PRELIMINARY PLAT / SITE PLAN FOR:

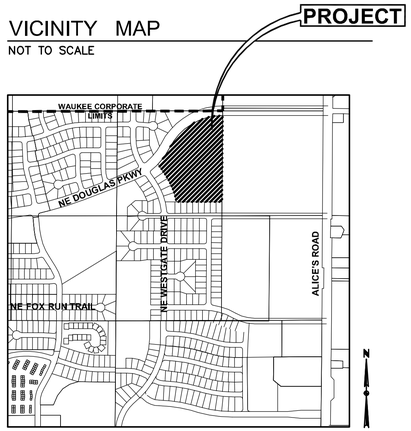
SOMERSET OAKS

WAUKEE, IOWA

Redwood
distinctive living

VICINITY MAP

NOT TO SCALE



OWNER

REDWOOD ACQUISITION, LLC
CONTACT: KELLIE MCIVOR
23775 COMMERCE PARK, SUITE 7
BEACHWOOD, OH 44122

APPLICANT

REDWOOD ACQUISITION, LLC
CONTACT: KELLIE MCIVOR
23775 COMMERCE PARK, SUITE 7
BEACHWOOD, OH 44122

ENGINEER/ SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC
CONTACT: KEITH WEGGEN
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PH. (515) 369-4400
FX. (515) 369-4410

ARCHITECT

MANN ARCHITECTS
CONTACT: DAVID J. MANN
3600 EMBASSY PARKWAY
FAIRLAWN, OH 44333

LEGAL DESCRIPTION

LOT 1 OF SOMERSET OAKS PLAT 1

BENCHMARKS

NE BOLT OF FIRST HYDRANT SOUTH OF FOX RUN TRAIL EAST SIDE OF DARTMOOR DRIVE – ELEVATION=1019.94

DATE OF SURVEY

FEBRUARY 10, 2015

SUBMITTAL DATES

SITE PLAN SUBMITTAL #1:	05/12/15
SITE PLAN SUBMITTAL #2:	06/05/15
SITE PLAN SUBMITTAL #3:	07/17/15

BULK REGULATIONS

R-4 (ROW DWELLING & TOWNHOME DISTRICT)

MINIMUM PLAT AREA:	15,000 SQUARE FEET
LOT AREA PER DWELLING UNIT:	3,500 SQUARE FEET PER UNIT
MINIMUM FLOOR AREA:	800 SQUARE FEET PER UNIT.
LOT WIDTH:	ROW DWELLINGS – 20 FEET PER UNIT; 75 FT OVERALL.
FRONT YARD:	30 FEET.
SIDE YARDS:	A TOTAL OF 15 FEET; ONE SIDE MAY BE REDUCED TO NOT LESS THAN 7 FEET; 15 FEET FOR ANY OTHER PRINCIPAL BUILDING.
REAR YARDS:	DWELLING – 30 FEET OTHER BUILDINGS – 40 FEET.
MAXIMUM HEIGHT:	PRINCIPAL BUILDING – 40 FEET. ACCESSORY BUILDING – 14 FEET.
MAXIMUM NUMBER OF STORIES:	PRINCIPAL BUILDING – 3 STORIES. ACCESSORY BUILDING – 1 STORY.

PROJECT SITE ADDRESS

TBD

EXISTING/ PROPOSED USE

EXISTING: UNDEVELOPED
PROPOSED: SINGLE STORY TOWNHOMES

DEVELOPMENT SUMMARY

SITE AREA:	661,312 SF (15.18 ACRES)
OPEN SPACE:	
OPEN SPACE REQUIRED	132,262 SF (20%)
OPEN SPACE PROVIDED	332,860 SF (50.3%)
IMPERVIOUS AREA:	
TOWNHOMES	
BUILDING 1:	14,796 SF
BUILDING 2:	11,430 SF
BUILDING 3:	9,625 SF
BUILDING 4:	9,232 SF
BUILDING 5:	9,347 SF
BUILDING 6, 10, & 11:	43,497 SF (14,499) X(3)
BUILDING 7 & 8:	29,016 SF (14,508) X(2)
BUILDING 9:	14,533 SF
BUILDING 12 & 19:	28,978 SF (14,489) X(2)
BUILDING 13 & 18:	20,694 SF (10,347) X(2)
BUILDING 14:	14,418 SF
BUILDING 15:	9,487 SF
BUILDING 16:	9,230 SF
BUILDING 17:	6,951 SF
MAINTENANCE BUILDING:	1,210 SF
MAIL KIOSK:	153 SF
ROADWAY/PARKING AREAS:	78,977 SF
SIDEWALK:	16,878 SF
	328,452 SF (7.54 ACRES)

UNIT SUMMARY:

1-CAR GARAGE:	12
2-CAR GARAGE:	88
	100

UNIT TYPE SUMMARY:

TYPE 1 (2 BDRM/2 BTH/ 1 CAR ATTACHED GARAGE):	12 (12%)
TYPE 2 (2 BDRM/2 BTH/2 CAR ATTACHED GARAGE):	63 (63%)
TYPE 2J (2 BDRM/2 BTH/2 CAR ATTACHED GARAGE):	15 (15%)
TYPE 5 (2 BDRM/2 BTH/2 CAR ATTACHED GARAGE):	10 (10%)

DENSITY:	6.59 UNITS/ACRE
PHASING:	THE COMMUNITY WILL BE CONSTRUCTED IN ONE PHASE

PARKING PROVIDED

1-CAR GARAGE:	12 SPACES
2-CAR GARAGE:	176 SPACES
DRIVEWAY:	188 SPACES
STANDARD:	25 SPACES
	402 SPACES

PRIVATE DRIVE LENGTH:	2,853 (BASED OFF CENTERLINE)
REFUSE COLLECTION:	CURBSIDE PICK-UP (NO DUMPSTERS)
NOTE:	NO ON-STREET PARKING ALLOWED

INDEX OF SHEETS

NO.	DESCRIPTION
C0.1	COVER SHEET
C1.1	PRELIMINARY PLAT
C2.1	TOPOGRAPHIC SURVEY
C3.1	OVERALL EXHIBIT
C4.1	DIMENSION PLAN REFERENCE
C4.2–C4.3	DIMENSION PLAN
C5.1	GRADING PLAN REFERENCE
C5.2–C5.4	GRADING PLAN
C6.1	UTILITY PLAN REFERENCE
C6.2–C6.3	UTILITY PLAN
C7.1–7.3	DETAILS
L1–L4	LANDSCAPE PLAN

UTILITY CONTACTS

WATER:
805 UNIVERSITY AVE
WAUKEE, IA 50263
CONTACT: JOHN GIBSON
PH: (515)978-7920

GAS:
805 UNIVERSITY AVE
WAUKEE, IA 50263
CONTACT: JOHN GIBSON
PH: (515)978-7920

SANITARY SEWER:
805 UNIVERSITY AVE
WAUKEE, IA 50263
CONTACT: JOHN GIBSON
PH: (515)978-7920

STORM SEWER:
805 UNIVERSITY AVE
WAUKEE, IA 50263
CONTACT: JOHN GIBSON
PH: (515)978-7920

ELECTRIC:
MIDAMERICAN ENERGY
666 GRAND AVE
DES MOINES, IA 50309
CONTACT: DAWN MARTINO
PH: (515)252-6597

TELEPHONE:
CENTURY LINK
2103 E. UNIVERSITY
DES MOINES, IA 50317
CONTACT: DAVE HARRIS
PH: (303)263-7250

BUILDING DEPARTMENT:
230 W HICKMAN RD
WAUKEE, IA 50263
CONTACT: KEITH RASH
PH: (515)978-7893

HEALTH DEPARTMENT:
DALLAS COUNTY PUBLIC HEALTH & HOME HEALTH
9002 COURT ST
ADEL, IA 50003
PH: (515)993-3750

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN. A REQUEST WAS MADE TO IOWA ONE CALL FOR THE UTILITY PROVIDERS TO LOCATE THEIR UTILITIES IN THE FIELD.

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DR. SUITE G, GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 1501.002

GENERAL LEGEND

PROPOSED

PROPERTY LINE
CENTER LINE
PERMANENT EASEMENT — P/E —
TYPE SW-501 STORM INTAKE
TYPE SW-503 STORM INTAKE
TYPE SW-505 STORM INTAKE
TYPE SW-506 STORM INTAKE
TYPE SW-513 STORM INTAKE
TYPE SW-401 STORM MANHOLE
TYPE SW-402 STORM MANHOLE
TYPE SW-301 SANITARY MANHOLE
STORM/SANITARY CLEANOUT
WATER VALVE
FIRE HYDRANT ASSEMBLY
SIGN
DETECTABLE WARNING PANEL
STORM SEWER STRUCTURE NO. ST-10
STORM SEWER PIPE NO. L-10
SANITARY SEWER STRUCTURE NO. S-10
SANITARY SEWER PIPE NO. P-10
SANITARY SEWER WITH SIZE — 8"S —
SANITARY SERVICE — S — S — S —
STORM SEWER
STORM SERVICE — ST — ST —
WATERMAIN WITH SIZE — 8"W —
WATER SERVICE — W — W —
SAWCUT (FULL DEPTH)
SILT FENCE

EXISTING

SANITARY MANHOLE
WATER VALVE BOX
FIRE HYDRANT
WATER CURB STOP
WELL
STORM SEWER MANHOLE
STORM SEWER SINGLE INTAKE
STORM SEWER DOUBLE INTAKE
FLARED END SECTION
ROOF DRAIN/ DOWNSPOUT
DECIDUOUS TREE
CONIFEROUS TREE
DECIDUOUS SHRUB
CONIFEROUS SHRUB
ELECTRIC POWER POLE
GUY ANCHOR
STREET LIGHT
POWER POLE W/ TRANSFORMER
UTILITY POLE W/ LIGHT
ELECTRIC BOX
ELECTRIC TRANSFORMER
ELECTRIC MANHOLE OR VAULT
TRAFFIC SIGN
TELEPHONE JUNCTION BOX
TELEPHONE MANHOLE/VAULT
TELEPHONE POLE
GAS VALVE BOX
CABLE TV JUNCTION BOX
CABLE TV MANHOLE/VAULT
MAIL BOX
BENCHMARK
SOIL BORING
UNDERGROUND TV CABLE — TV —
GAS MAIN — G —
FIBER OPTIC — FO —
UNDERGROUND TELEPHONE — T —
OVERHEAD ELECTRIC — OE —
UNDERGROUND ELECTRIC — E —
FIELD TILE — TILE —
SANITARY SEWER W/ SIZE — 8"S —
STORM SEWER W/ SIZE — 15" RCP —
WATER MAIN W/ SIZE — 8"W —

THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2 AND CITY OF WAUKEE COSESCO PERMIT. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

ALL CONSTRUCTION MATERIALS, DUMPSTERS, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC R.O.W.

THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, THE 2015 EDITION OF THE SUDAS STANDARD SPECIFICATIONS, THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), AMERICANS WITH DISABILITY ACT GUIDELINES (ADA), SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.

LICENSED PROFESSIONAL ENGINEER
RYAN A. HARGROVE
20811
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.

RYAN A. HARGROVE, P.E. — DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2015
PAGES OR SHEETS COVERED BY THIS SEAL:
C0.1, C1.1, C2.1, C3.1–3.3, C4.1–4.4, C5.1–5.3, C6.1–C6.2

PRELIMINARY
NOT FOR CONSTRUCTION
JULY 17, 2015

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PLOT SCALE: 1:1 DATE PLOTTED: 7/17/2015 10:03 AM DRAWING: ENG
PLOTTED BY: AARON JARDISH TEAM:

SOMERSET OAKS PLAT 1

PRELIMINARY PLAT

OWNER/DEVELOPER:

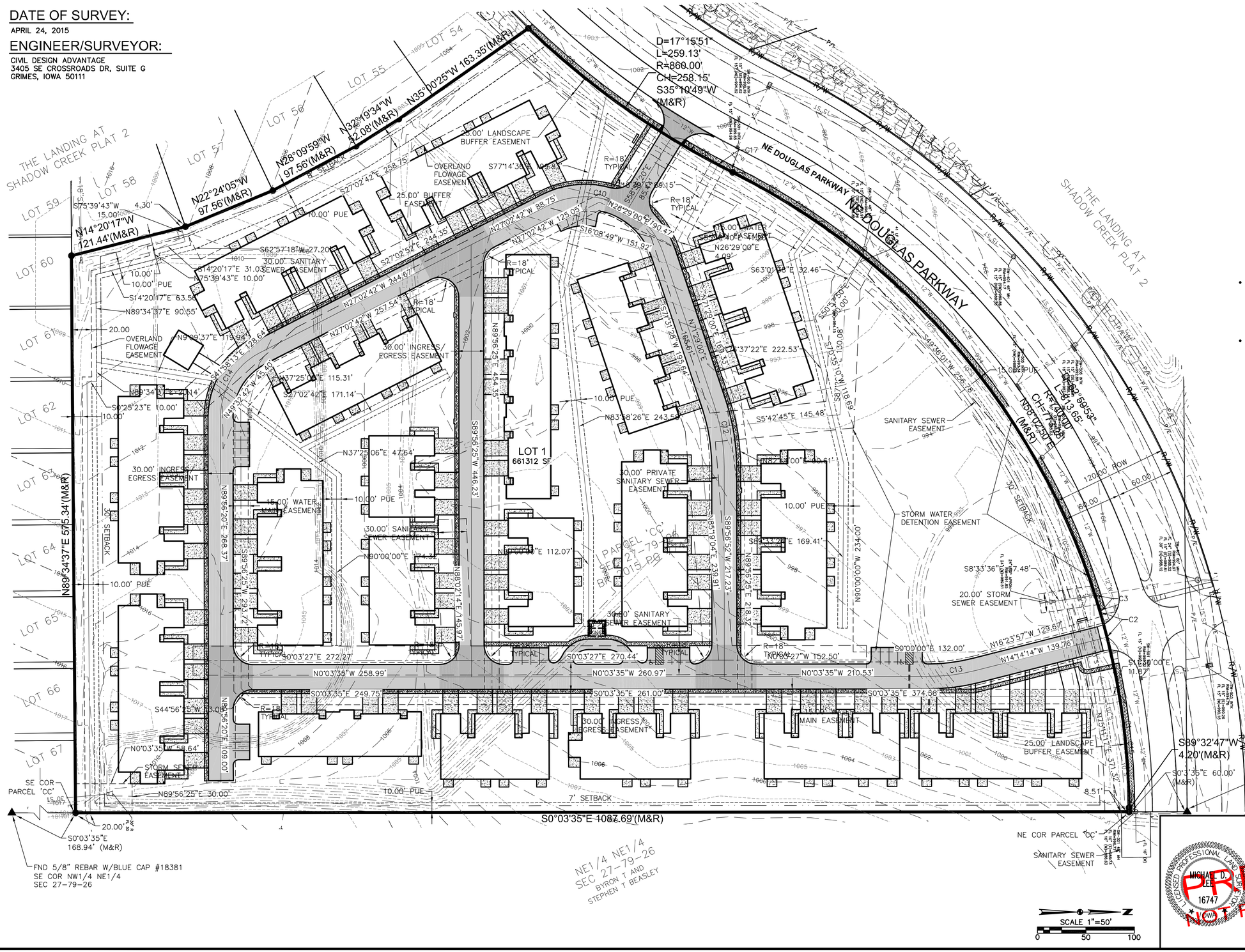
REDWOOD ACQUISITION, LLC
23775 COMMERCE PARK, SUITE 7
BEACHWOOD, OH 44122

DATE OF SURVEY:

APRIL 24, 2015

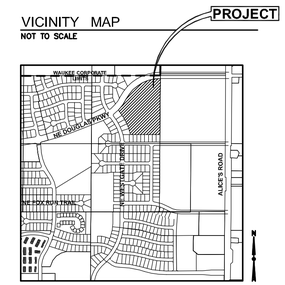
ENGINEER/SURVEYOR:

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DR, SUITE G
GRIMES, IOWA 50111



VICINITY MAP

NOT TO SCALE



ZONING

R-4 (ROW DWELLING & TOWNHOME DISTRICT)

BULK REGULATIONS

FRONT YARD:	30 FEET
SIDE YARD:	A TOTAL OF 15 FEET; ONE SIDE MAY BE REDUCED TO NOT LESS THAN 7 FEET; 15 FEET FOR ANY OTHER PRINCIPAL BUILDING
REAR YARD:	DWELLING – 30 FEET OTHER BUILDINGS – 40 FEET

BENCHMARKS

- STORM SEWER MANHOLE RIM LOCATED AT THE N.E. CORNER OF WARRIOR LANE AND FOX RUN TRAIL INTERSECTION. MANHOLE IS LOCATED 4' FROM THE EAST BACK OF CURB LINE OF WARRIOR LANE AND 46' NORTH OF FOX RUN TRAIL CENTERLINE. ELEVATION = 1014.23
- SANITARY SEWER MANHOLE RIM LOCATED ON THE WEST SIDE OF NE DARTMOOR DRIVE, 121' +/– NORTH OF THE CENTERLINE OF NE BOWMAN DRIVE. MANHOLE IS LOCATED 9' FROM THE WEST BACK OF CURB LINE OF NE DARTMOOR DRIVE. ELEVATION = 1020.12

PLAT DESCRIPTION:

PARCEL 'CC' AS SHOWN IN THE PLAT OF SURVEY RECORDED IN BOOK 2015, PAGE 7742 OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 79 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA AND CONTAINING 15.18 ACRES (661,312 SQUARE FEET) THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

NOTE

- ANY ELEVATIONS SHOWN ON THE FINAL PLAT WERE PROVIDED BY PROJECT ENGINEER AND ARE NOT CERTIFIED BY THIS SURVEYOR.
- ANY SET MONUMENTATION SHOWN ON THIS PLAT WILL BE COMPLETED WITHIN ONE YEAR FROM THE DATE THIS PLAT WAS RECORDED.

LEGEND:

	FOUND	SET
SECTION CORNER AS NOTED	▲	△
1/2" REBAR, YELLOW CAP#16747 (UNLESS OTHERWISE NOTED)	●	○
PLATTED BEARING & DISTANCE	P	
MEASURED BEARING & DISTANCE	M	
RECORDED BEARING & DISTANCE	R	
DEEDED BEARING & DISTANCE	D	
MINIMUM PROTECTION ELEVATION	MPE	
PUBLIC UTILITY EASEMENT	P.U.E.	
CENTERLINE		
SECTION LINE		
EASEMENT LINE		

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 PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

MICHAEL D. LEE 16747 LICENSED PROFESSIONAL LAND SURVEYOR IOWA

PRELIMINARY NOT FOR CONSTRUCTION

MICHAEL D. LEE DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2016
PAGES OR SHEETS COVERED BY THIS SEAL:
SHEETS 1

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	6/24/15
SITE PLAN SUBMITTAL #2	6/04/15
SITE PLAN SUBMITTAL #1	5/12/15

RETURN TO:

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
CIVIL DESIGN ADVANTAGE
ENGINEER: RH
EI: ES, CC

Redwood distinctive living

SOMERSET OAKS PLAT 1
PRELIMINARY PLAT
WAUKEE, IOWA

C1.1

1501.002

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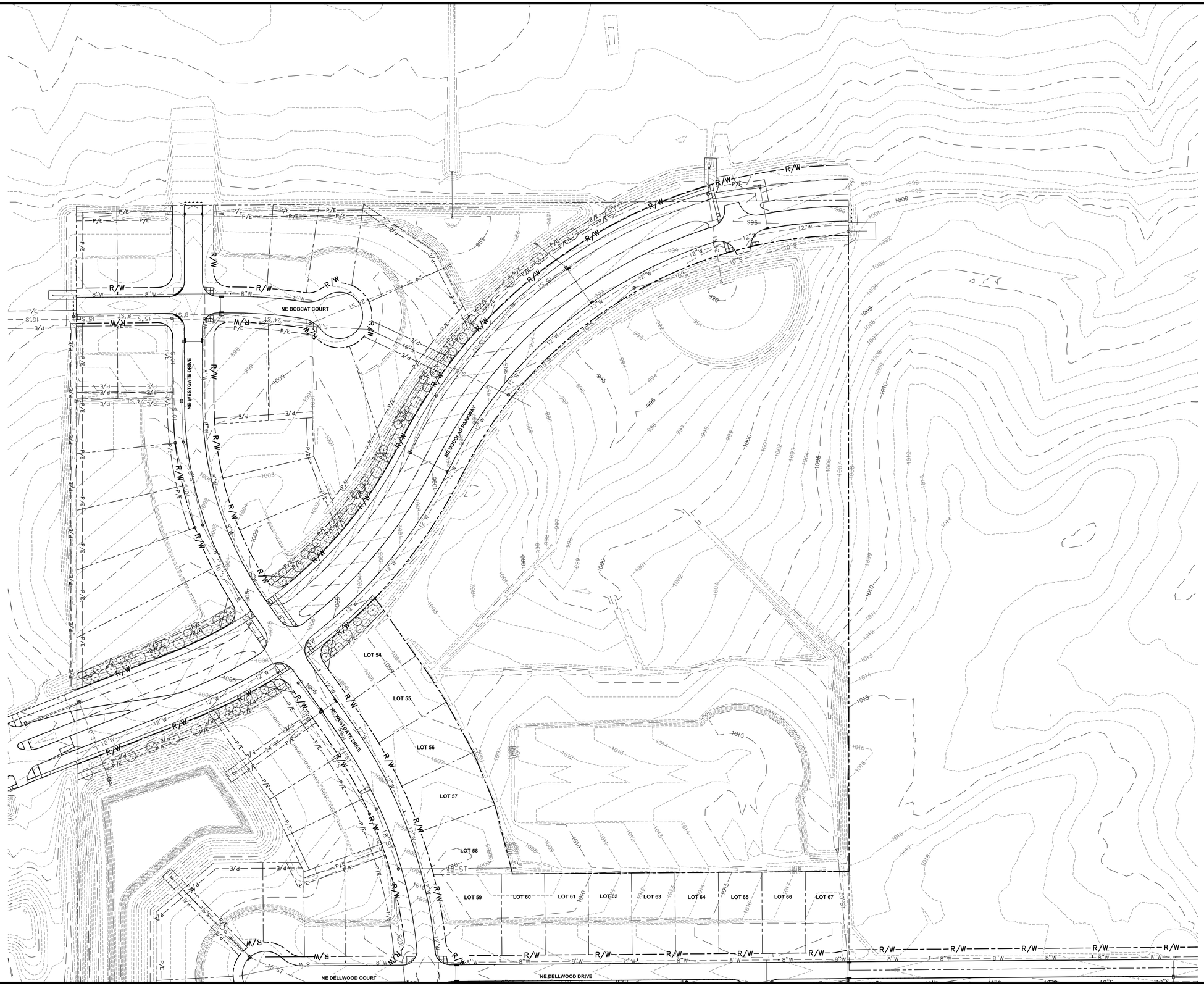

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	07/17/15
SITE PLAN SUBMITTAL #2	06/05/15
SITE PLAN SUBMITTAL #1	05/12/15

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: RH
EI: ES, CC
CIVIL DESIGN ADVANTAGE

Redwood distinctive living

SOMERSET OAKS
TOPOGRAPHIC SURVEY
WAUKEE, IOWA

C2.1

1501.002

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PLOTTED BY: AARON JAROSH
DATE PLOTTED: 7/17/2015 10:25 AM
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ENG:

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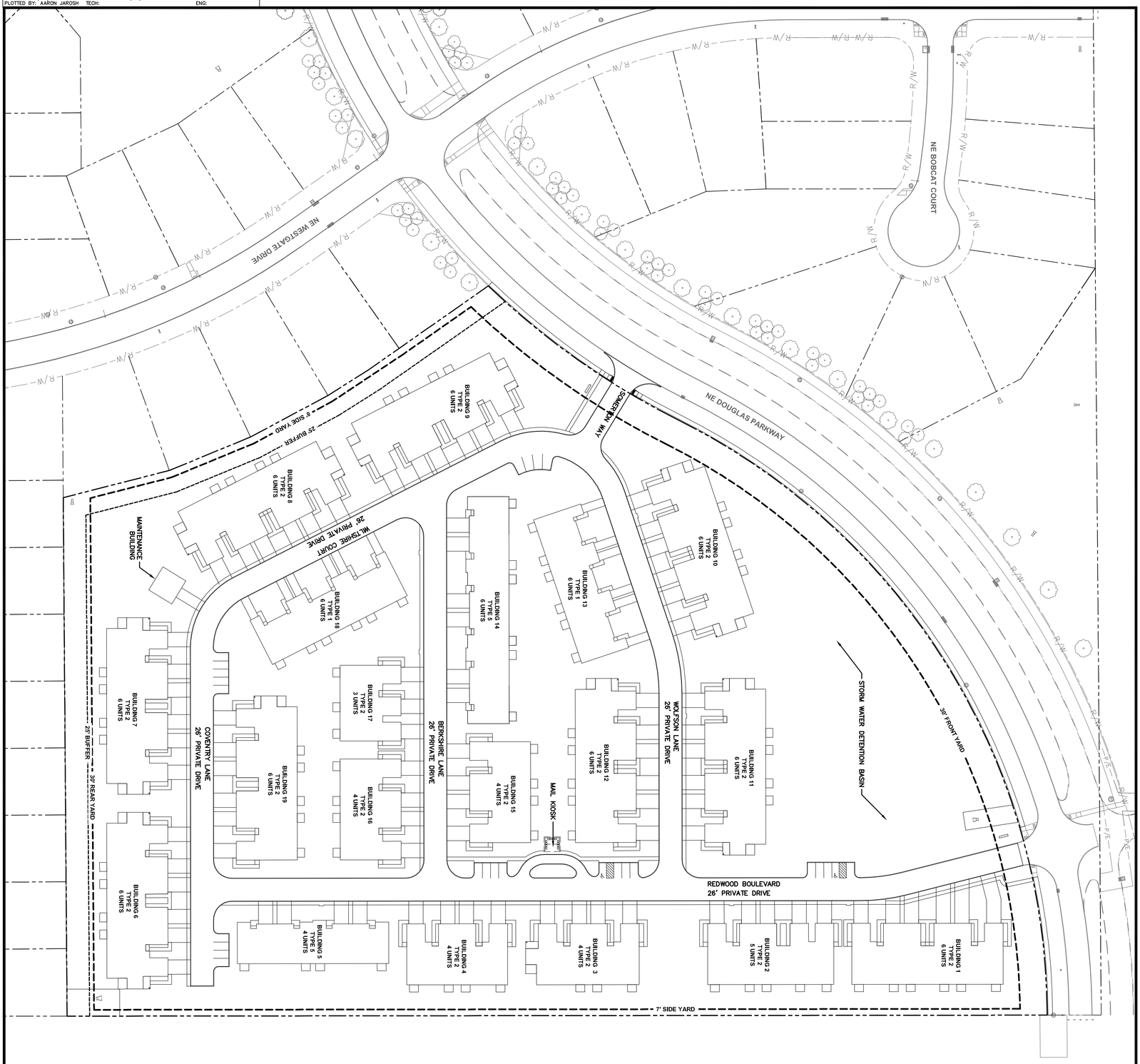
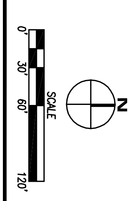




SOMERSET OAKS

OVERALL EXHIBIT

WAUKEE, IOWA

C3.1

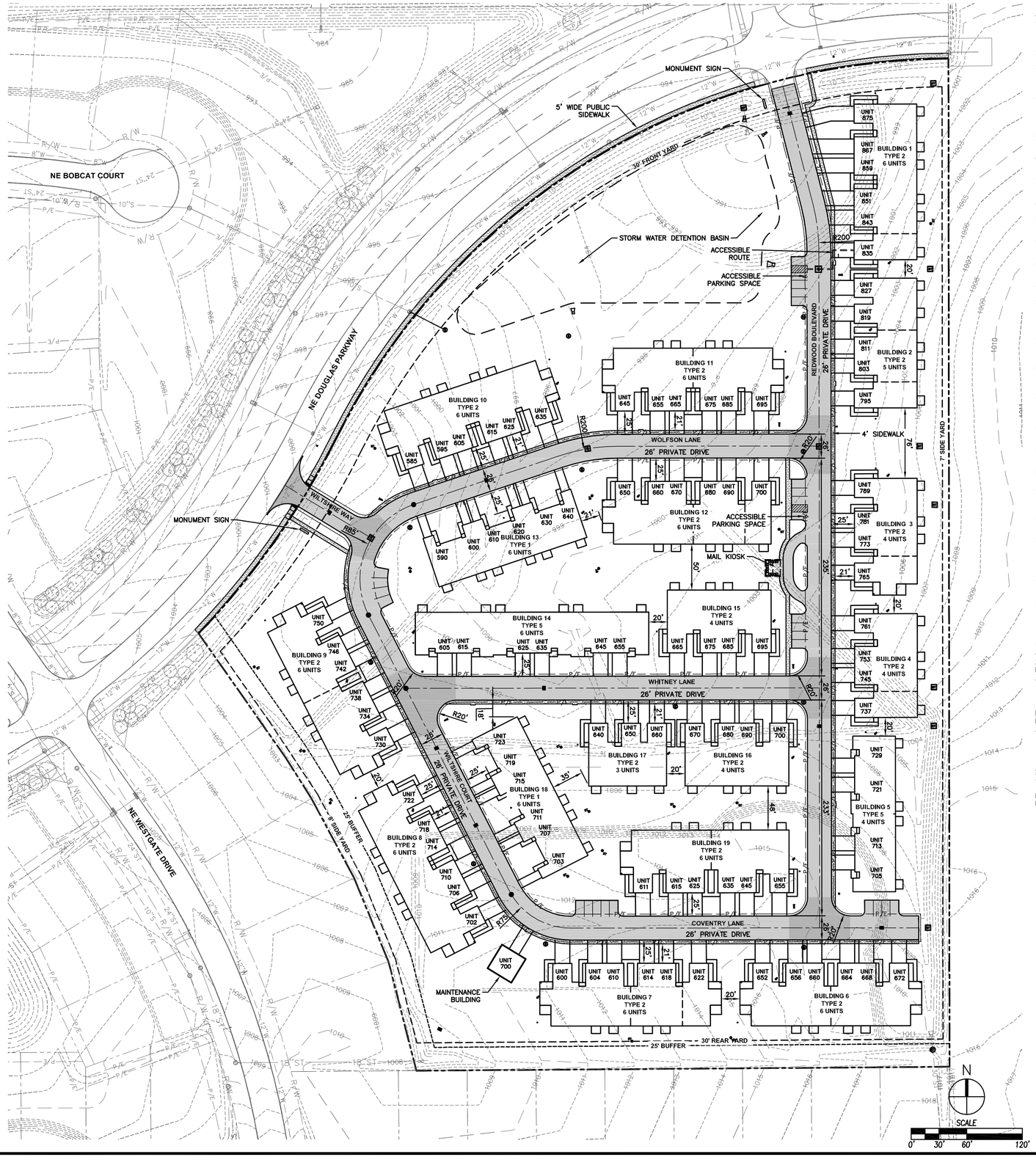
1501.002

CIVIL DESIGN ADVANTAGE

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER:RH | EI: ES, CC

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	07/17/15
SITE PLAN SUBMITTAL #2	06/05/15
SITE PLAN SUBMITTAL #1	05/12/15



GENERAL NOTES

1. THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND SUDAS STANDARD SPECIFICATIONS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
2. ALL WORK SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
3. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
4. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
5. ONE WEEK PRIOR TO CONSTRUCTION WITHIN CITY R.O.W. OR ANY CONNECTION TO PUBLIC UTILITIES CONTRACTOR SHALL NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
6. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
7. ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
9. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
10. REMOVE ALL DEBRIS SPILLED INTO R.O.W./PUBLIC STREETS AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
11. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
12. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
13. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
14. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
15. THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
16. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
17. ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACT BID.
18. MONUMENT SIGNS ARE TO BE REVIEWED AND APPROVED BY THE DEVELOPMENT SERVICES DEPARTMENT.
19. ALL STAKING IS TO BE DONE UNDER THE DIRECTION OF A LICENSED ENGINEER OR SURVEYOR.
20. IT IS THE CONTRACTORS RESPONSIBILITY TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT AT LEAST ONE WEEK PRIOR TO CONSTRUCTION ACTIVITIES COMMENCING.
21. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT 72 HOURS PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.
22. AN AS-BUILT SITE PLAN ILLUSTRATING THE LOCATION AND DEPTHS OF SITE UTILITIES AND GRADES FOR DRAINAGE SWALES, DETENTION FACILITIES AND FFE'S SHALL BE PROVIDED IN PDF FORM AND HARD COPY UPON COMPLETION OF EACH PHASE OF DEVELOPMENT TO THE CITY WAUKEE'S DEVELOPMENT SERVICES DEPARTMENT.
23. THE PROPOSED SIGNAGE WILL REQUIRE A PERMIT FROM THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT.
24. IT IS THE CONTRACTORS RESPONSIBILITY TO RECEIVE WRITTEN APPROVAL FROM THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT FOR ANY CHANGES MADE TO THE PROPOSED PLAN SET, AND ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT RECEIVED WRITTEN APPROVAL FROM THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT ARE THE RESPONSIBILITY OF THE CONTRACTOR.

PAVEMENT SCHEDULE

26' WIDE PRIVATE DRIVES
BASE BID: 6" P.C.C. WITH 3" SUBBASE
ALTERNATE BID: 7" HMA WITH 12" PREPARED SUBGRADE DEPTH AND 24" P.C.C. CURB AND GUTTER SECTION

INTERSECTIONS
BASE BID: 7" P.C.C. WITH 3" SUBBASE
ALTERNATE BID: 8" HMA WITH 12" PREPARED SUBGRADE DEPTH AND 24" P.C.C. CURB AND GUTTER SECTION

SIDEWALKS
4" P.C.C. WITH 4" SUBBASE

NOTE: SUBGRADE PREPARATION SHALL EXTEND 24" BEYOND EDGE OF PAVING

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	07/17/15
SITE PLAN SUBMITTAL #2	06/05/15
SITE PLAN SUBMITTAL #1	05/12/15

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
CIVIL DESIGN ADVANTAGE
ENGINEER: RH
EI: ES, CC

Redwood distinctive living

SOMERSET OAKS
DIMENSION PLAN REFERENCE
WAUKEE, IOWA

C4.1

1501.002

FILE: J:\1501\1501002\DWG\150100SP-SITE-DIMENSION.DWG
LAYOUT: C4.1 DATE: 07/17/2015 10:35 AM COMMENT:
PLOTTED BY: AARON JARDISH TECH: ENG:

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	07/17/15
SITE PLAN SUBMITTAL #2	06/05/15
SITE PLAN SUBMITTAL #1	05/12/15

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
CIVIL DESIGN ADVANTAGE
ENGINEER: RH
EI: ES, CC

Redwood distinctive living

SOMERSET OAKS
DIMENSION PLAN REFERENCE
WAUKEE, IOWA

C4.2

1501.002

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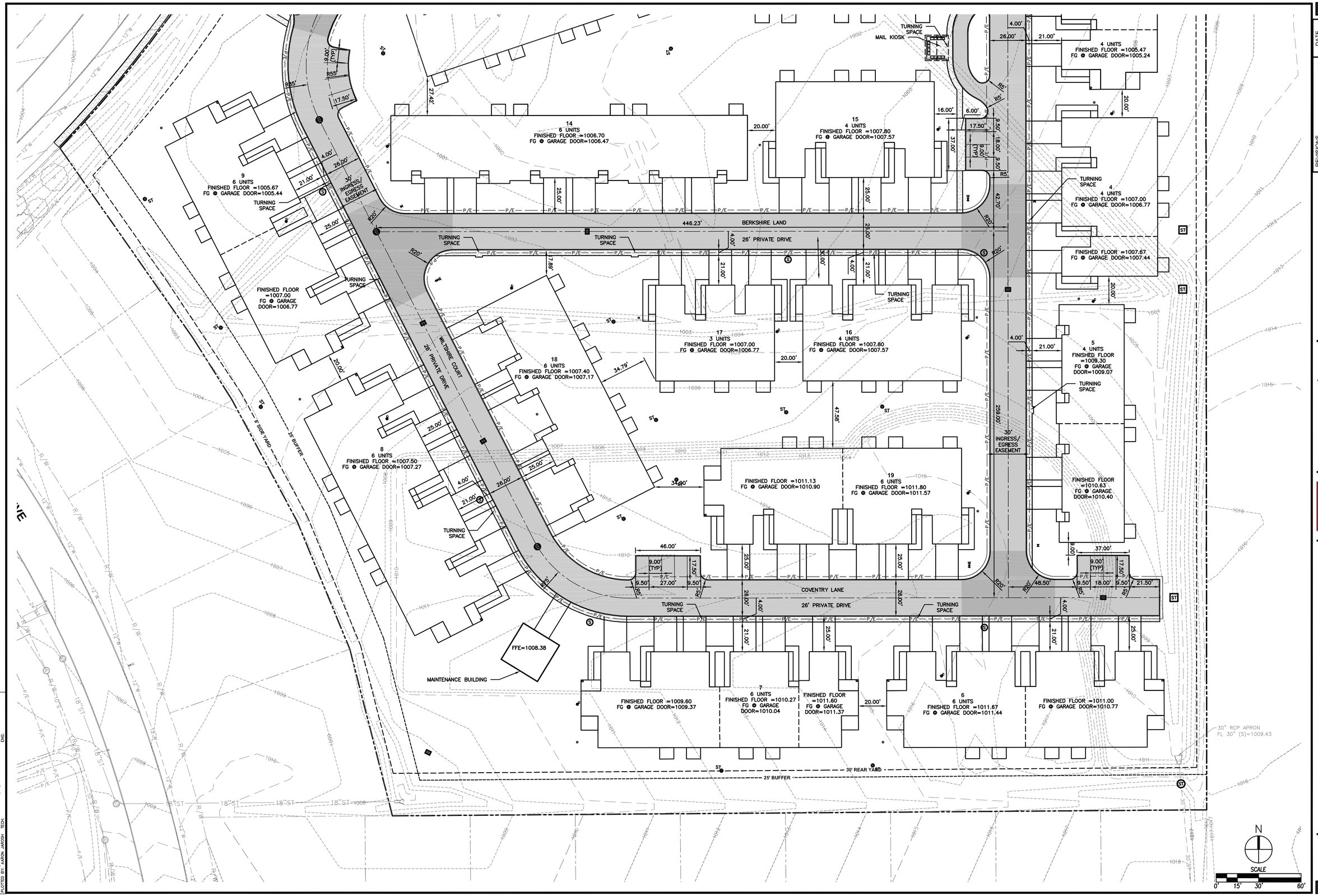

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	07/17/15
SITE PLAN SUBMITTAL #2	06/05/15
SITE PLAN SUBMITTAL #1	05/12/15

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: RH | EI: ES, CC

CIVIL DESIGN ADVANTAGE

Redwood distinctive living

SOMERSET OAKS
DIMENSION PLAN REFERENCE
WAUKEE, IOWA

C4.3

1501.002

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PLOTTED BY: AARON JARDISH
COMMENT: ENG.
TECH.

GRADING NOTES

1. THE COMPLETION AND APPROVAL OF THE COSESCO PERMIT SHALL BE PROVIDED BY THE CITY OF WAUKEE BUILDING DIVISION AND STORM WATER DEPARTMENT PRIOR TO ANY GRADING ACTIVITIES.
2. CONTRACTOR SHALL STRIP ALL DELETERIOUS MATERIAL. THE TOP 6" OF TOPSOIL IS TO BE STOCKPILED AND RESPREAD AFTER GRADING IS COMPLETE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SUITABLE TOPSOIL STOCKPILE SITE.
3. EXCAVATION SHALL BE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2015 EDITION OF THE SUDAS STANDARD SPECIFICATIONS, IF APPLICABLE.
4. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
5. ALL SPOT ELEVATIONS ARE FORM GRADE (FG) OR TOP OF FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS.
7. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
8. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
10. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
11. FINAL FINISH GRADING TO BE APPROVED BY THE ARCHITECT AND CIVIL ENGINEER. MATCH EXISTING GRADES AT THE INTERFACE OF NEW AND EXISTING GRADES OR PAVING.
12. THE GRADING OF THE DETENTION FACILITY, INSTALLATION OF THE STORM SEWER SYSTEM AND INSTALLATION OF THE TEMPORARY STAND PIPE SHALL BE COMPLETED AND FUNCTIONAL PRIOR TO ANY INCREASE IN IMPERVIOUS SURFACES WITHIN THE SITE OR THE PREVIOUSLY MENTIONED ITEMS SHALL BE GRADED/ INSTALLED AS SOON AS POSSIBLE. SEE SWPPP FOR TEMPORARY STAND PIPE DETAILS.
13. A CERTIFIED AS-BUILT GRADING PLAN OF THE DETENTION BASIN AND DRAINAGE SWALES SHALL BE SUBMITTED TO THE CITY OF WAUKEE UPON COMPLETION OF THE SITE IMPROVEMENTS FOR EACH PHASE OF CONSTRUCTION PRIOR TO FINAL ACCEPTANCE.
14. CONSTRUCTION OPERATIONS SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.
15. GENERAL PERMIT #2 HOLDER MUST PROVIDE THE CITY OF WAUKEE WITH A WRITTEN VERIFICATION THAT THE TOPSOIL REQUIREMENTS OF GENERAL PERMIT #2 HAVE BEEN MET UPON COMPLETION OF THE PROJECT.
17. BUILDING PADS:
    OVERBUILD PADS 5' ON SIDES, 10' ON REAR, AND 3' ON FRONT. PADS TO BE CONSTRUCTED +/1" FROM FIELD GRADES. PADS TO BE LEFT 6" UNLESS OTHERWISE DIRECTED BY CONSTRUCTION MANAGER. SURVEYOR TO COORDINATE BUILDING PAD STAKING METHOD WITH EXCAVATOR AND CM.

LANDLOK 300 TURF REINFORCEMENT MATTING OR APPROVED EQUIVALENT

General Permit #2
TOP SOIL REQUIRED: 3,599 CY

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ENGINEER: RH
EI: ES, CC
CIVIL DESIGN ADVANTAGE

Redwood distinctive living

SOMERSET OAKS
GRADING PLAN REFERENCE
WAUKEE, IOWA

C5.1
1501.002

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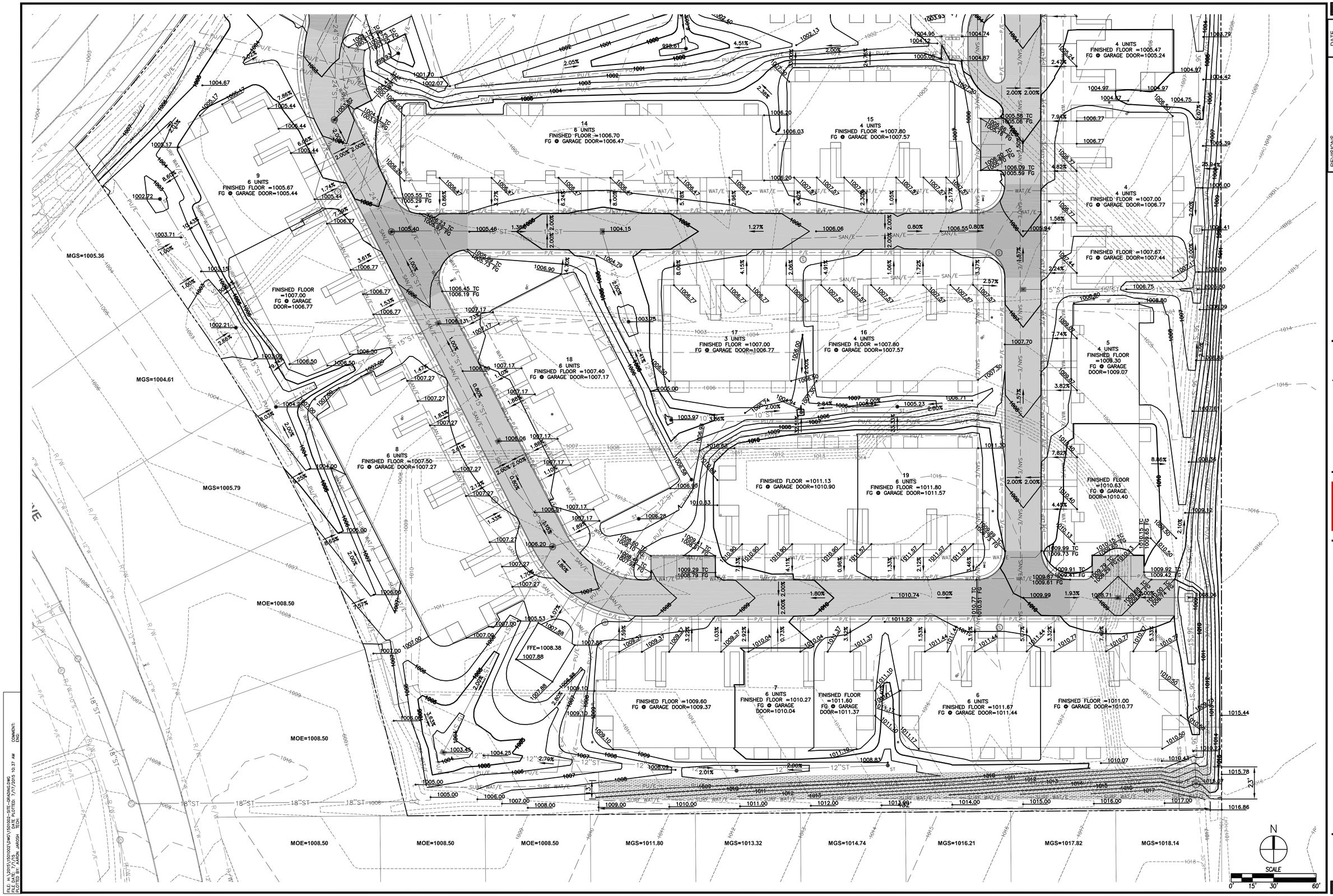
Redwood distinctive living

SOMERSET OAKS
GRADING PLAN REFERENCE
WAUKEE, IOWA

C5.2

1501.002



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CIVIL DESIGN ADVANTAGE

Redwood distinctive living

SOMERSET OAKS

GRADING PLAN REFERENCE

WAUKEE, IOWA

C5.3

1501.002

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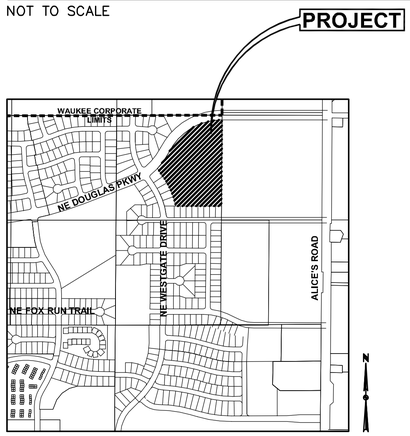
PLOT SCALE: 1:1 DATE: 7/17/2015 10:37 AM COMMENT:
PLOTTED BY: AARON JAROSH TECH: ENG:

SOMERSET OAKS

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

NOT TO SCALE



STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	1,485
2	SEEDING, FERTILIZING, AND MULCHING	AC	10
3	CONCRETE WASHOUT PIT	EA	1
4	INLET PROTECTION	EA	39
5	FILTER SOCK	LF	60
6	24" CMP/HDPE TEMPORARY STANDPIPE	EA	1

SEEDING SHALL CONSIST OF SUDAS TYPE 4 (URBAN TEMPORARY EROSION CONTROL MIXTURE)

SWPPP LEGEND

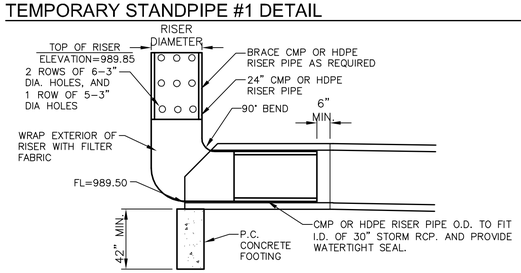
- DRAINAGE ARROW — X.XX %
- GRADING LIMITS
- FILTER SOCK
- SILT FENCE
- INLET PROTECTION
- PORTABLE RESTROOM — R
- CONCRETE WASHOUT PIT
- TEMPORARY STANDPIPE
- AREA TO BE SEEDED
- STRAW MAT
- UNDISTURBED AREA
- RIPRAP
- GRAVEL ENTRANCE
- STAGING AREA
- TEMPORARY SEDIMENT BASIN — TSB #

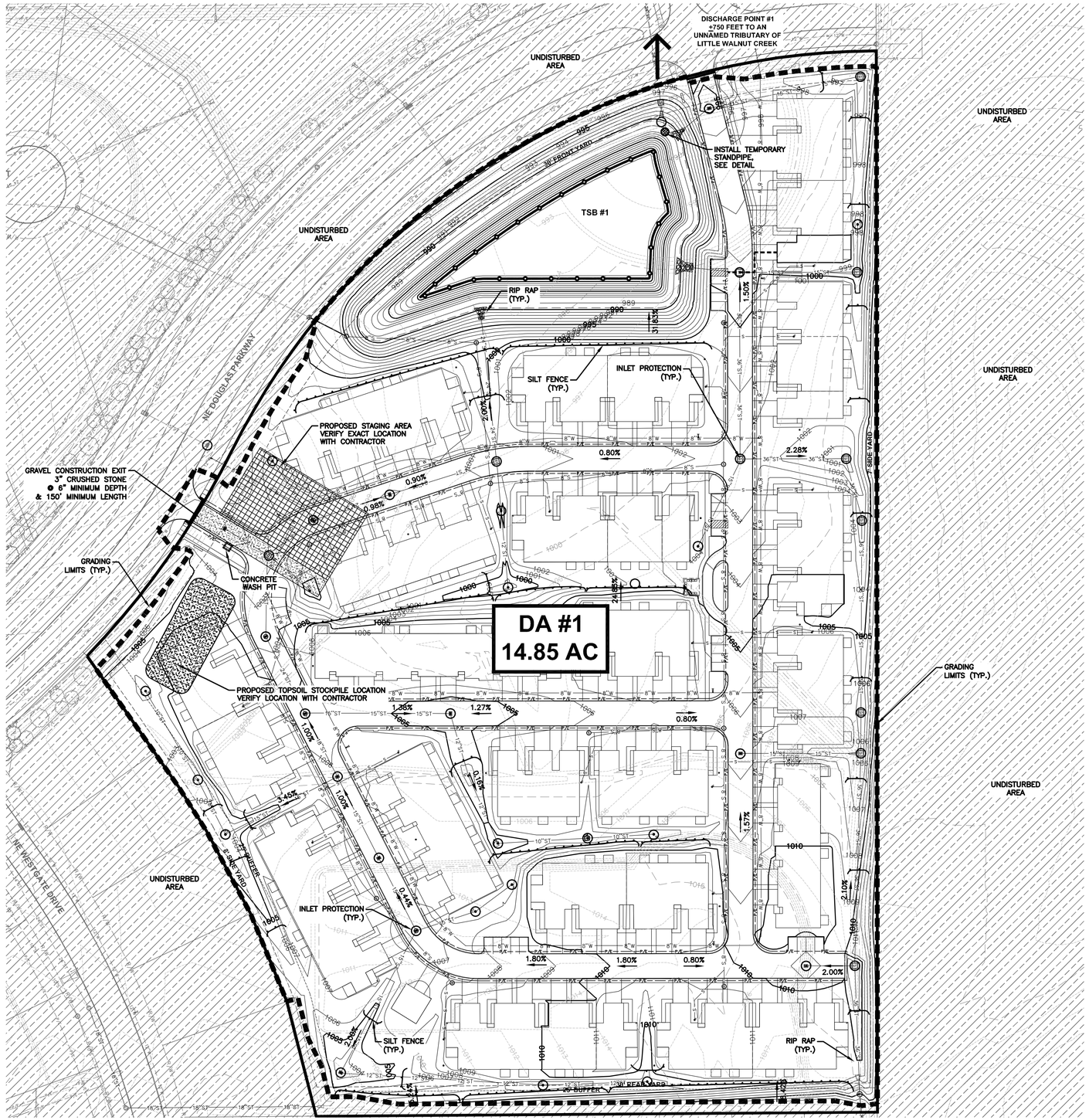
DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO LITTLE WALNUT CREEK ±750 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	14.85 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	53,460 CU FT
VOLUME PROVIDED IN SILT FENCE (1485 LF @ 4.5 CU FT/LF OF FENCE)	6,682 CU FT
VOLUME PROVIDED IN FILTER SOCK (60 LF @ 2.0 CU FT/LF OF FENCE)	120 CU FT
VOLUME PROVIDED IN TSB #1	46,778 CU FT
TOTAL VOLUME PROVIDED	53,580 CU FT

TEMPORARY STANDPIPE #1 DETAIL





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Redwood distinctive living

SOMERSET OAKS
EROSION AND SEDIMENT CONTROL PLAN
WAUKEE, IOWA

C5.4

1501.002

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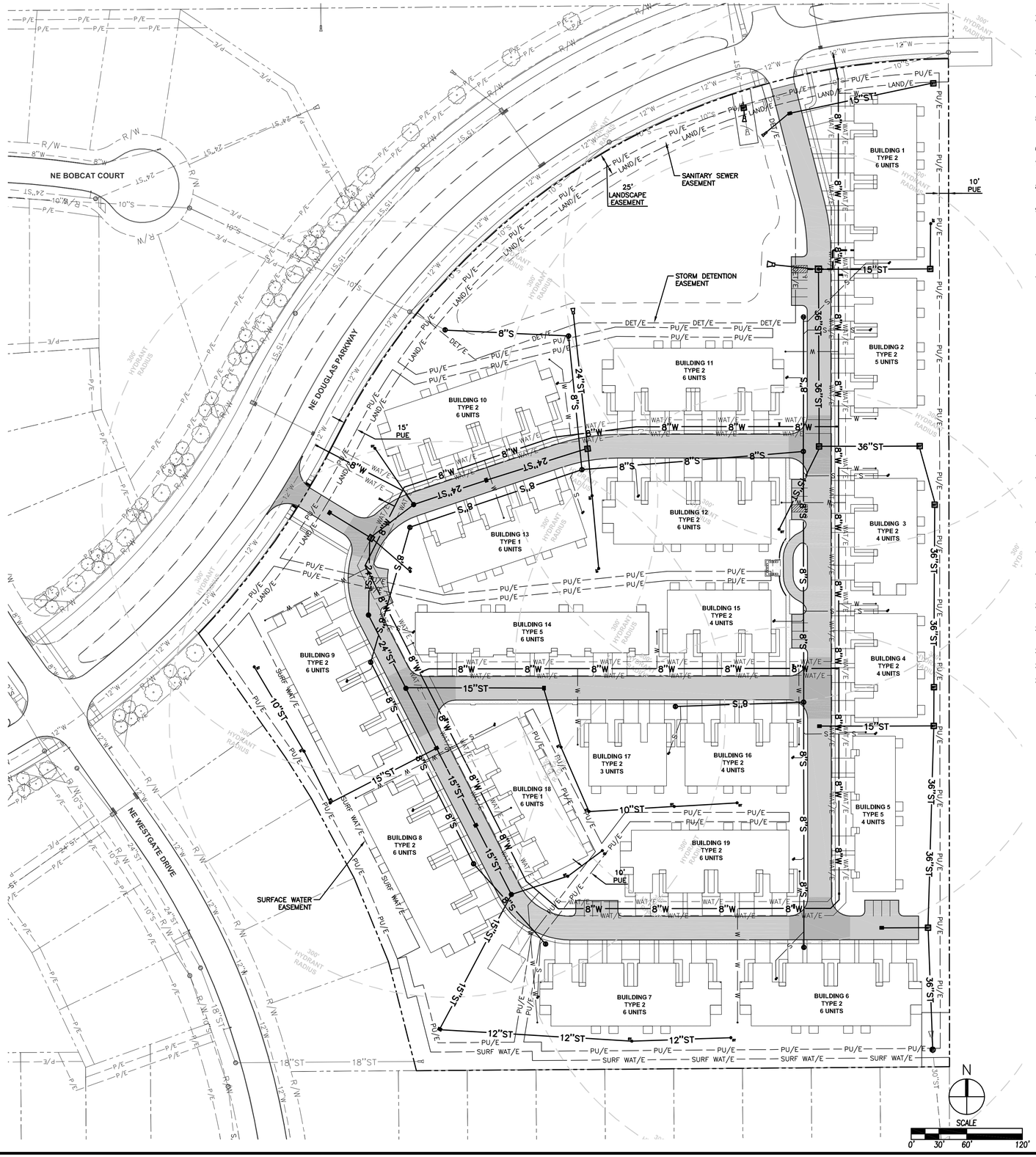

UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR UTILITY SERVICE SIZES AND EXACT LOCATIONS. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. CONCRETE COLLARS ARE REQUIRED FOR INSTALLING STORM SEWER PIPES INTO EXISTING STORM SEWER STRUCTURES PER SUDAS SW-211 FIGURE 4020.11.
4. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
5. BACKFILL ALL UTILITY TRENCHES ACCORDING TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2015 EDITION OF THE SUDAS STANDARD SPECIFICATIONS, MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATERMAINS.
6. INSTALL STORZ FITTINGS ON ALL HYDRANTS INCLUDING ANY RELOCATED HYDRANTS.
7. ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES. INSTALL CHIMNEY SEALS ON ANY ADJUSTED MANHOLES. ALL PROPOSED SANITARY MANHOLES ARE TO UTILIZE A TYPE 'A' CASTING.
8. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
9. 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN. O-RING GASKET JOINTS ARE TO BE INSTALLED IN SITUATIONS LESS THAN 18" BELOW OR ANY TIME SANITARY OR STORM SEWER CROSSES OVER WATERMAIN. SEE SUDAS STANDARD SPECIFICATION DIVISION 5 SECTION 5010-3.07.
10. MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER MAINS.
11. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
12. ALL WATERMAIN WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
13. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
14. PRIVATE UTILITIES TO BE INSTALLED PER THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE LATEST VERSION OF THE UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS. ALL APPLICABLE UTILITY COMPANIES SHALL BE CONTACTED 48 HOURS PRIOR TO ANY WORK BEING STARTED.
15. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE RETENTION FACILITIES AND PRIVATE UTILITIES.
16. CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS AND OTHER MATERIAL INTO NEW AND EXISTING SEWER SYSTEMS. SHOULD ANY CONTAMINATION OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AT NO COST TO THE OWNER. INSTALL SEDIMENT CONTROLS AT ALL PERMANENT STORM SEWER INLETS. DROP DOWN INLET PROTECTION IS REQUIRED FOR PUBLIC STREETS.
17. CONTRACTOR SHALL TEST AND INSPECT ALL PROPOSED STORM SEWER, WATERMAIN AND SANITARY SEWER. THE CITY OF WAUKEE ENGINEERING DEPARTMENT IS REQUIRED TO WITNESS TESTING. ALL TESTING SHALL BE COMPLETED MEETING CITY OF WAUKEE STANDARDS.
18. ALL UTILITY TIE-INS TO EXISTING PUBLIC UTILITIES SHOULD BE COORDINATED WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT AND REQUIRES 48 HOUR NOTICE
19. ALL PRIVATE AND PUBLIC STORM SEWER AND SANITARY SEWER PIPES SHALL BE CLEANED, TELEVISED, AND SANITARY MANHOLES SHALL BE VACUUM TESTED. A HARD COPY OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
20. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL BE CORE DRILLED AND A LINK SEAL SHALL BE USED FOR THE CONNECTION.
21. IT IS THE OWNER'S RESPONSIBILITY TO COORDINATE IRRIGATION AND METER PITS WITH THE WAUKEE PUBLIC WORKS DEPARTMENT.
22. ALL BUILDING DOWNSPOUTS SHALL HAVE CONCRETE SPLASH BLOCKS.
23. INSTALL DEETER 2326 GRATE AND FRAME ON ALL SW-511, SW-402, AND SW-502 INTAKES.
24. ALL STORM SEWER PIPE MATERIALS NOT SPECIFIED ON PLANS MAY CONSIST OF:
    - REINFORCED CONCRETE PIPE (RCP)
    - REINFORCED CONCRETE ARECH PIPE (RCAP)
    - CORRUGATED METAL PIPE (CMP)
    - POLYVINYLCHLORIDE PIPE (PVC)
    - HIGH DENSITY POLYETHLENE (HDPE)

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GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
CIVIL DESIGN ADVANTAGE
ENGINEER: RH
EI: ES, CC

Redwood distinctive living

SOMERSET OAKS
UTILITY PLAN REFERENCE
WAUKEE, IOWA

C6.1

1501.002

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ENGINEER: RH | EI: ES, CC

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UTILITY PLAN REFERENCE
WAUKEE, IOWA

C6.2

1501.002

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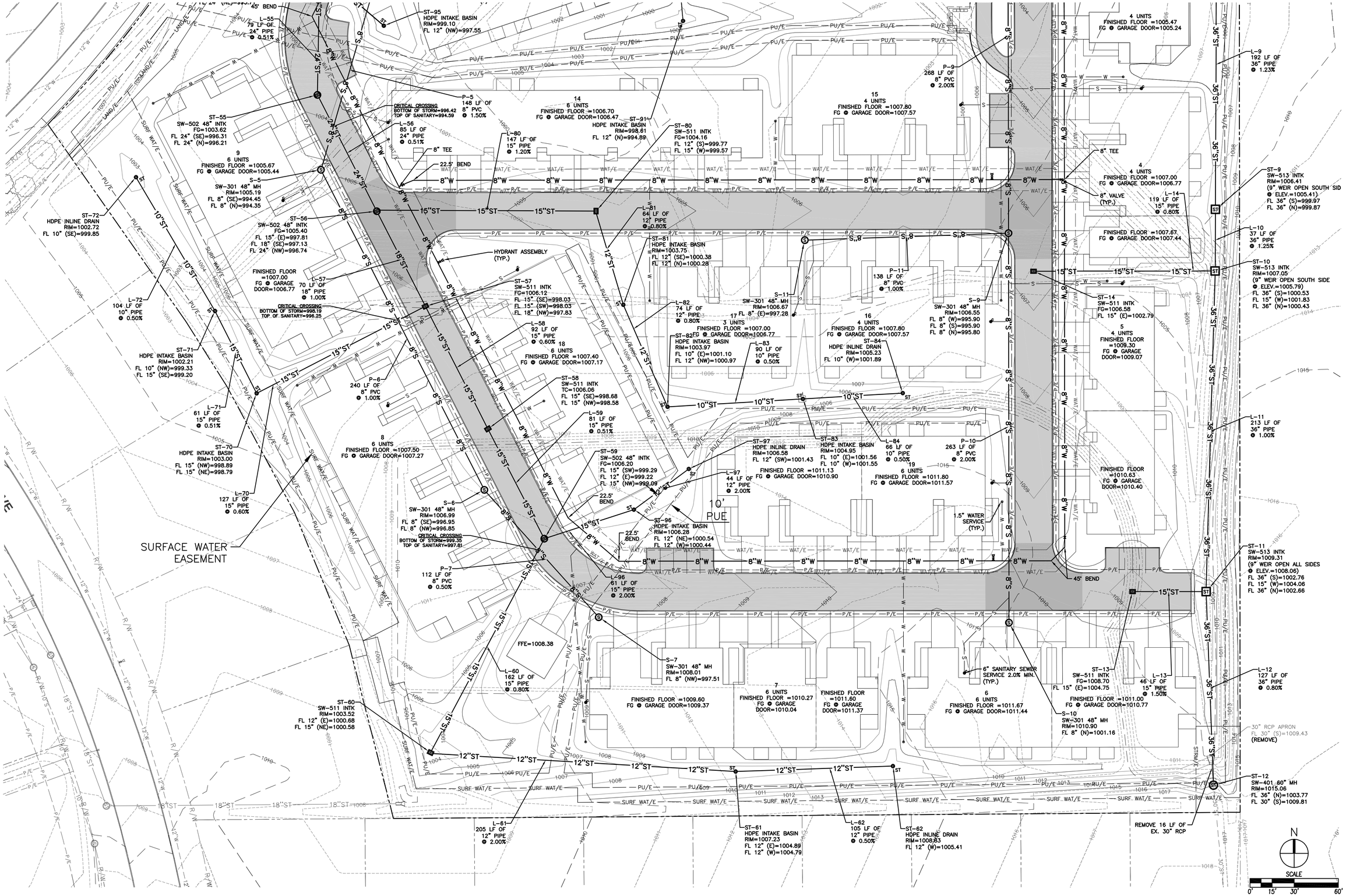

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UTILITY PLAN REFERENCE
WAUKEE, IOWA

C6.3

1501.002

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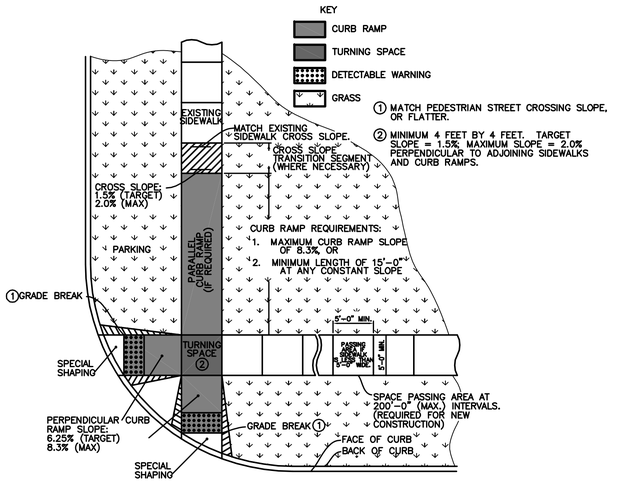
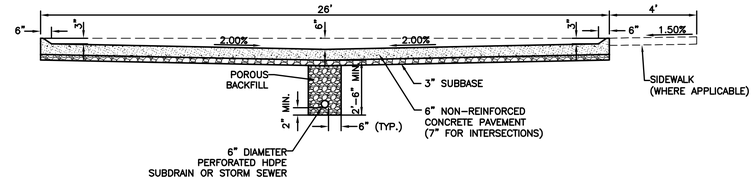
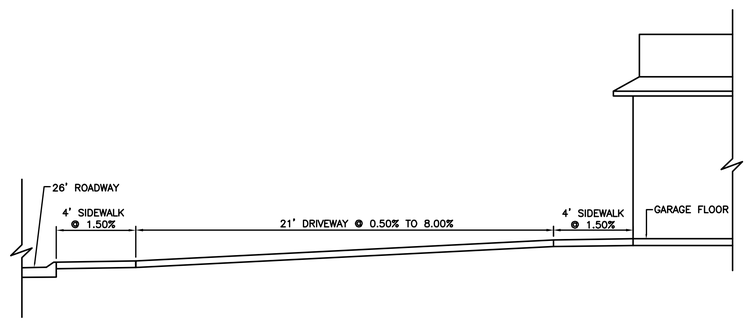


1 GENERAL FEATURES OF AN ACCESSIBLE SIDEWALK
NOT TO SCALE



2 TYPICAL PAVEMENT SECTION SUBDRAIN DETAIL
NOT TO SCALE



3 TYPICAL BUILDING GRADING (PROFILE)
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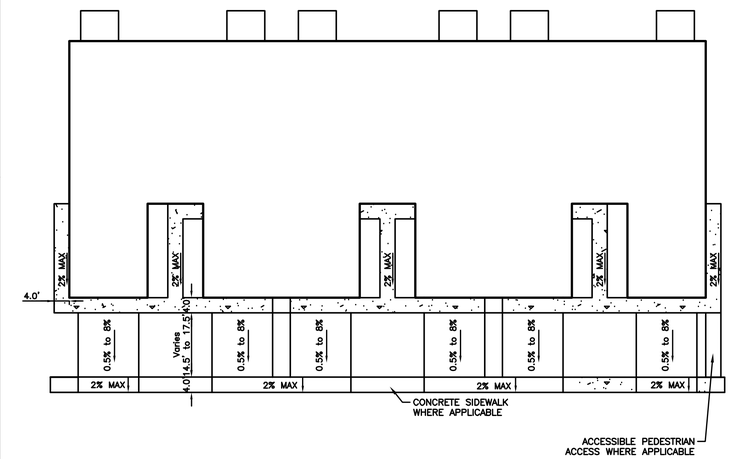

4 TYPICAL BUILDING GRADING (PLAN)
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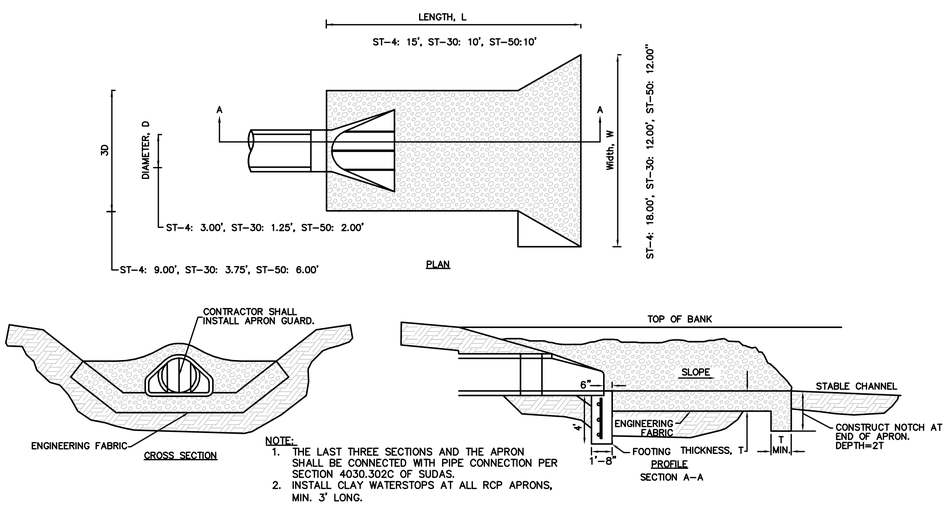
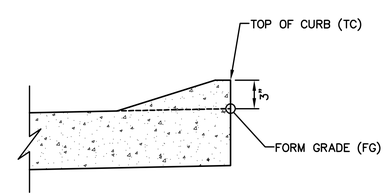


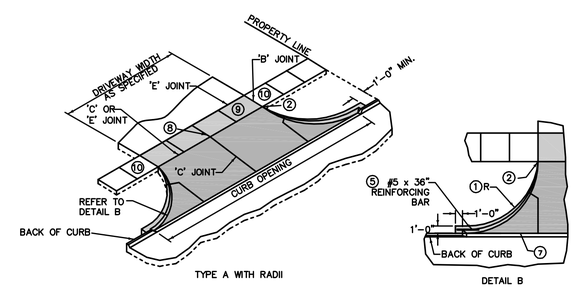
NOTE:
1. THE LAST THREE SECTIONS AND THE APRON SHALL BE CONNECTED WITH PIPE CONNECTION PER SECTION 4030.302C OF SUDAS.
2. INSTALL CLAY WATERSTOPS AT ALL RCP APRONS, MIN. 3' LONG.

5 RIP RAP
NOT TO SCALE



6 3" INTEGRAL ROLLED CURB
NOT TO SCALE

1. DRIVEWAY RADIUS (R).
2. TRANSITION THE CURB HEIGHT TO 0 INCHES AT END OF TAPER/RADIUS OR AT THE FRONT EDGE OF SIDEWALK. DO NOT EXTEND RAISED CURB ACROSS SIDEWALK.
3. PAVEMENT THICKNESS. RESIDENTIAL: 6 INCHES MINIMUM. COMMERCIAL AND INDUSTRIAL: 7 INCHES MINIMUM.
4. SIDEWALK THICKNESS THROUGH DRIVEWAY TO MATCH THICKNESS OF DRIVEWAY.
5. CENTER REINFORCING BAR VERTICALLY IN THE PAVEMENT.
6. MATCH THICKNESS OF ADJACENT ROADWAY, 8 INCHES MINIMUM.
7. PROVIDE 'E' JOINT AT BACK OF CURB UNLESS 'B' JOINT IS SPECIFIED.
8. FOR ALLEYS, INVERT THE PAVEMENT CROWN 2% TOWARD CENTER OF ALLEY.
9. TARGET CROSS SLOPE OF 1.5% WITH A MAXIMUM CROSS SLOPE OF 2.0%. IF SPECIFIED IN THE CONTRACT DOCUMENTS, CONSTRUCT THE SIDEWALK THROUGH THE DRIVEWAY 5 FEET WIDE TO SERVE AS A PASSING SPACE.
10. IF CROSS SLOPE OF ADJACENT SIDEWALK PANEL EXCEEDS 2.0%, REMOVE AND REPLACE TO TRANSITION FROM EXISTING SIDEWALK TO SIDEWALK THROUGH DRIVEWAY. IF ELEVATION CHANGE REQUIRES A CURB RAMP, COMPLY WITH FIGURE 7030.205; VERIFY NEED FOR DETECTABLE WARNING PANEL WITH ENGINEER.



7 CONCRETE DRIVEWAY TYPE A
NOT TO SCALE

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DETAILS
WAUKEE, IOWA

C7.1
1501.002

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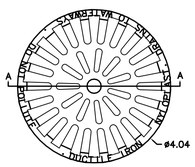
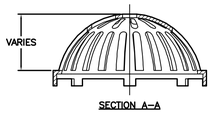
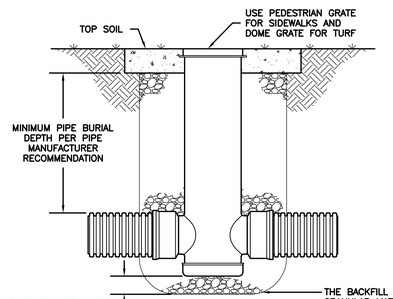
FILE DATE: 7/17/2015 LAYOUT: C7.1 DATE: 07/17/2015 10:29 AM DRAWN BY: ENG
PLOTTED BY: AARON JARDSHA TECH: ENGINEER:





DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70–50–05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

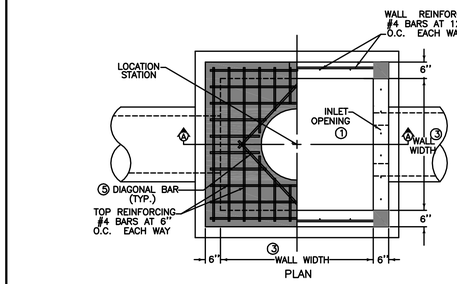
8 DOME GRATE
NOT TO SCALE



THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II MATERIAL AS DEFINED IN ASTM D2321, OR AS DETERMINED BY LOCAL STANDARDS & SITE ENGINEER. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

1. GRATES/SOLID COVERS SHALL MEET H–20 LOAD RATING FOR 30" PEDESTRIAN & 12" – 30" STANDARD & SOLID

9 HDPE INTAKE
NOT TO SCALE



STRUCTURE MAY BE BUILT WITH OPENINGS ON ANY OR ALL SIDES. PROVIDE OPENINGS AND ORIENTATION AS SPECIFIED IN THE CONTRACT DOCUMENTS.

ADJACENT WALLS MAY HAVE DIFFERENT WIDTHS BASED UPON PIPE CONFIGURATION, BUT STRUCTURE MUST BE RECTANGULAR.

① CONSTRUCT INLET OPENINGS WITH 15–INCH #4 EPOXY–COATED BARS AT 6 INCHES ON CENTER. EMBED BARS A MINIMUM OF 3 INCHES INTO WALLS AND TOP AT ALL OPENINGS.

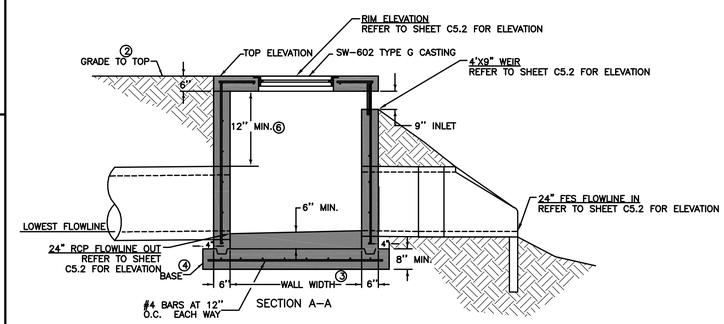
② GRADE TO TOP ELEVATION ON CLOSED SIDES.

③ WALL WIDTHS VARY WITH PIPE DIAMETER. PROVIDE 6 INCHES OF WALL WIDTH (MINIMUM) EACH SIDE OF PIPE OPENING. MINIMUM WALL WIDTH IS 36 INCHES. MAXIMUM WALL WIDTH IS 72 INCHES.

④ CAST–IN–PLACE BASE SHOWN. IF BASE IS PRECAST INTEGRAL WITH WALLS, THE FOOTPRINT OF BASE IS NOT REQUIRED TO EXTEND BEYOND THE OUTER EDGE OF THE WALLS.

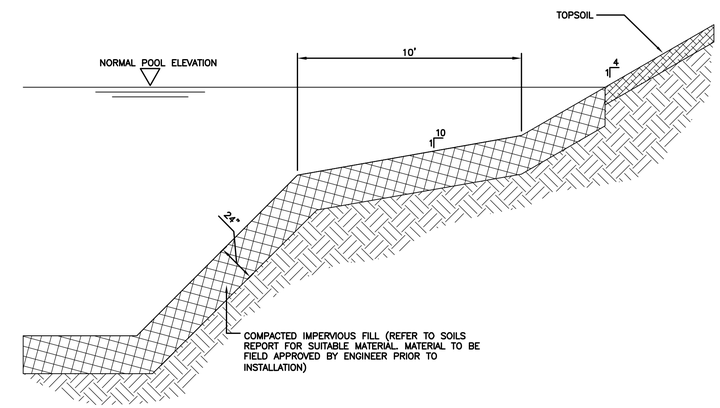
⑤ INSTALL FOUR #4 DIAGONAL BARS AT ALL PIPE OPENINGS.

⑥ 12" MINIMUM WALL HEIGHT ABOVE ALL PIPES.

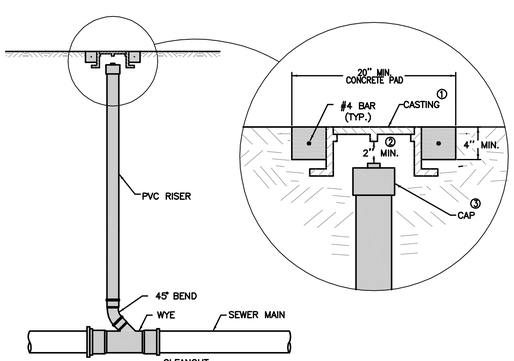


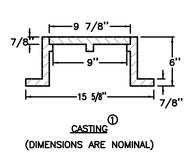
STORM STRUCTURE ST-2 DETENTION OUTLET

10 STRUCTURE ST-2 SW-513 INTAKE
NOT TO SCALE



11 POND DETAIL
NOT TO SCALE



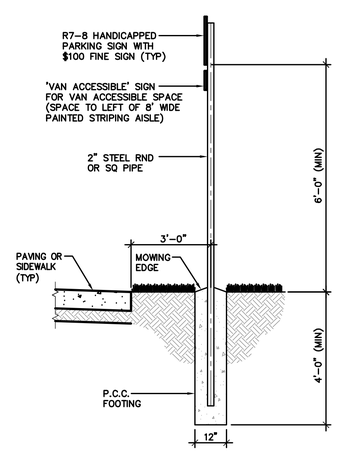


① STANDARD DUTY CASTING COMPLYING WITH AASHTO M 306. MARK LID WITH "SANITARY" OR "SANITARY C.O."

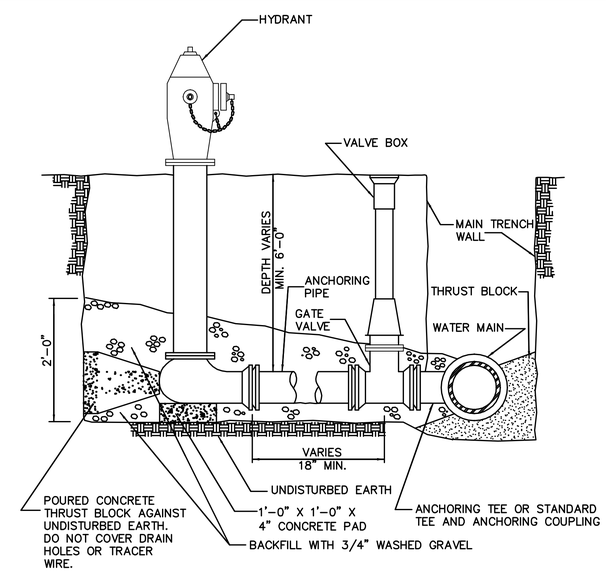
② DO NOT ALLOW CASTING TO BEAR ON TOP OF RISER PIPE.

③ THREADED PVC CAP OR IRON BODY FERRULE WITH BRASS SCREW PLUG

12 SW-203 SANITARY CLEANOUT
NOT TO SCALE



13 ACCESSIBLE PARKING SIGN
NOT TO SCALE



NOTES
1. MINIMUM SIZE FOR PIPING. VALVES AND FITTINGS FROM WATER MAIN TO HYDRANT INLET: 6".
2. PROVIDE TRACER WIRE AND TRACER WIRE STATION.
3. WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASEMENT.

14 CITY OF WAUKEE STANDARD HYDRANT
NOT TO SCALE

REVISIONS	DATE
SITE PLAN SUBMITTAL #3	07/17/15
SITE PLAN SUBMITTAL #2	06/05/15
SITE PLAN SUBMITTAL #1	05/12/15

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: RH
EI: ES, CC
CIVIL DESIGN ADVANTAGE

Redwood distinctive living

SOMERSET OAKS
DETAILS
WAUKEE, IOWA

C7.2

1501.002

FILE: I:\2015\1501002\DWG\1501002-SITE-COVER-TOPO-OVERALL-DETAILS.DWG
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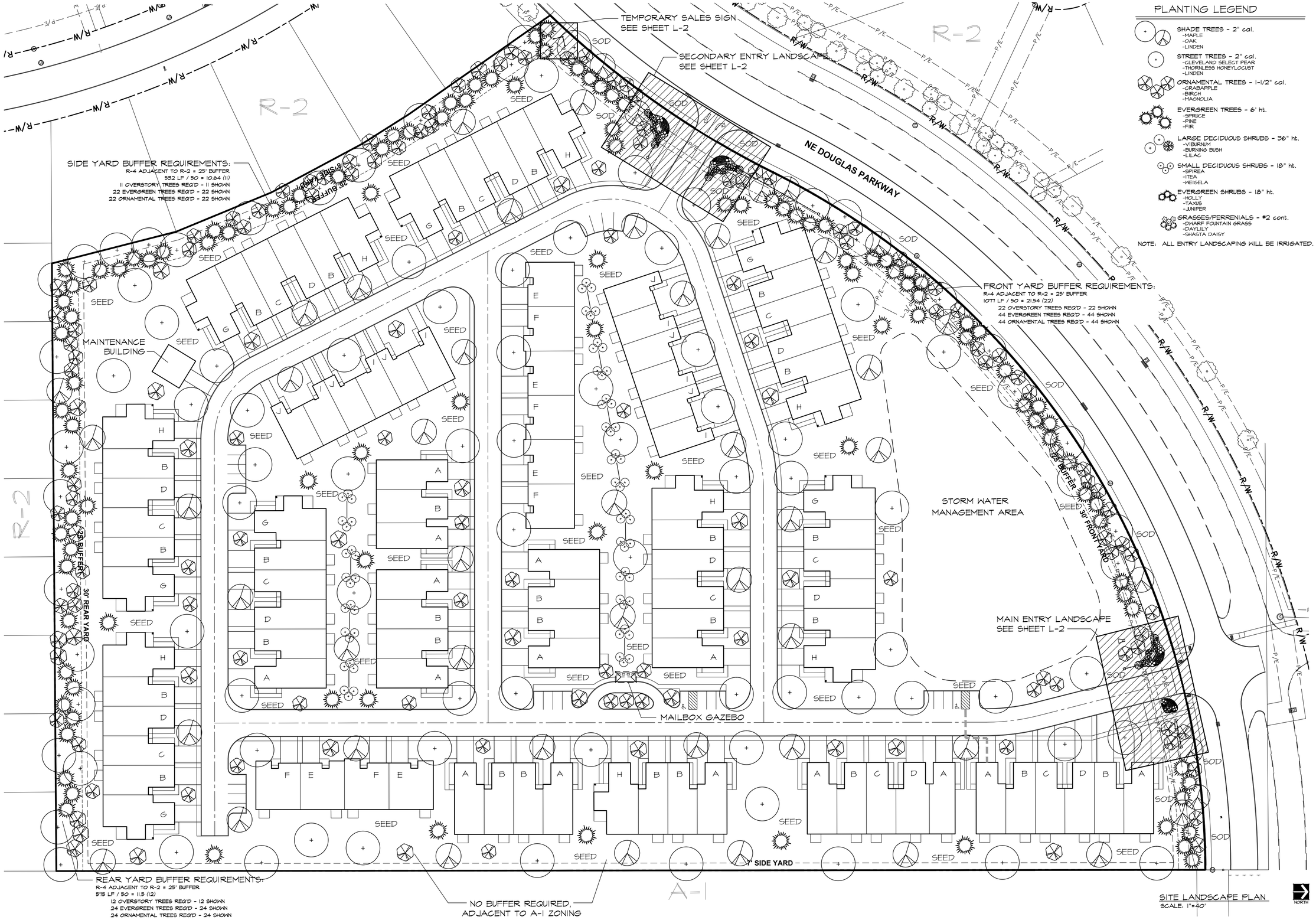

PLANTING LEGEND

- SHADE TREES - 2" cal.
  - -MAPLE
  - -OAK
  - -LINDEN
- STREET TREES - 2" cal.
  - -GLEVELAND SELECT PEAR
  - -THORNLESS HONEYLOCUST
  - -LINDEN
- ORNAMENTAL TREES - 1-1/2" cal.
  - -CRABAPPLE
  - -BIRCH
  - -MAGNOLIA
- EVERGREEN TREES - 6' ht.
  - -SPRUCE
  - -PINE
  - -FIR
- LARGE DECIDUOUS SHRUBS - 36" ht.
  - -VIBURNUM
  - -BURNING BUSH
  - -LILAC
- SMALL DECIDUOUS SHRUBS - 18" ht.
  - -SPIREA
  - -ITEA
  - -WEIGELA
- EVERGREEN SHRUBS - 18" ht.
  - -HOLLY
  - -TAXUS
  - -JUNIPER
- GRASSES/PERRENIALS - #2 cont.
  - -DWARF FOUNTAIN GRASS
  - -DAYLILY
  - -SHASTA DAISY

NOTE: ALL ENTRY LANDSCAPING WILL BE IRRIGATED.

SITE LANDSCAPE PLAN
SCALE: 1"=40'

REGISTERED LANDSCAPE ARCHITECT
DALE JAMES BURRIER
651
STATE OF IOWA

CAWRSE & ASSOCIATES, INC.
Landscape Architecture · Land Planning
549 E. Washington Street · Chagrin Falls, OH 44022
440-247-7003/fax 440-247-7143

PRELIMINARY LANDSCAPE PLAN
SOMERSET OAKS

NE DOUGLAS PARKWAY, WAUKEE, IOWA

REDWOOD ACQUISITIONS, LLC
23775 COMMERCE PARKWAY, SUITE 7, BEACHWOOD, OHIO 44122

Date	Notes
04-30-15	DRWN
07-16-15	REV'D

Job No: 15003
File: prelim landscape.dwg

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Sheet 1 of 4

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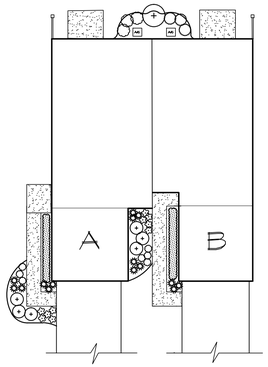
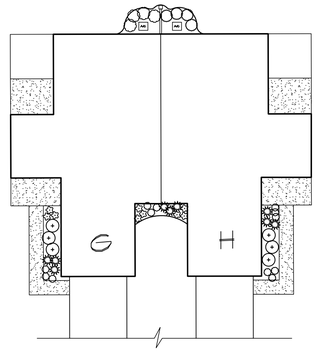


UNIT A-B LANDSCAPE PLAN
SCALE: 1"=20'



UNIT G-H LANDSCAPE PLAN
SCALE: 1"=20'

PLANTING LEGEND

SHADE TREES - 2" cal.
-MAPLE
-OAK
-LINDEN

STREET TREES - 2" cal.
-CLEVELAND SELECT PEAR
-THORNLESS HONEYLOCUST
-LINDEN

ORNAMENTAL TREES - 1-1/2" cal.
-CRABAPPLE
-BIRCH
-MAGNOLIA

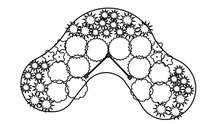
EVERGREEN TREES - 6' ht.
-SPRUCE
-PINE
-FIR

LARGE DECIDUOUS SHRUBS - 36" ht.
-VIBURNUM
-BURNING BUSH
-LILAC

SMALL DECIDUOUS SHRUBS - 18" ht.
-SPIREA
-ITEA
-WEIGELA

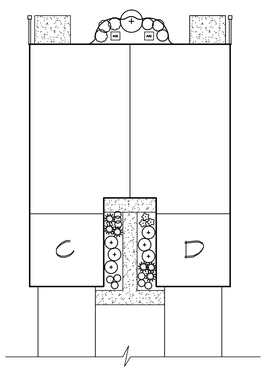
EVERGREEN SHRUBS - 18" ht.
-HOLLY
-TAXUS
-JUNIPER

GRASSES/PERRENIALS - #2 cont.
-DWARF FOUNTAIN GRASS
-DAYLILLY
-SHASTA DAISY

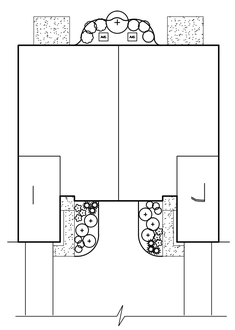


TEMP SALES SIGN
LANDSCAPE PLAN
SCALE: 1"=10'

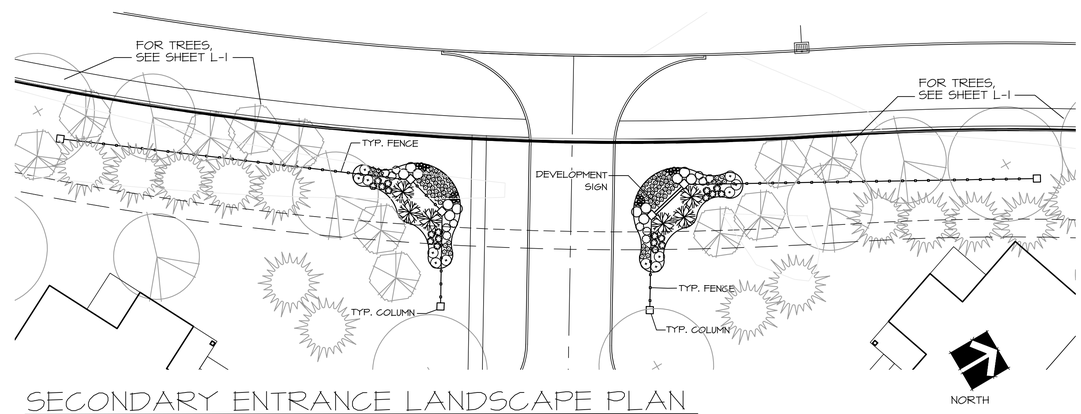
NORTH



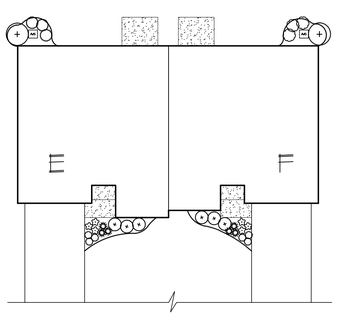
UNIT C-D LANDSCAPE PLAN
SCALE: 1"=20'



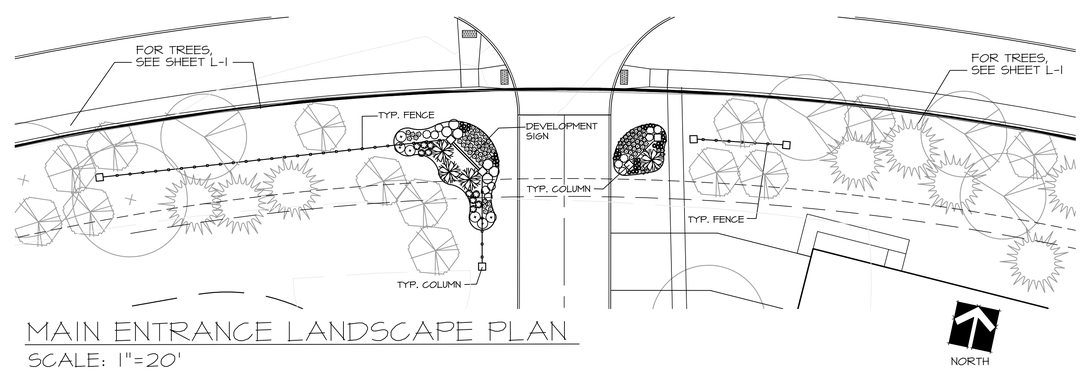
UNIT I-J LANDSCAPE PLAN
SCALE: 1"=20'



SECONDARY ENTRANCE LANDSCAPE PLAN
SCALE: 1"=20'



UNIT E-F LANDSCAPE PLAN
SCALE: 1"=20'



MAIN ENTRANCE LANDSCAPE PLAN
SCALE: 1"=20'

REGISTERED LANDSCAPE ARCHITECT
DALE JAMES BURRIER
651
STATE OF IOWA

CAWRSE & ASSOCIATES, INC.
Landscape Architecture · Land Planning
549 E. Washington Street · Chagrin Falls, OH 44022
440-247-7003/fax 440-247-7143

ENTRY AND UNIT LANDSCAPE PLANS
SOMERSET OAKS
NE DOUGLAS PARKWAY, WAUKEE, IOWA
REDWOOD ACQUISITIONS, LLC
23775 COMMERCE PARKWAY, SUITE 7, BEACHWOOD, OHIO 44122

Date	Notes
04-30-15	DRAWN
07-16-15	REV'D

Job No: 15003
File: prelim landscape.dwg

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Sheet 2 of 4

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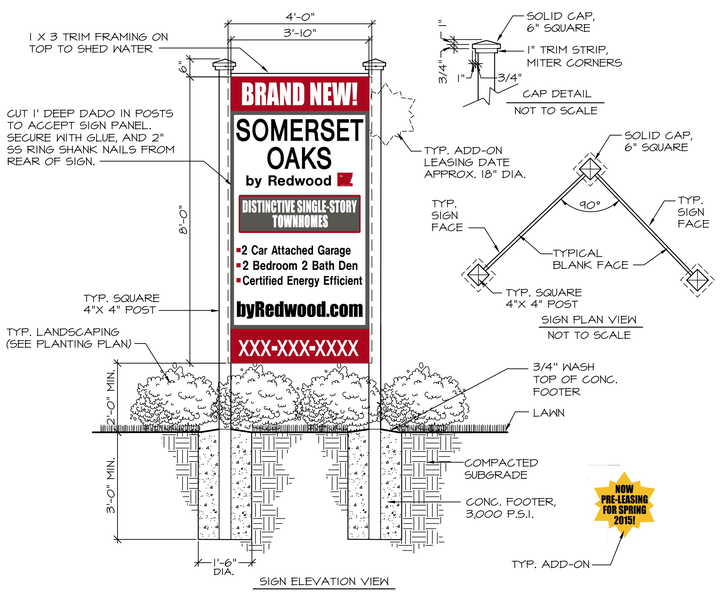
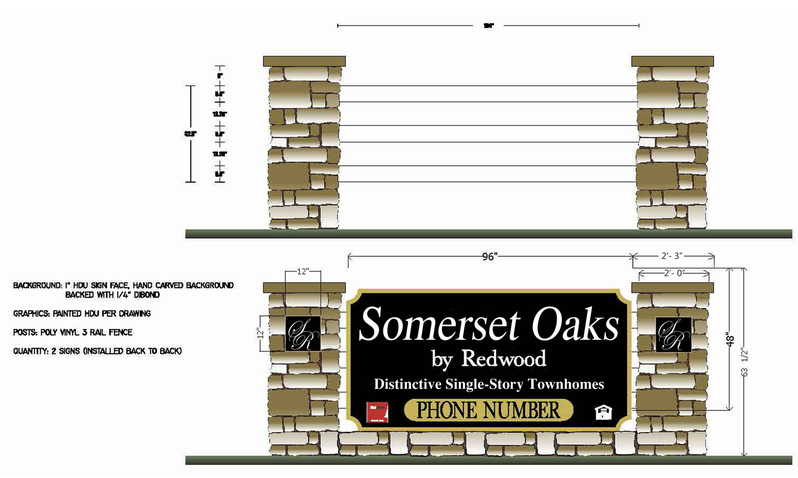


NOTES:
1. ALL SIGN POST MATERIAL TO BE SOUTHERN YELLOW PINE, ACQ-TREATED OR CBA-TREATED.
2. FASTENERS SHALL BE HOT-DIPPED GALVANIZED METAL.
3. STAIN FENCE WITH TWO COATS OF OLYMPIC SEMI-TRANSPARENT STAIN TO MATCH FENCE.
4. SIGN PANELS TO BE MARINE-GRADE PLYWOOD.

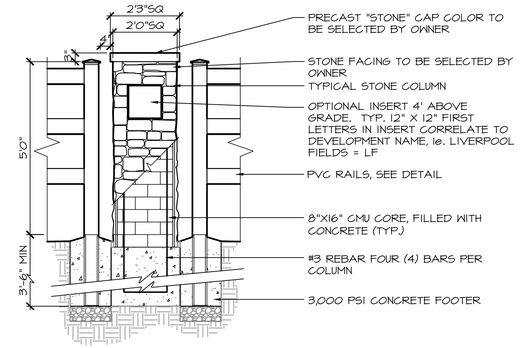
1 / L-3 TEMPORARY SALES SIGN

1/2" = 1'-0"



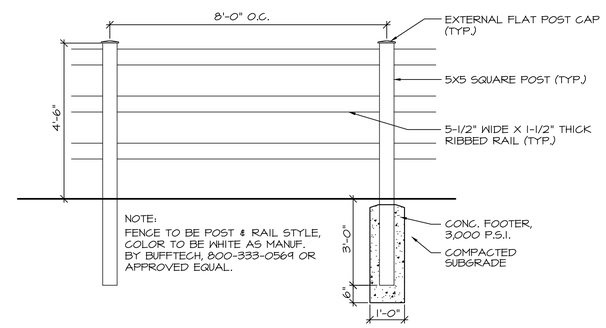
2 / L-3 SITE ENTRANCE SIGN

1/2" = 1'-0" (APPROXIMATE)



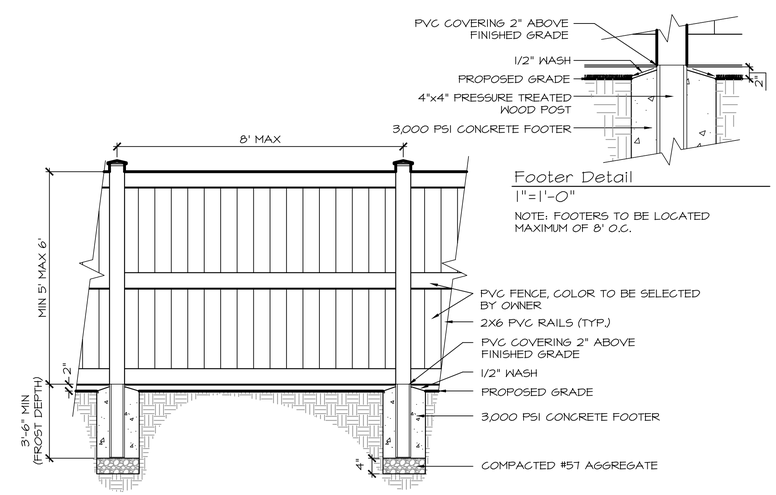
3 / L-3 STAND-ALONE COLUMN AND FENCE

NOT TO SCALE



4 / L-3 3-RAIL PVC FENCE

1/2"=1'-0"



5 / L-3 PVC PRIVACY FENCE

1/2"=1'-0"

REGISTERED LANDSCAPE ARCHITECT
DALE JAMES BURRIER
651
STATE OF IOWA

CAWRSE & ASSOCIATES, INC.
Landscape Architecture · Land Planning
549 E. Washington Street · Chagrin Falls, OH 44022
440-247-7003/fax 440-247-7143

LANDSCAPE DETAILS
SOMERSET OAKS
NE DOUGLAS PARKWAY, WAUKEE, IOWA
REDWOOD ACQUISITIONS, LLC
23775 COMMERCE PARKWAY, SUITE 7, BEACHWOOD, OHIO 44122

Date	Notes
04-30-15	DRAWN
07-16-15	REV'D

Job No: 15003
File: prelim landscape.dwg

L-3

Sheet 3 of 4

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SECTION 02900 - LANDSCAPING

PART 1 - GENERAL

A. DESCRIPTION:
1. Work Included:
Planting required for this Work is indicated on the Drawings and, in general, includes the planting and other ground cover throughout the Work.

B. QUALITY ASSURANCE:
1. Qualifications of workmen:
Provide at least one person who shall be present at all times during execution of this portion of the Work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all work performed under this Section.
2. Codes, Regulations and Standards:
a. All plants and planting material shall meet or exceed the Specifications of Federal, State and County laws requiring inspection for plant disease and insect control.
b. Quality and Size:
(1) General:
Quality and size shall conform with the current edition of "Horticultural Standards" for number one grade nursery stock as adopted by the American Association of Nurserymen.
(2) Deciduous Trees:
Trees will measure in units of average height in feet above the ground or of an average caliper at a point 6 inches above the ground.
(3) Evergreen Trees:
Trees will measure in units of an average height in feet above the ground.
(4) Plant stock:
Each ball shall be of sufficient size to insure successful fibrous feeding roots necessary to insure successful recovery and development of the plant.
c. Topsoil shall conform with ASTM D 5268-92.

C. SUBMITTALS:
1. Material List:
Within 35 days after award of Contract, and before any planting materials are delivered to the job site, submit to the Architect a complete list of nurseries where plants are to be obtained and other types proposed to be installed.
a. Include complete data on source, size and quality.
b. Demonstrate complete conformance with the requirements of this Section.
c. This shall in no way be construed as permitting substitutions for specific items described in the Drawings or these Specifications unless the substitution has been approved in advance by the Architect.
d. All plant material substitutions shall be approved by the City of Waukee Development Services Department, prior to making any substitutions.
2. Certificates:
a. All certificates required by law shall accompany shipments.
b. Upon completion of the installation, deliver all certificates to the Architect.
3. Approval of plants at source does not alter right of rejection at project site.

D. PRODUCT HANDLING:
1. Delivery:
a. Balled and Burlapped Stock:
Care should be taken at all times as to not damage the bark or branches. Plants shall be lifted and handled from the bottom of the ball as much as possible in order to prevent damage to the plant.
b. Plant stock to be delivered in B & B shall be moved with a compact natural ball of earth so firmly wrapped in burlap, that upon delivery the soil in the ball is still firm and compact about the small feeding roots.
2. Temporary Storage and Protection:
a. Protect plants at all times from sun or drying winds.
b. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected with soil, wood chips, straw or other acceptable material, and shall be kept well watered.
3. Replacements:
In the event of damage, immediately make all repairs and replacements necessary for the approval of the architect and at no additional expense to the Owner.

PART 2 - PRODUCTS

A. MATERIALS:
1. Topsoil/Planting Mix:
a. Lawn Areas:
Use on-site stockpiled topsoil. If the quantity of on-site topsoil stockpiled is insufficient to complete the work, provide imported topsoil.
b. Planting Beds:
Use imported topsoil. Contractor to obtain rights and pay all costs for imported topsoil material. Topsoil shall meet the following requirements:
(1) Shall be free from admixture of subsoil, heavy clay, coarse sand, stone, plants roots, sticks, and other foreign material.
(2) Shall be classified in the "Loam" portion of the U.S.D.A. Soil Textural Triangle. For topsoil to be classified as "Loam", that fraction passing through a #10 sieve shall meet the following mechanical analysis:
(a) 8 to 25% clay (less than 0.002 mm particle size).
(b) 30 to 55% sand (2.0 to 0.05 mm particle size)
(c) 30 to 50% silt (0.05 mm to .002 mm particle size).
(3) Contain neither less than 8%, nor more than 20%, organic matter as determined by loss on ignition of samples oven-dried to constant weight at 212 degrees F.
(4) Have a pH level of between 6.2 and 6.8.
(5) All topsoil shall be screened through a 1-1/4" screen.
(6) Submit an analysis of proposed topsoil. Topsoil shall be acceptable to Landscape Architect and Soils Testing Firm.
2. Seed:
Seed shall be 5 Way Blend Perennial Rye Grass, composed of 20% Apple GL Perennial Rye, 20% HomeRun Perennial Rye, 20% Fiesta 4 Perennial Rye, 20% Amazing GS Perennial Rye, 20% Protege GLR Perennial Rye.
3. Sod (If specified on the drawings):
Sod shall be a mixture of disease resistant Kentucky Bluegrass soil grown sod. Provide well-rooted, healthy sod, free of diseases, nematodes and soil borne insects. Provide sod uniform in color, leaf texture, density, and free of weeds, undesirable grasses, stones, roots, thatch, and extraneous material; viable and capable of growth and development when planted.
4. Lime:
Lime shall be ground limestone containing not less than 85% of total carbonates and shall be ground to such a fineness that 50% will pass through a 200-mesh sieve and 90% will pass through a 100-mesh sieve.
5. Fertilizer For Lawns:
Fertilizer shall be 12-12-12, uniform in composition, free flowing and suitable for application with approved equipment delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
6. Plants:
a. Trees, shrubs, and herbaceous plants:
(1) All trees, shrubs and herbaceous plants, deciduous plants or evergreens shall be sound, healthy, vigorous, first-class, freshly dug, nursery grown in a climate similar to or more severe than Ohio.
(2) All plant material shall be free of insects, their eggs, and larvae.
(3) Plants shall be free of mechanical or cultural injury by rodents, and free of noticeable after effects of insects (borers).
(4) Plants shall be true to scientific names. The names used are those of "Standardized Plant Names".
7. Soil Amendments:
"Soil Moist" granular soil moisturizer Polymer Product or equal, as manufactured and distributed by JRM Chemical Inc., Cleveland, Ohio, (216-475-8488), or equal.
8. Mulch:
All mulch shall be double shredded, hardwood bark, dark brown in color.
9. Fertilizer For Plantings:
Fertilizer shall be 20-10-5 Agriform Planting tablets or equal manufactured by Sierra Chemical Company, 1-408-263-8080 or equal and suitable for application with approved equipment. Deliver to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
10. Wood Cellulose Fiber Mulch: Degradable green dyed wood cellulose fiber or 100% recycled long fiber pulp, free from weeds or other foreign matter toxic to seed germination and suitable for hydromulching.
11. Tackifier: Liquid concentrate diluted with water forming a transparent 3-dimensional film like crust permeable to water and air and containing no agents toxic to seed germination.
12. Erosion Control Blanket: S-75 by North American Green as distributed by Meredith Brothers, Phone: (614) 258-4491 or equal.
13. Anti-Desiccant: Emulsion type, film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver in manufacturer's fully-identified containers and mix in accordance with manufacturer's instructions.
14. Herbicide: Round Up, or Kleenup or equal.
15. Wrapping: Tree-wrap tape not less than four inches (4") wide, designed to prevent bore damage and winter freezing.
16. Stakes and Guys: Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire not lighter than 12 ga. with zinc-coated turnbuckles. Provide not less than one-half inch (1/2") diameter rubber or plastic hose, cut to required lengths and of uniform color, material and size to protect tree trunks from damage by wire.
17. Stake Separator: Shall be non-woven, water-permeable polyester geotextile, manufactured as a landscaping product.
18. Weed mat: Provide 4.1 oz., woven polypropylene, needle-punched fabric, weed barrier.

PART 3 - EXECUTION

A. SURFACE CONDITIONS:
1. Inspection:
Prior to all work in this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
2. Discrepancies:
a. In the event of any discrepancies, immediately notify the Architect.
b. Do not proceed with the installation in the areas of discrepancy until all such discrepancies have been fully resolved.

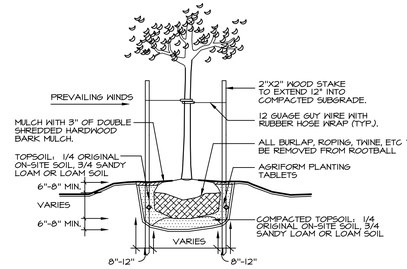
B. LAYOUT:
Shrubs and trees shall be installed within 1'-0" and groundcover shall be installed within 6" of plant location shown on plan.

C. LAWN:
1. General:
a. Planting season:
(1) Fall: August 15 to October 15
(2) Spring: From time ground is workable to July, unless irrigation is provided.
b. All areas not required to be developed otherwise shall be planted in grass.
c. Sod or seed as designated on plan and any areas disturbed by construction.
2. Finished grading:
a. All depressions or settled areas shall be corrected. All stones over one inch (1") in size, gravel, weeds, sticks, and rubbish shall be removed.
b. Scarify subgrade to a depth of 3" where topsoil is scheduled, and in areas where equipment has compacted subsoil.
c. Distribute topsoil to a two inch (2") minimum depth. Provide imported topsoil material as required.
d. Manually spread topsoil around trees, plants and buildings to prevent damage.
e. Areas to be sodded or seeded shall be brought to a smooth finished grade.
f. Lightly compact placed topsoil.
g. Remove surplus topsoil from site.
3. Soil preparation:
a. Lime:
Where lime is required, after testing, it shall be applied at the rate of 50 pounds to 1,000 square feet and raked in.
4. Fertilizing:
Fertilizer shall be applied at the rate of 15 pounds to 1,000 sq. ft. and raked in.
5. Sodding:
a. Limit preparation to areas which will be immediately sodded.
b. Loosen topsoil of lawn areas to minimum of 2". Remove stones over 1" in any dimension and sticks, roots, rubbish, and extraneous matter.
c. Remove all weeds from area.
d. Grade lawn areas to smooth, free draining and even surface with a loose, uniformly fine texture. Roll and rake, remove ridges and fill depressions as required to drain.
e. Rake in a light application of 12-12-12 fertilizer at a rate of 5 lb. per 1,000 S.F. before laying sod.
f. Dampen dry soil prior to sodding.
g. Restore prepared areas to specified condition if eroded, settled, or otherwise disturbed after fine grading and prior to sodding.
h. Lay sod to form a solid mass with tightly-fitted joints. Butt ends and sides of sod strips. Do not overlap edges. Stagger strips to offset joints in adjacent course. Remove excess sod to avoid smothering of adjacent grass. Provide sod pad top flush with adjacent curbs, sidewalks, drains, and seeded areas.
i. Do not lay dormant sod or install sod on saturated or frozen soil.
j. Install initial row of sod in a straight line, beginning at bottom of slopes, perpendicular to direction of the sloped area. Place subsequent rows parallel to and tightly against previously installed row.
k. Water sod thoroughly with a fine spray immediately after laying.
l. Roll with light lawn roller to ensure contact with sub-grade.
6. Seeding:
a. Seed areas as follows:
(1) Remove all weeds from area to be seeded.
(2) After topsoil has been spread, thoroughly disc all areas. Remove all stones and lumps mechanically. Then spread evenly and work into the topsoil, 12-12-12 fertilizer at a rate of fifteen pounds (15#) per 1,000 square feet.
(3) Then sow evenly the grass seed mixture at a rate of five pounds per 1,000 square feet.
(4) Cover the seeded area with a 1-1/2" thick layer of non-compacted straw or other approved means.
b. Maintain watering (between July and September) and protection of the seeded area as needed until a full stand of grass is established and accepted by the Owner's Representative or Field Inspector.
c. Seed all areas disturbed by construction.
7. Hydroseeding
Use a Hydromulcher (sprayer) and apply mixture(s) at the following rates. Mix in accordance with manufacturer's recommendations.
a. Seed: 260 lbs./acre
b. Fertilizer: 435 lbs./acre
c. Tackifier: 45 lbs/acre
d. Wood cellulose, fiber mulch: 1500 lbs./acre of straw mulch: 2-1/2 tons/acre
e. Limestone: Rate determined by soil test.

D. PLANTING
1. General:
a. All plantings shall be done between the dates of March 1 and June 1 or September 1 and November 1. All other plantings to be done between the dates of June 2nd and August 31 to be Will Frooted (or equal) and a watering schedule shall be maintained by the Contractor until acceptance by Owner.
b. Plant areas: Plant areas are pits or pockets for trees, shrubs and groundcovers where indicated on the Drawings.
c. Topsoil for planting operations shall be furnished by the Contractor.
d. The depth of planting areas is the depth below the finished grade.
e. Provide positive drainage away from all buildings and around or away from planting beds to prevent ponding of water. Do NOT raise bed grades or finished grades above finished floor elevations.
2. Shrubs:
a. General:
(1) Planting areas shall have a soil mixture at a 6" depth minimum.
(2) On the bottom of all plant areas, add and lightly tamp a layer of planting soil mixture at least six inches (6") thick or as much as is necessary so that the ball or roots will rest thereon when the plant is set to the required grade.
(3) Set all plants so that when they are settled they will bear the same relation to the required grade as they bore to the natural grade before being transplanted. Make adjustment of position where necessary or as directed.
(4) Plant in topsoil in the center of the pit unless otherwise specified or shown on the Drawings. Remove all non-treated or non-rot proofed burlap, ropes, staves, etc., off sides and tops of balls and remove from the pit before it is filled in. Completely remove all treated or polypropylene burlap or ropes from planting pits.
(5) Do not mat roots of bare-rooted plants together, but arrange in their natural state and work topsoil in among them. Use no soil in a frozen or muddy condition for backfilling. Do not fill around trunks or stems. Properly cut off all broken or frayed roots.
b. Shrubs:
(1) Dig and prepare shrub pits or beds prior to planting to a minimum depth of 6".
(2) Width of the pits - at least 2 feet greater in diameter than their ball of earth or spread of roots.
(3) Add 21 gram 'Agriform' planting tablets or equal, to planting pit, manufactured by Sierra Chemical Co. (1-408-263-8080) or equal. Backfill planting pit halfway with planting soil mixture and place tablet beside rootball about 1" from root tips. Do not place in bottom of hole. Follow manufacturer's recommended application rates for size of plant installed.
(4) Set shrubs so as to allow sufficient depth. Properly set the crown of plant at the finished surface of the bed.
(5) Backfill topsoil about the roots and thoroughly settle by watering. Form a mound of earth around each shrub so as to produce a shallow saucer.
(6) Edge the bed in a neat line as directed and make sure an even 6" layer of topsoil remains over entire area.
(7) Dress all beds with a uniform 3" layer of finely shredded hardwood bark.
(8) If an irrigation system is NOT installed as part of the project, add 'Terra AG' soil moisturizer granules to the soil mix, per manufacturer's recommended application.
3. Trees:
a. Tree pits:
(1) Depth of the pits-deep enough as is necessary to accommodate the ball or roots and to permit the required preparation of the bottom of the pit so that when the tree is settled in the pit, it will not be necessary to raise or lower the tree.
(2) Width of the pits - 2 feet greater in diameter than their ball of earth or spread of roots.
(3) Plant tree in topsoil in the center of the pit unless otherwise specified or shown on the Drawings. Remove all non-treated or non-rot proofed burlap, ropes, staves, etc., off sides and tops of balls and remove from the pit before it is filled in. Completely remove all treated or polypropylene burlap or ropes from planting pits.
(4) If an irrigation system is NOT installed as part of the project, add 'Terra Sorb AG' soil moisturizer granules to the soil mix, per manufacturer's recommended application.
b. Fertilizer:
(1) When the tree has been properly set, backfill tree pit halfway and place fertilizer planting tablet beside rootball about 1" from root tips. Do not place in bottom of hole. Use one 21 gram tablet (20-10-5) for each 1/2" cal., or each foot of height or spread. Backfill tree pit the rest of the way with planting soil mixture.
(2) Thoroughly tamp and water during and after backfilling.
c. All trees are to be wrapped and staked. Protect the bark from the guying wire with a length of hose or any other material approved by the Architect.
d. Dress all beds with a uniform 3" layer of finely shredded hardwood bark.
4. Ground Cover:
a. All ground cover beds shall have a minimum depth of 6" of topsoil.
b. Dress all beds with a uniform 3" layer of finely shredded hardwood bark.
5. Annuals:
a. All annual planting beds shall have a minimum of 10" of "annual bed mix".
b. "Annual bed mix" shall be processed shredded topsoil with organic compost and fine silica gravel for annuals.
c. Mulch with 1" of compost mulch or treat soil with a granular pre-emergence herbicide suitable for annual plantings.
6. Pruning:
a. Prune all new trees and shrubs in accordance with acceptable standard practices. All cuts over one inch in diameter shall be treated with an approved tree paint. In the same manner, prune existing trees which are to remain if indicated on the landscape plan.
7. Protection:
a. Protect all plant areas and plants from damage. If any plants are injured, treat and replace as required. Execute no work in or over prepared plant areas, or adjacent to planting without proper safeguards and protection.
8. Maintenance During Installation:
a. Maintain immediately following the accomplishment of planting operations of any plant unit.
b. Spray foliage with water, where required, during the evening after sundown or otherwise as directed. Keep all plantings in a healthy, growing condition by watering, weeding, cultivating, pruning, spraying, trimming and by performing any other necessary operations of maintenance.
c. The Contractor shall be responsible for continued proper care of the lawn areas during the period when the grass is becoming established. The period of maintenance for all lawn area shall extend for sixty (60) days with two (2) mowings required or as long as necessary to establish over the entire lawn areas a uniform stand of grasses as specified, free of weeds and undesirable grasses. After the required maintenance period and upon acceptance of lawn area by the Architect, the Owner will assume maintenance responsibility.
d. Mowing: The lawn seeded area shall be mowed with approved mowing equipment to a height of two inches (2") whenever the average height of grass becomes three inches (3"). If weeds or other undesirable vegetation threaten to smother the planted species, such vegetation shall be mowed, or in the case of exceedingly rank growths, be uprooted, raked and removed from the area.
e. Refertilizing: Areas needing refertilization will be designated by the Architect at least fifteen (15) days prior to the time that the application is required. The fertilizer shall be distributed on the seeded area between August 15 and October 15, during a period when the grass is dry. The fertilizer shall be 10-6-4 grade and shall be applied uniformly at the rate of ten (10) pounds per one thousand (1,000) square feet. Physical condition, packaging and marking of the fertilizer shall be as specified for original seeding.
f. Reseeding: Areas that require reseeding will be designated by the Architect at least fifteen (15) days prior to the period specified for reseeding. Reseeding shall be with the seed specified therein before and shall be drilled as four (4) pounds per one thousand (1,000) square feet in a manner which will cause a minimum of disturbance to the existing stand of grass, and at an angle of not less than fifteen (15) degrees from the direction of the rows of prior seeding.
g. Lawns shall be protected against damage, including erosion and washouts. Damaged areas shall be promptly replanted. Use erosion netting as required.
h. The contractor is responsible to clean the site of all mulching materials and other debris prior to the final inspection.
i. Final Inspection: Inspection of work for lawns will be made after the second cutting written notice requesting inspection shall be submitted at least ten (10) days prior to anticipated date.
j. Acceptance: Final inspection shall determine acceptance or non-acceptance of lawn areas. Acceptance indicates a complete cover of grasses in all lawn areas, which have been maintained by weeding, reseeding and refertilizing as necessary, watering and mowing as stated above and appears to be in a potential healthy state with weeds, rocks, stones and debris removed and all erosion or ruts repaired. Lawns not maintained or appearing as stated herein shall be unacceptable and shall be reworked as necessary until desired results are obtained.
k. Maintain trees, shrubs and other plants until final acceptance, but in no case less than 60 days after substantial completion of planting.
l. Maintain trees, shrubs and other plants by pruning, cultivating, watering and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.

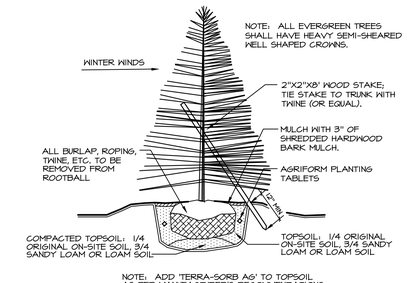
E. CLEAN-UP
1. Upon completion of the planting, all excess soil, stones and debris which has not previously been cleaned up shall be removed from the site or disposed of as directed by the Architect.
2. Any soil, manure, peat, or similar material which has been brought onto paved areas by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times.
3. Protect landscape work and materials from damage due to landscape operations, operations by other contractors, trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

F. ACCEPTANCE
1. Final Inspection:
a. Inspection:
At the conclusion of the contract work, (exclusive of maintenance and replacement) one inspection will be made by the Architect. Written notice to the Architect requesting such an inspection shall be submitted by the Contractor at least ten days prior to the anticipated date.
b. The purpose of this inspection will be to determine whether or not the Contractor has completed all the work of the contract.
c. The condition of the lawns and shrubs will be noted and a determination will be made by the Architect whether maintenance shall continue in any part as specified under 'Maintenance During Installation.'
2. Acceptance Inspection:
a. At the conclusion of the maintenance during installation period, an inspection will be made by the Architect. Written notice requesting the inspection shall be submitted by the Contractor at least 10 days prior to the anticipated date.
b. The purpose of the inspection shall be for the acceptance of the contract work including maintenance during installation, but exclusive of replacements.
c. After the inspection of the Architect, the Contractor shall be notified in writing of acceptance of the work. If there are any deficiencies in the maintenance, during installation, the Contractor will be notified of these deficiencies in writing by the Architect, and the work shall be subject to reinspection before acceptance.
3. Guarantee Period:
a. Guarantee period shall begin at the issuance of the Certificate of Completion and shall end exactly one year from that date.
b. At the conclusion of the guarantee period, a final inspection of the work will be made to determine the condition of the plant material. All plant material not in a healthy or 40% defoliated growing condition will be noted.
c. Remove the material so noted from the site at the direction of the Architect and replace during the following planting season with the materials of like kind and size, and in a manner specified for the original planting at no extra cost.
d. Guarantee period also applies to replaced material.



NOTE: ADD 'TERRA-SORB AG' TO TOPSOIL AS PER MANUFACTURER'S RECOMMENDATIONS IF NO IRRIGATION IS APPLIED.

1 L-4 TREE PLANTING
NOT TO SCALE
(ALL BUFFER PLANTINGS)



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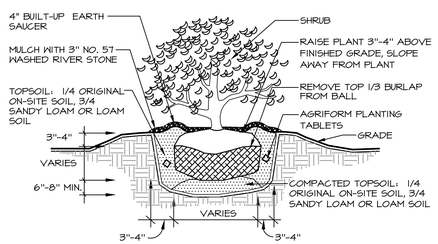
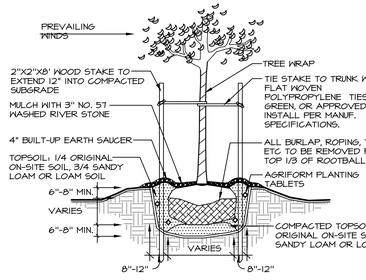
2 L-4 EVERGREEN PLANTING
NOT TO SCALE
(ALL BUFFER PLANTINGS)



NOTE: ADD 'TERRA-SORB AG' TO TOPSOIL AS PER MANUFACTURER'S RECOMMENDATIONS IF NO IRRIGATION IS APPLIED.

3 L-4 SHRUB PLANTING
NOT TO SCALE



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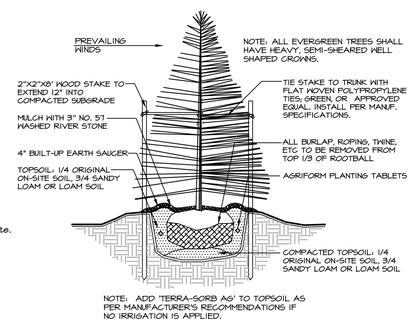
4 L-4 TREE PLANTING
NOT TO SCALE



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5 L-4 EVERGREEN PLANTING
NOT TO SCALE

REGISTERED LANDSCAPE ARCHITECT
DALE JAMES BURRIER
651
STATE OF IOWA

CAWRSE & ASSOCIATES, INC.
Landscape Architecture · Land Planning
549 E. Washington Street · Chagrin Falls, OH 44022
440-247-7003/fax 440-247-7143

LANDSCAPE NOTES AND DETAILS
SOMERSET OAKS
NE DOUGLAS PARKWAY, WAUKEE, IOWA
REDWOOD ACQUISITIONS, LLC
23775 COMMERCE PARKWAY, SUITE 7, BEACHWOOD, OHIO 44122

Date	Notes
04-30-15	DRWN
07-16-15	REV'D

Job No: 15003
File: prelim landscape.dwg

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Sheet 4 of 4

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