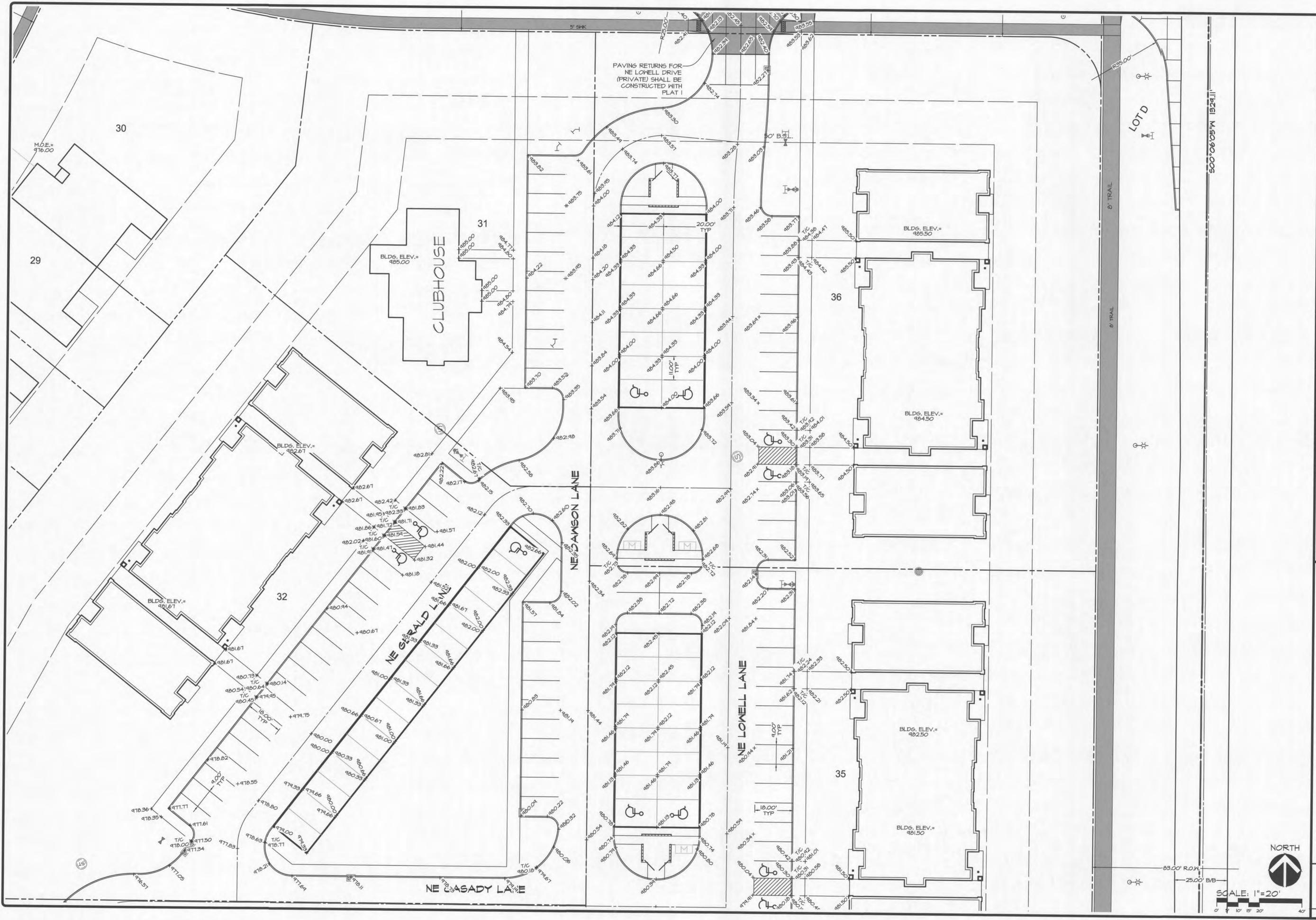
SHEET
14
OF 18

E6410

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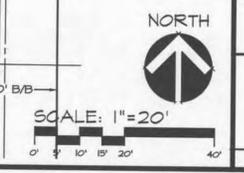
DATE:	OT-18-2016	REVISIONS	COMMENTS
	1	08-26-2016	
	2	09-23-2016	
	3	10-07-2016	
	4	10-11-2016	
	5	10-27-2016	
	6	11-01-2016	

DATE OF SURVEY: 05-05-2015
 DESIGNED BY: MHH
 DRAWN BY: CM

NORTHGATE EAST
 ANKENY, IOWA
APARTMENT NORTH DETAIL

CITY OF ANKENY DESIGN APPROVAL DATE: _____ CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____

SHEET 16 OF 16
 E6970



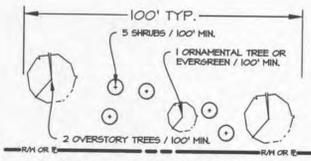
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TYPICAL APARTMENT PLANTING DETAIL

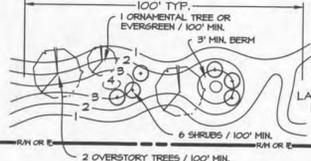
SCALE 1"=20'

PLANTING SCHEDULE

	OPEN	PARKING	WEST BUFFER	DELAWARE BUFFER	NE 54TH BUFFER						
AR	16			3	6	Acer rubrum	3' Cal.	B4B	See Plan		
GB	2		6	6	6	Quercus bicolor	3' Cal.	B4B	See Plan		
GT	10	8				Swamp White Oak	3' Cal.	B4B	See Plan		
UA	2	4	10	5	6	Gleditsia triacanthos 'skyline'	3' Cal.	B4B	See Plan		
PT	20					Ulmus americana	3' Cal.	B4B	See Plan		
CC						Populus tremuloides	2' Cal.	Cont.	See Plan		
MP	10			4		Crataegus crusgalli 'cockspur'	2' Cal.	Cont.	See Plan		
PG	6		8		4	Thornless Hawthorn	2' Cal.	Cont.	See Plan		
CD	66		18	18	24	Prunella virginiana	6'-8" Ht.	T5/B4B	See Plan		
WF	30					Picea canadensis 'Snow Fairy'	#2	Cont.	See Plan		
PO	13		24	24	30	Variegated Blue Mist Spruce	#2	Cont.	See Plan		
CA	30					Heligolita Florida 'Vermont'	#2	Cont.	See Plan		
PA	35					Mj Monet 'Majella'	#2	Cont.	See Plan		
JA	42					Physocarpus opulifolius 'Dorados'	#2	Cont.	See Plan		
						Lemon Candy golden Ninespark	#2	Cont.	See Plan		
						Calamagrostis x acutiflora	#2	Cont.	See Plan		
						Karl Foerster Grass	#2	Cont.	See Plan		
						Picea abies 'Milliformis'	#2	Cont.	See Plan		
						Birds Nest Spruce	#2	Cont.	See Plan		
						Juniperus horizontalis 'Blue Chip'	#2	Cont.	See Plan		
						Blue Chip Juniper	#2	Cont.	See Plan		



CLASS 'A' SCREEN (100' TYP.)



CLASS 'B' SCREEN (100' TYP.)

RECOMMENDED TREES FOR STREET R.O.W. PLANTING

- STATE STREET MAPLE
- SWAMP WHITE OAK
- RED SUNSET MAPLE
- SKYLINE HONEY LOCUST
- LITTLE LEAF LINDEN

NOTE: TYPICALLY, TWO TREES ARE REQUIRED PER LOT (FOUR ON CORNER LOTS). STREET TREES ARE NOT REQUIRED BY THE CITY PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY BUT MAY BE KEPT AS A COVENANT REQUIREMENT BY THE DEVELOPER IF DESIRED.

LANDSCAPE REQUIREMENTS

OPEN SPACE
 REQUIRED: 2 TREE & 6 SHRUBS/3000 SF
 375,252 X 20% = 75,050 SF
 75,010 SF/3000 = 25
 50 TREES
 150 SHRUBS

PROPOSED:
 50 TREES
 216 SHRUBS

PARKING AREA
 REQUIRED: GROSS PAVED AREA X 20% = REG. SHADED AREA
 48,904 SF X 20% = 9,780 SF
 14,780 SF/100 = 148
 28 TREES

PROPOSED:
 28 TREES

BUFFER (CLASS 'A' SCREEN) WEST PROPERTY LINE
 REQUIRED: 2 OVERSTORY TREES, 1 ORNAMENTAL OR EVERGREEN & 5 SHRUBS/100 LF
 766 / 100 = 7.66 (8)
 16 OVERSTORY TREES
 8 ORNAMENTAL OR EVERGREEN
 40 SHRUBS

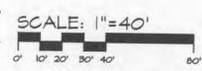
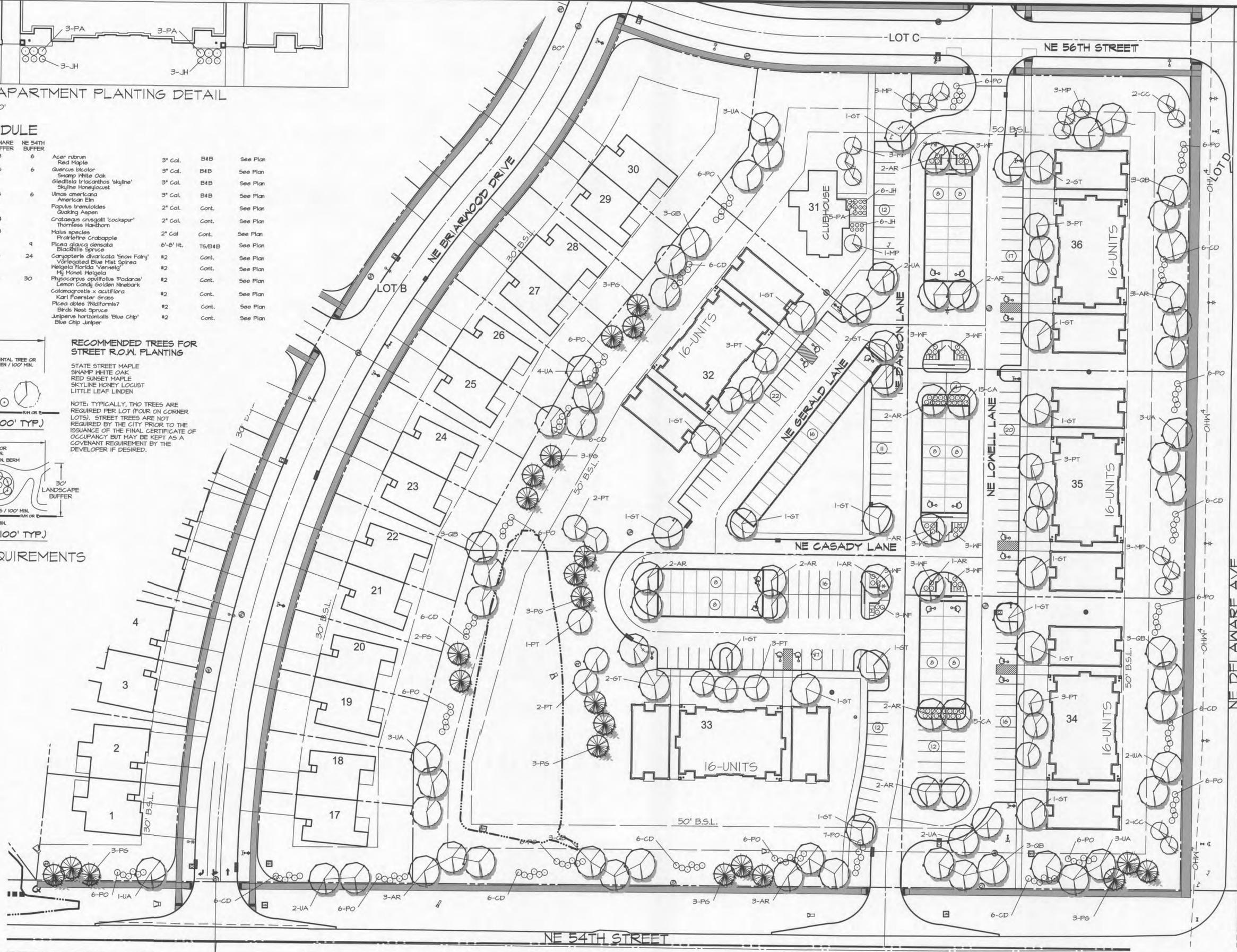
PROPOSED:
 16 OVERSTORY TREES
 8 ORNAMENTAL OR EVERGREEN
 42 SHRUBS

BUFFER (CLASS 'B' SCREEN) NE DELAWARE
 REQUIRED: 2 OVERSTORY TREES, 1 ORNAMENTAL OR EVERGREEN & 6 SHRUBS/100 LF
 683 / 100 = 6.83 (7)
 14 OVERSTORY TREES
 7 ORNAMENTAL OR EVERGREEN
 42 SHRUBS

PROPOSED:
 14 OVERSTORY TREES
 7 ORNAMENTAL OR EVERGREEN
 42 SHRUBS

BUFFER (CLASS 'B' SCREEN) NE 54TH STREET
 REQUIRED: 2 OVERSTORY TREES, 1 ORNAMENTAL OR EVERGREEN & 6 SHRUBS/100 LF
 908 / 100 = 9.08 (11)
 18 OVERSTORY TREES
 9 ORNAMENTAL OR EVERGREEN
 54 SHRUBS

PROPOSED:
 18 OVERSTORY TREES
 9 ORNAMENTAL OR EVERGREEN
 54 SHRUBS



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

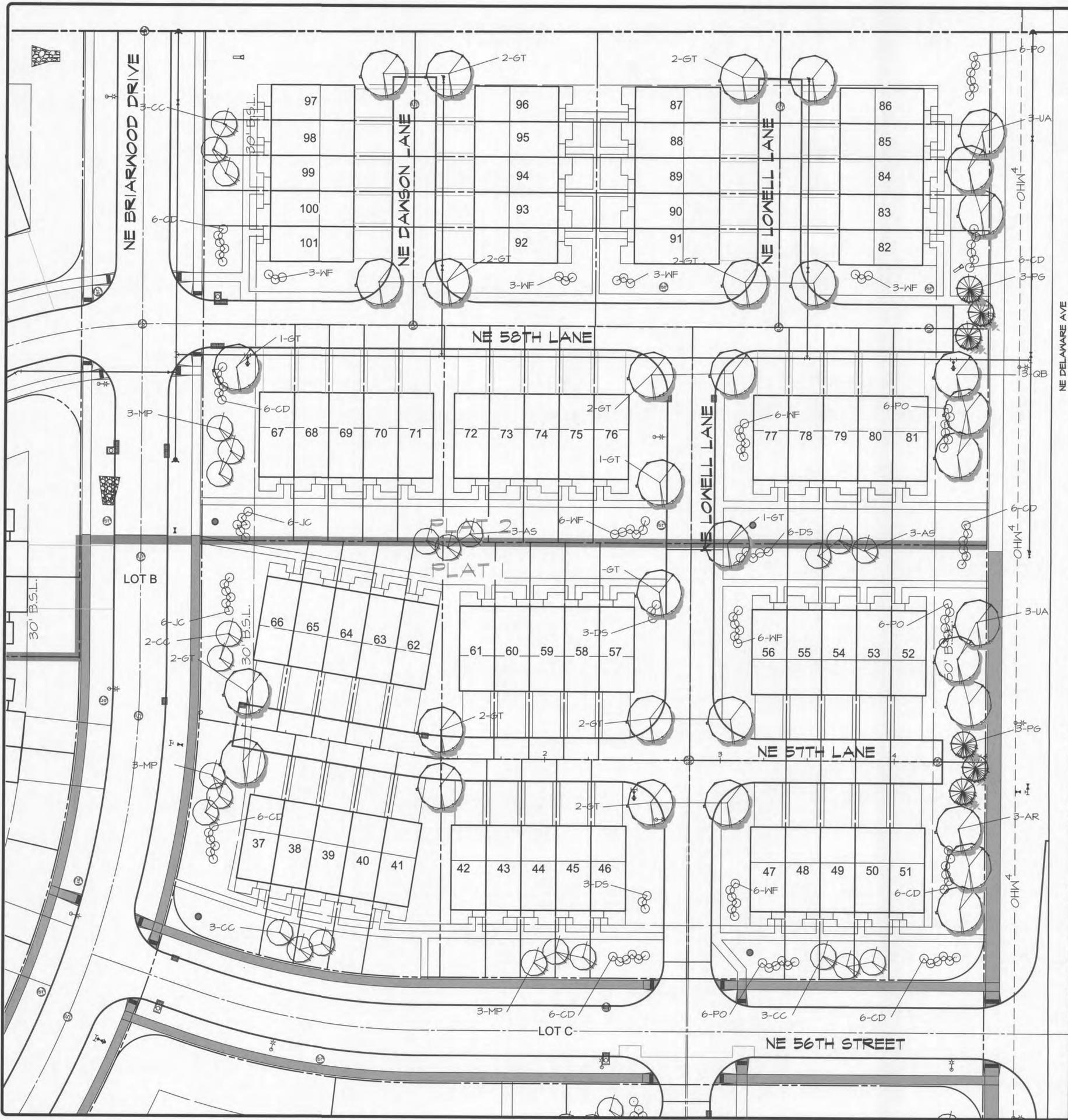


DATE:	REVISIONS	COMMENTS
07-18-2016	1	08-26-2016
	2	04-23-2016
	3	10-07-2016
	4	10-17-2016
	5	10-27-2016
	6	11-01-2016

NORTHGATE EAST
 ANKENY, IOWA
APARTMENTS - LANDSCAPING

SHEET 17 OF 18
 E66170

CITY OF ANKENY DESIGN APPROVAL DATE: CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE:



LANDSCAPE REQUIREMENTS

OPEN SPACE
 REQUIRED: 2 TREE & 6 SHRUBS/3000 SF
 241,322 X 20% = 48,265 SF
 48,265 SF/3000 = 16
 32 TREES
 46 SHRUBS

PROPOSED:
 32 TREES
 46 SHRUBS

PARKING AREA
 REQUIRED: GROSS PAVED AREA X 20% =
 REQ. SHADED AREA
 38,748 SF X 20% = 7,750 SF
 7,750 SF/106 = 73
 11 TREES

PROPOSED:
 14 TREES

BUFFER (CLASS 'B' SCREEN) NE DELAWARE
 REQUIRED: 2 OVERSTORY TREES, 1 ORNAMENTAL OR
 EVERGREEN & 6 SHRUBS/100 LF
 536 / 100 = 5.36 (6)
 12 OVERSTORY TREES
 6 ORNAMENTAL OR EVERGREEN
 36 SHRUBS

PROPOSED:
 12 OVERSTORY TREES
 6 ORNAMENTAL OR EVERGREEN
 36 SHRUBS

PLANTING SCHEDULE

	OPEN	PARKING	DELAWARE BUFFER				
AR			3	Acer rubrum Red Maple	3" Cal.	B4B	See Plan
QB			3	Quercus bicolor Swamp White Oak	3" Cal.	B4B	See Plan
GT	6	16		Gleditsia triacanthos 'skyline' Skyline Honeylocust	3" Cal.	B4B	See Plan
UA			6	Ulmus americana American Elm	3" Cal.	B4B	See Plan
CC	11			Crataegus crusgalli 'cockspur' Thornless Hawthorn	2" Cal.	Cont.	See Plan
AS	6			Ametanther canadensis (clump form) Serviceberry	10' HT.	Cont.	Multi-trunk
MP	4			Malus species Prairie Fire Crabapple	2" Cal.	Cont.	See Plan
PG			6	Picea glauca densata Blaufrühes Spruce	6'-8' HT.	TS/B4B	See Plan
JC	12			Juniperus chinensis Sea Green Juniper	#3	Cont.	See Plan
CD	30		10	Caryopteris divaricata 'Snow Fairy' Variegated Blue Mist Spirea	#2	Cont.	See Plan
WF	36			Waldia Florida 'Variegata' Mj Monet Weigela	#2	Cont.	See Plan
PO	6		10	Physocarpus opulifolius 'Padaras' Lemon Candy Golden Ninebark	#2	Cont.	See Plan
DS	12			Diervilla sessilifolia Cool Splash Honeyuckle	#2	Cont.	See Plan

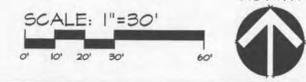
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11-01-2016	6	

NORTHGATE EAST
 ANKENY, IOWA
ROMHOUSE - LANDSCAPING

SHEET
 18
 OF 18
 E6470



CITY OF ANKENY DESIGN APPROVAL DATE: _____ CITY OF ANKENY APPROVED FOR CONSTRUCTION DATE: _____

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