

THE PEAK AT KETTLESTONE APARTMENTS

PHASE 1 SITE PLAN

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FUTURE DEVELOPMENT NOTE:

1. THIS SITE PLAN SHALL ONLY BE USED TO CONSTRUCT PHASE 1 IMPROVEMENTS. ALL FUTURE DEVELOPMENTS INCLUDING THE ALLURE BUILDING AND NORTH APARTMENTS ARE SHOWN FOR PLANNING PURPOSES ONLY AND WILL REQUIRE SEPARATE SITE PLAN APPROVALS FROM THE CITY OF WAUKEE.

PROPERTY DESCRIPTION:

LOT 5 KETTLESTONE PEAK
DALLAS COUNTY
WAUKEE, IOWA

SAID PROPERTY BEING SUBJECT TO AND TOGETHER WITH ANY AND ALL EASEMENTS AND RESTRICTIONS OF RECORD.

SAID TRACT OF LAND CONTAINS 15.23 ACRES.

ADDRESS:

1300 SE PLEASANT VIEW DRIVE
WAUKEE, IOWA

OWNER/PREPARED FOR:

KETTLESTONE PEAK LLC
J LARSON HOMES LLC
5721 MERLE HAY ROAD, SUITE 18
JOHNSTON, IOWA 50131
ATTN: JOHN LARSON
PHONE: (515) 491-4090
EMAIL: JOHN.LARSON89@GMAIL.COM

ZONING:

KETTLESTONE MULTI-FAMILY STACKED HIGH BULK REGS
SETBACKS
FRONT SETBACK 0'
SIDE YARD 0'
REAR YARD 0'
PRINCIPAL BLDG SETBACK FROM ADJOINING SFR: 50'
MINIMUM PRINCIPLE BUILDING SEPARATION: 10' STORY
DENSITY
MIN 15 DU/AC, MAX 24 DU/AC
PHASE 1 PROVIDED DENSITY = 268 UNITS/15.23 ACRES = 17.59
FULL BUILD DENSITY = 345 UNITS/15.23 ACRES = 22.66

PARKING REQUIREMENTS:

REQUIRED PARKING PER KETTLESTONE GUIDELINES: 1 STALL PER BEDROOM PLUS 1 STALL PER 5 FOR VISITORS

PHASE 1 PARKING:

BUILDINGS 1-3 APARTMENTS (2-30 PLEX & 1-24 PLEX):	46 STALLS
45 1-BEDROOM UNITS	12 STALLS
12 STUDIO UNITS	36 STALLS
18 2-BEDROOM UNITS	36 STALLS
6 3-BEDROOM UNITS	18 STALLS
TOTAL BLDGS 1-3 PARKING	112 STALLS

VISITOR PARKING:

1 SPACE PER 5 VISITORS (1 VISITOR PER UNIT)	17 STALLS
82 TOTAL UNITS / 5	17 STALLS

TOTAL PARKING REQUIRED	129 STALLS
MIN. REQUIRED ADA	5 STALLS REQ'D
TOTAL SURFACE STALLS PROVIDED	102 STALLS
TOTAL GARAGE STALLS PROVIDED	46 STALLS
TOTAL PHASE 1 PARKING PROVIDED	148 STALLS
(INCLUDES 6 ADA STALLS)	

FUTURE PARKING (AS SHOWN ON PLAN):

BUILDINGS 4-6 APARTMENTS (2-24 PLEX & 1-30 PLEX):	23 STALLS
23 1-BEDROOM UNITS	6 STALLS
6 STUDIO UNITS	72 STALLS
36 2-BEDROOM UNITS	116 STALLS
12 3-BEDROOM UNITS	36 STALLS
TOTAL BLDGS 4-6 PARKING	137 STALLS

MAIN APARTMENT BUILDING (ALLURE BLDG):

24 2-BEDROOM UNITS	48 STALLS
3 GUEST UNITS	3 STALLS
16 2-BEDROOM ADA ACC. UNITS	32 STALLS
116 1-BEDROOM ADA UNITS	116 STALLS
27 STUDIO UNITS	27 STALLS
TOTAL MAIN APARTMENT	226 STALLS

VISITOR PARKING:

1 SPACE PER 5 VISITORS (1 VISITOR PER UNIT)	16 STALLS
78 TOTAL UNITS / 5	16 STALLS

TOTAL FUTURE PARKING REQUIRED	379 STALLS
MIN. REQUIRED ADA	8 STALLS REQ'D
TOTAL FUTURE SURFACE STALLS PROVIDED	291 STALLS
TOTAL FUTURE GARAGE STALLS PROVIDED	79 STALLS
TOTAL FUTURE SURFACE PARKING PROVIDED	370 STALLS
(INCLUDES 9 ADA STALLS)	

TOTAL UNDERGROUND STALLS PROVIDED	96 STALLS
(INCLUDES 5 ADA STALLS)	

TOTAL FUTURE PARKING PROVIDED	466 STALLS
(INCLUDES 14 ADA STALLS)	

SITE FULL BUILD REQUIRED PARKING	508 STALLS
SITE FULL BUILD REQUIRED ADA	13 STALLS
SITE FULL BUILD PROVIDED PARKING	614 STALLS
SITE FULL BUILD PROVIDED ADA	22 STALLS

OPEN SPACE REQUIREMENTS:

MINIMUM 20% OPEN SPACE REQUIRED
REQUIRED = 663,419SF * 20% = 132,684SF
PROVD (INCLUDING FUTURE) = 304,870SF OR 46%

IMPERVIOUS SURFACE:

FULL BUILD IMPERVIOUS = 358,549 SF
BUILDING = 142,167 SF
PAVEMENT = 216,382 SF

UTILITY CONFLICT NOTES:

1. UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
2. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS THAT ARE EITHER CALLED OUT ON THE PLANS OR THAT CAN BE SEEN ON THE PLANS BETWEEN AN EXISTING UTILITY AND PROPOSED CONSTRUCTION

WETLAND NOTES:

1. BISHOP ENGINEERING DOES NOT PERFORM WETLAND STUDIES OR WETLAND MITIGATION. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF ANY WETLANDS ARE LOCATED ON THE PROJECT SITE AND PERFORM ANY NECESSARY MITIGATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

SURVEY NOTES:

1. SURVEY WORK WAS COMPLETED BY BISHOP ON 7-15-2021. SEE SITE SURVEY PROVIDED AS PART OF THIS SET OF PLANS FOR EXISTING SITE CONDITIONS AND BOUNDARY INFORMATION.

SITE CONTROL AND BENCHMARKS:

BASIS OF BEARING OBTAINED FROM GPS OBSERVATIONS
DATUM = NAD 83, IOWA SOUTH
BENCHMARK DATUM = NAVD88

POINT #9000
NORTHING = 580971.24
EASTING = 1545959.54
ELEVATION = 1065.49
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9001
NORTHING = 581468.39
EASTING = 1546028.48
ELEVATION = 1069.18
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9002
NORTHING = 582009.12
EASTING = 1546000.97
ELEVATION = 1062.85
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9003
NORTHING = 580941.14
EASTING = 1545575.29
ELEVATION = 1062.16
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9004
NORTHING = 580870.93
EASTING = 1545099.80
ELEVATION = 1059.25
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9005
NORTHING = 580756.75
EASTING = 1544265.09
ELEVATION = 1043.36
DESCRIPTION: CUT "X"

POINT #9006
NORTHING = 581294.15
EASTING = 1544171.64
ELEVATION = 1042.63
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9007
NORTHING = 581929.27
EASTING = 1543819.74
ELEVATION = 1048.33
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9008
NORTHING = 582621.90
EASTING = 1543871.78
ELEVATION = 1047.64
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9009
NORTHING = 582452.60
EASTING = 1544896.94
ELEVATION = 1059.61
DESCRIPTION: 3/4" IRON PIPE WITH RPC

POINT #9011
NORTHING = 581845.60
EASTING = 1545087.11
ELEVATION = 1061.21
DESCRIPTION: 3/4" IRON PIPE WITH RPC

UTILITY NOTE:

THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS HAVE BEEN TAKEN FROM THE FIELD SURVEY, EXISTING PUBLIC RECORDS, AND PLANS PROVIDED BY OTHERS. SURFACE UTILITY LOCATIONS HAVE BEEN FIELD LOCATED BY BISHOP ENGINEERING, UNLESS OTHERWISE NOTED. ALL UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE LOCATIONS ONLY. BISHOP ENGINEERING DOES NOT GUARANTEE THE UNDERGROUND LOCATION OF ANY UTILITIES SHOWN. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE THE LOCATION AND DEPTH OF ANY UNDERGROUND UTILITIES SHOWN AND IF ANY ADDITIONAL UTILITIES, OTHER THAN THOSE SHOWN ON THE PLANS, MAY BE PRESENT. A REQUEST WAS MADE TO IOWA ONE CALL FOR UTILITY PROVIDERS TO VERIFY, LOCATE, AND MARK THEIR UTILITIES IN THE FIELD.

GENERAL NOTES:

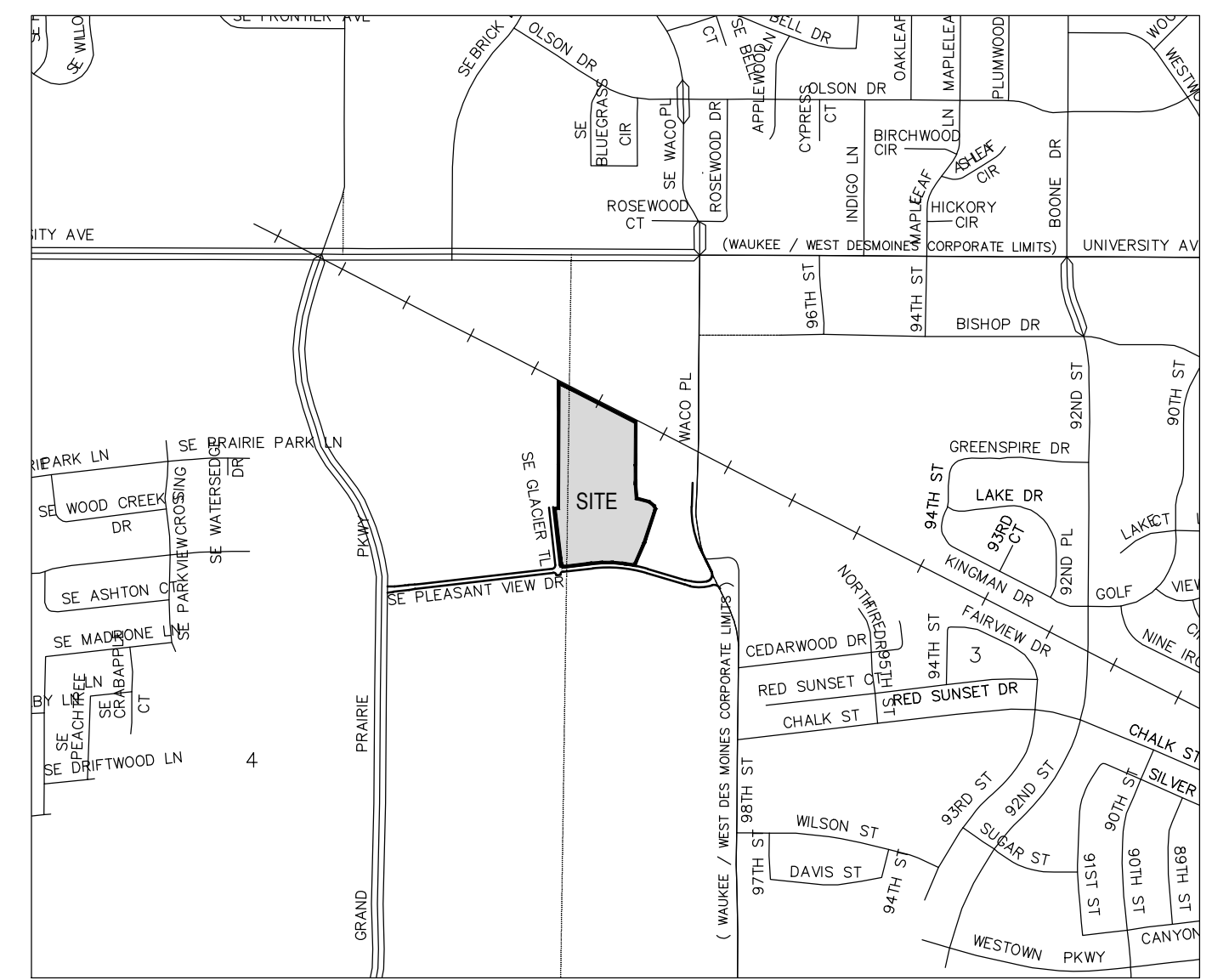
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2020 CITY OF WAUKEE AND 2021 SUDAS STANDARD SPECIFICATIONS AND ANY AND ALL CITY/COUNTY SUPPLEMENTAL SPECIFICATIONS. THE CITY OF WAUKEE MUST BE NOTIFIED BY ALL CONTRACTORS 48 HOURS PRIOR TO COMMENCING WORK.
2. IN EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
5. ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
6. BISHOP ENGINEERING SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
7. THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
8. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE FOR PERFORMANCE OF WORK ITEMS. THIS SCHEDULE SHALL BE PROVIDED BY THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN UNTIL A SCHEDULE HAS BEEN SUBMITTED AND ACCEPTED. THE CONTRACTOR SHALL THEN PERFORM WORK TO CONFORM TO THE ACCEPTED SCHEDULE.
9. LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
10. SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
11. THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
12. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNERS REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF WAUKEE.
13. GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.
14. THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY AND PRIOR TO ANY RAIN EVENT.
15. THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
16. DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.
17. APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED AS SOON AS CONSTRUCTION COMMENCES. IF PAVING IS NOT INSTALLED PRIOR TO BUILDING CONSTRUCTION COMMENCING AFTER FOOTING INSTALLED, AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING TO EXTEND WITHIN 100-FEET OF ALL PORTIONS OF THE EXTERIOR WALLS SHALL BE PROVIDED AND COMPLY WITH THE REQUIREMENTS OF SECTION 503.2 OF THE IFC.

PAVING NOTES:

1. THE PAVING/ GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SEEDED IN ACCORDANCE WITH CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE CURRENT VERSION OF SUDAS.
2. SUBGRADE PREPARATION AND PAVEMENTS WILL BE CONSTRUCTED FOLLOWING RECOMMENDATIONS IN THE SOILS REPORT. APPROVED SOILS ENGINEER MUST SIGN OFF ON SUBASE PRIOR TO ANY PAVEMENT BEING PLACED.
3. SEE DETAILS FOR ALL PAVEMENT THICKNESS.
4. ALL PEDESTRIAN WALKWAYS THAT UNLOAD INTO A VEHICLES TRAVELED PATH MUST HAVE A.D.A. DETECTABLE WARNING PANEL(S) AS PER A.D.A. REGULATIONS. PANEL TYPE & COLOR SHALL BE PER CITY STANDARD.
5. ALL WALKS, PARKING LOTS, HANDICAP PARKING, RAMPS, ETC. SHALL COMPLY WITH ALL A.D.A. AND CITY CODES. HANDICAP PARKING SIGNAGE IS REQUIRED FOR ALL HANDICAP STALLS AND SHALL BE CONSIDERED INCIDENTAL. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./CITY CODES THE A.D.A./CITY CODES SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING A.D.A. CODES ARE MET.

UTILITY NOTES:

1. QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
2. THE CONTRACTOR SHALL PROVIDE AS-BUILTS OF ALL UTILITIES, INCLUDING DEPTH AND LOCATION OF ALL SERVICES.
3. THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
4. ACTIVE EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE.
5. ALL PROPOSED RPC STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD.
6. ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
7. SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2%. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATERMAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.
8. MANDREL AND PRESSURE TESTS SHALL BE REQUIRED FOR ALL PROPOSED SANITARY LINES. TELEVISION OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED PRIOR TO PAVING UNLESS OTHERWISE APPROVED BY JURISDICTION.
9. WATERMANS SHALL BE C-900. SIZE OF WATERMAIN AS SHOWN ON PLANS.
10. THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATERMAIN CONSTRUCTION.
11. PROPOSED WATERMAIN SHALL BE PRESSURE TESTED, BACTERIA TESTED AND CHLORINATED. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF WAUKEE.
12. TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
13. ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF WAUKEE WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
14. THE MINIMUM HYDRANT LEAD SHALL BE 3.5 FEET.
15. ALL HYDRANTS SHALL HAVE 5-INCH STORZ FITTINGS.



VICINITY MAP
SCALE: 1" = 1,000'

LEGEND:

- SAN — SANITARY SEWER
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE
- UE — UNDERGROUND ELECTRIC
- OIE — OVERHEAD ELECTRIC
- TELE — TELEPHONE LINE
- F/O — FIBER OPTIC
- CATV — CABLE TV

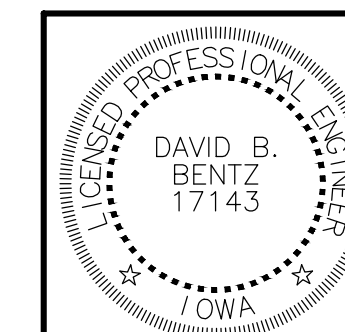
- ⊙ STORM MANHOLE
- ⊠ CURB INTAKE
- SURFACE INTAKE
- ⊠ FLARED END SECTION
- ⊙ SANITARY MANHOLE
- ⊙ CLEANOUT
- ⊙ FIRE HYDRANT
- ⊙ SPRINKLER
- ⊙ IRRIGATION CONTROL VALVE
- ⊙ WATER MANHOLE
- ⊙ WELL
- ⊙ WATER VALVE
- ⊙ WATER SHUT OFF
- ⊙ YARD HYDRANT
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC RISER
- ⊙ ELECTRIC VAULT
- ⊙ POWER POLE
- ⊙ TRANSFORMER POLE
- ⊙ LIGHT POLE
- ⊙ ELECTRIC JUNCTION BOX
- ⊙ ELECTRIC PANEL
- ⊙ TRANSFORMER
- ⊙ GROUND LIGHT
- ⊙ GUY WIRE
- ⊙ ELECTRIC HANDHOLE
- ⊙ GAS METER
- ⊙ GAS VALVE
- ⊙ AIR CONDITIONING UNIT
- ⊙ TELEPHONE RISER
- ⊙ TELEPHONE VAULT
- ⊙ TELEPHONE MANHOLE
- ⊙ TRAFFIC SIGNAL MANHOLE
- ⊙ FIBER OPTIC MANHOLE
- ⊙ FIBER OPTIC VAULT
- ⊙ CABLE TV RISER
- ⊙ SIGN
- BOLLARD
- DENOTES NUMBER OF PARKING STALLS
- PROPERTY CORNER - FOUND AS NOTED
- PROPERTY CORNER - PLACED AS NOTED
- SECTION CORNER - FOUND AS NOTED

ABBREVIATIONS:

AC	ACRES
ASPH	ASPHALT
BK	BOOK
CONC	CONCRETE
D	DEEDED DISTANCE
EX	EXISTING
ENCL	ENCLOSURE
FF	FINISHED FLOOR
FL	FLOW LINE
FRAC	FRACTIONAL
M	MEASURED DISTANCE
MH	MANHOLE
OPC	ORANGE PLASTIC CAP
P	PLATTED DISTANCE
PG	PAGE
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
PRA	PREVIOUSLY RECORDED AS PUBLIC UTILITY EASEMENT
PUE	RIGHT OF WAY
RPC	RED PLASTIC CAP
SF	SQUARE FEET
SAN	SANITARY
TYP	TYPICAL
YPC	YELLOW PLASTIC CAP
N	NORTH
S	SOUTH
E	EAST
W	WEST

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.

SIGNED: DAVID B. BENTZ, PE, 17143 DATE: _____
LICENSE RENEWAL DATE: DEC. 31, 2023
PAGES OR SHEETS COVERED BY THIS SEAL: C0.1 - C7.2



Bishop Engineering
"Planning Your Successful Development"

3501 104th Street
Des Moines, Iowa 50322-3825
Phone: (515) 276-0467 Fax: (515) 276-0217
Civil Engineering & Land Surveying
Established 1959

THE PEAK AT KETTLESTONE APARTMENTS
WAUKEE, IA

COVER SHEET

REFERENCE NUMBER:

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EWM

CHECKED BY:
DB

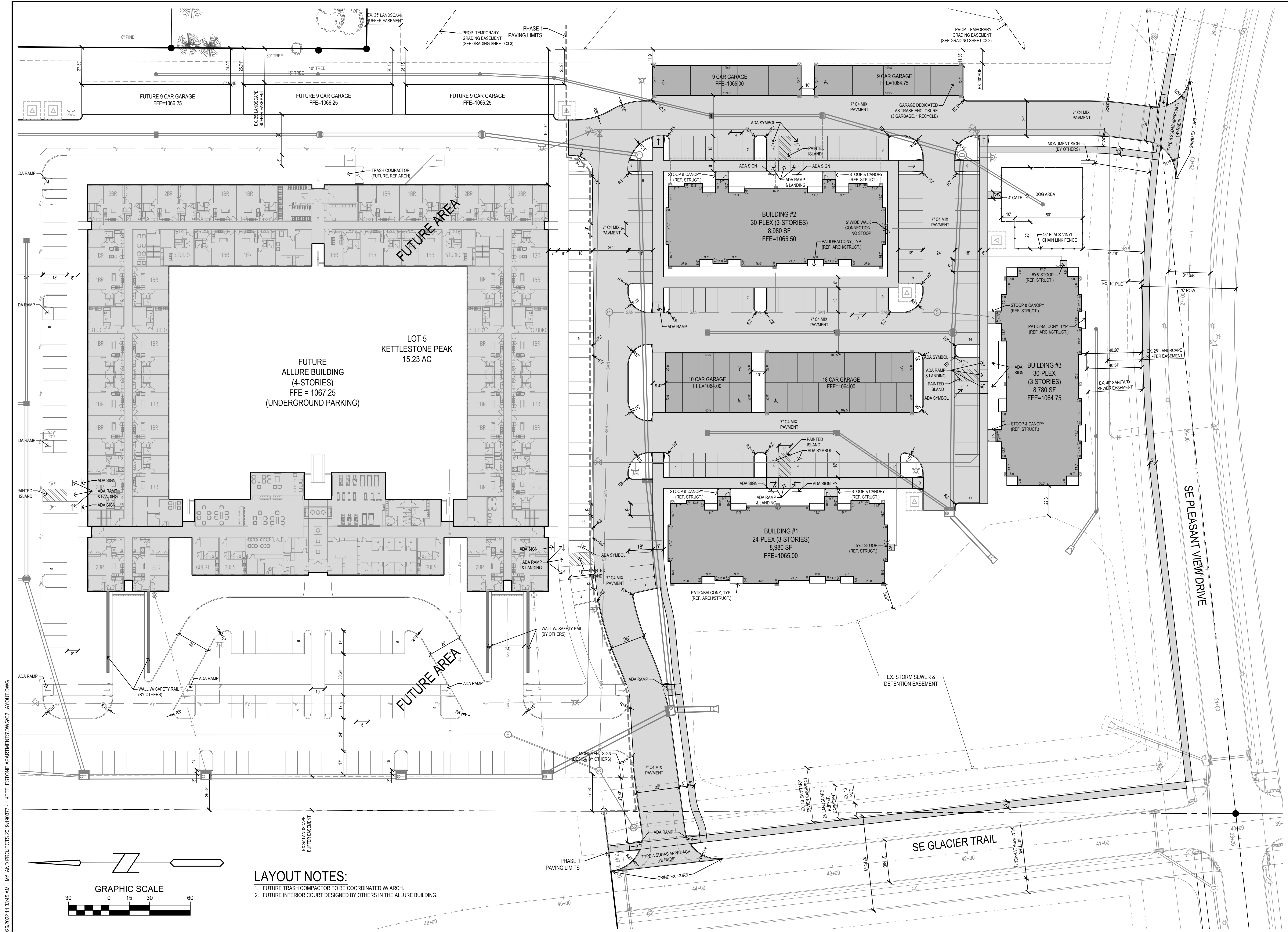
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12-28-2021 CITY SUBMITTAL
08-04-2022 CITY SUBMITTAL
08-26-2022 CITY SUBMITTAL

PROJECT NUMBER:
190377-1

SHEET NUMBER:

C0.1

PRELIMINARY- NOT FOR CONSTRUCTION



LAYOUT NOTES:

1. FUTURE TRASH COMPACTOR TO BE COORDINATED W/ ARCH.
2. FUTURE INTERIOR COURT DESIGNED BY OTHERS IN THE ALLURE BUILDING.

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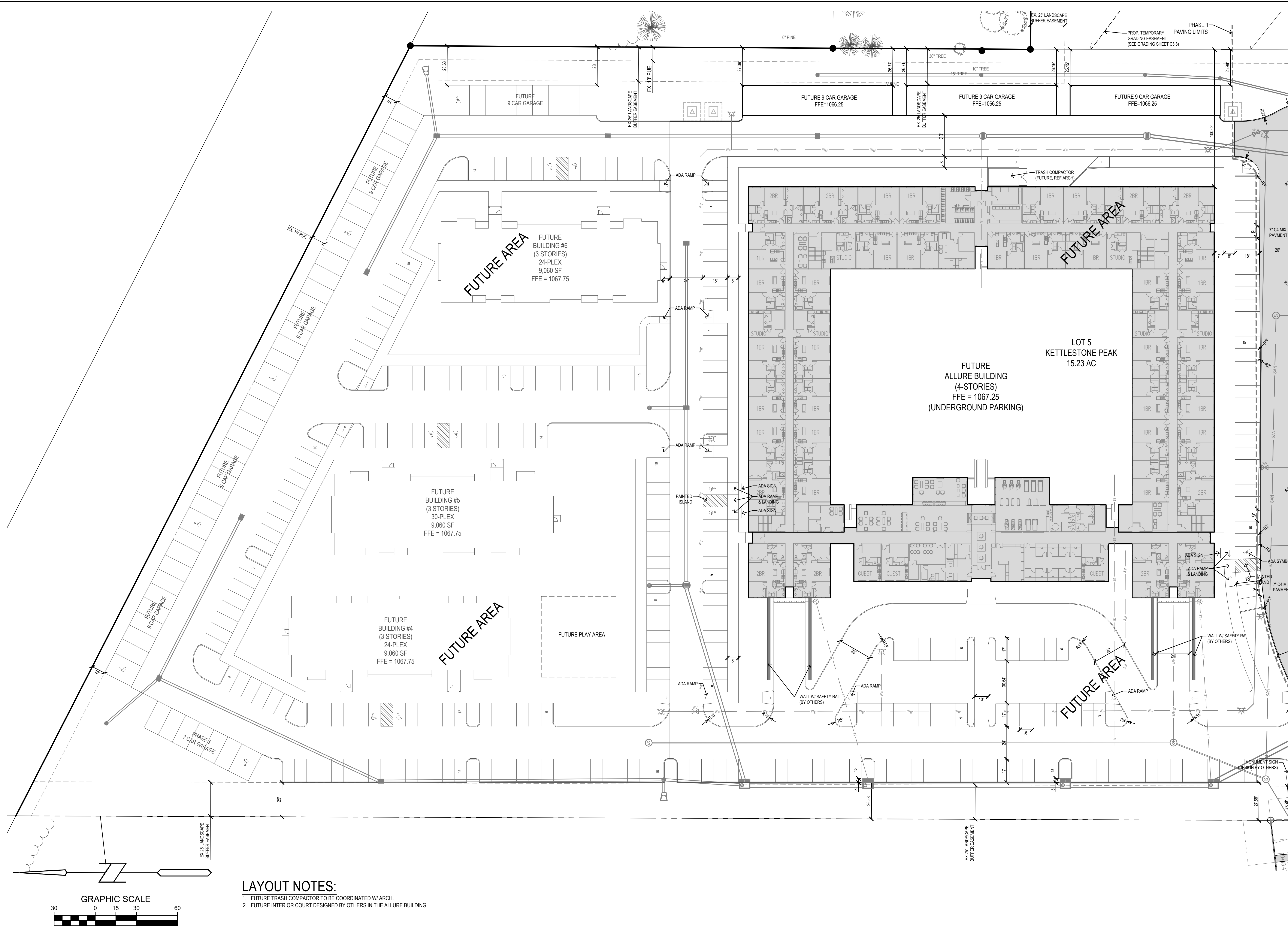
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WAUKEE, IA
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SHEET NUMBER:	C2.1

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PRELIMINARY - NOT FOR CONSTRUCTION

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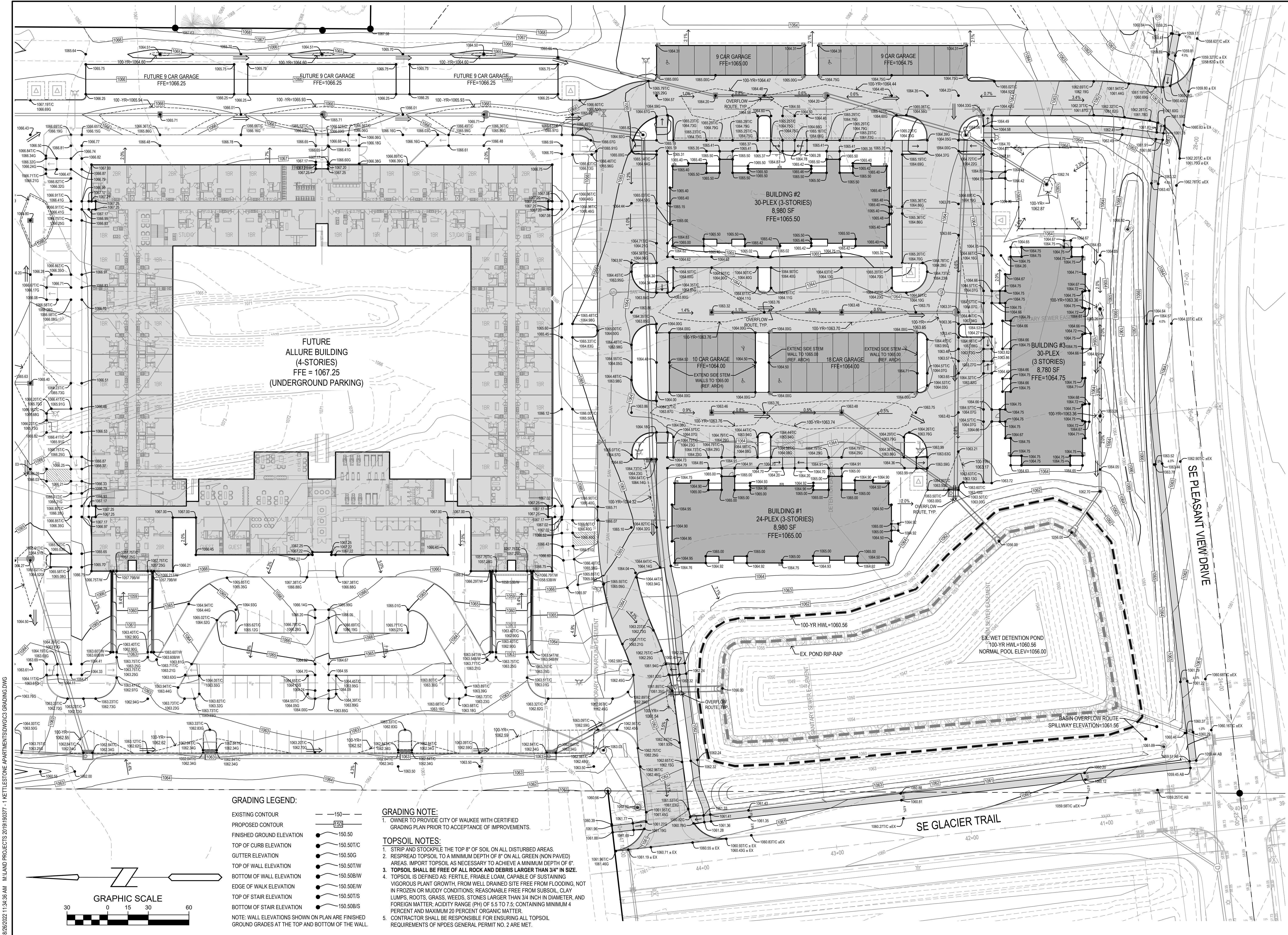
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PRELIMINARY - NOT FOR CONSTRUCTION



GRADING LEGEND:

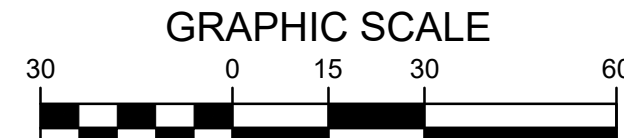
- EXISTING CONTOUR ——— 150 ———
 - PROPOSED CONTOUR ——— 150 ———
 - FINISHED GROUND ELEVATION ● 150.50
 - TOP OF CURB ELEVATION ● 150.50TC
 - GUTTER ELEVATION ● 150.50G
 - TOP OF WALL ELEVATION ● 150.50TW
 - BOTTOM OF WALL ELEVATION ● 150.50BW
 - EDGE OF WALK ELEVATION ● 150.50EW
 - TOP OF STAIR ELEVATION ● 150.50TS
 - BOTTOM OF STAIR ELEVATION ● 150.50BS
- NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL

GRADING NOTE:

1. OWNER TO PROVIDE CITY OF WAUKEE WITH CERTIFIED GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.

TOPSOIL NOTES:

1. STRIP AND STOCKPILE THE TOP 8" OF SOIL ON ALL DISTURBED AREAS.
2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 8" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
3. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4" IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.



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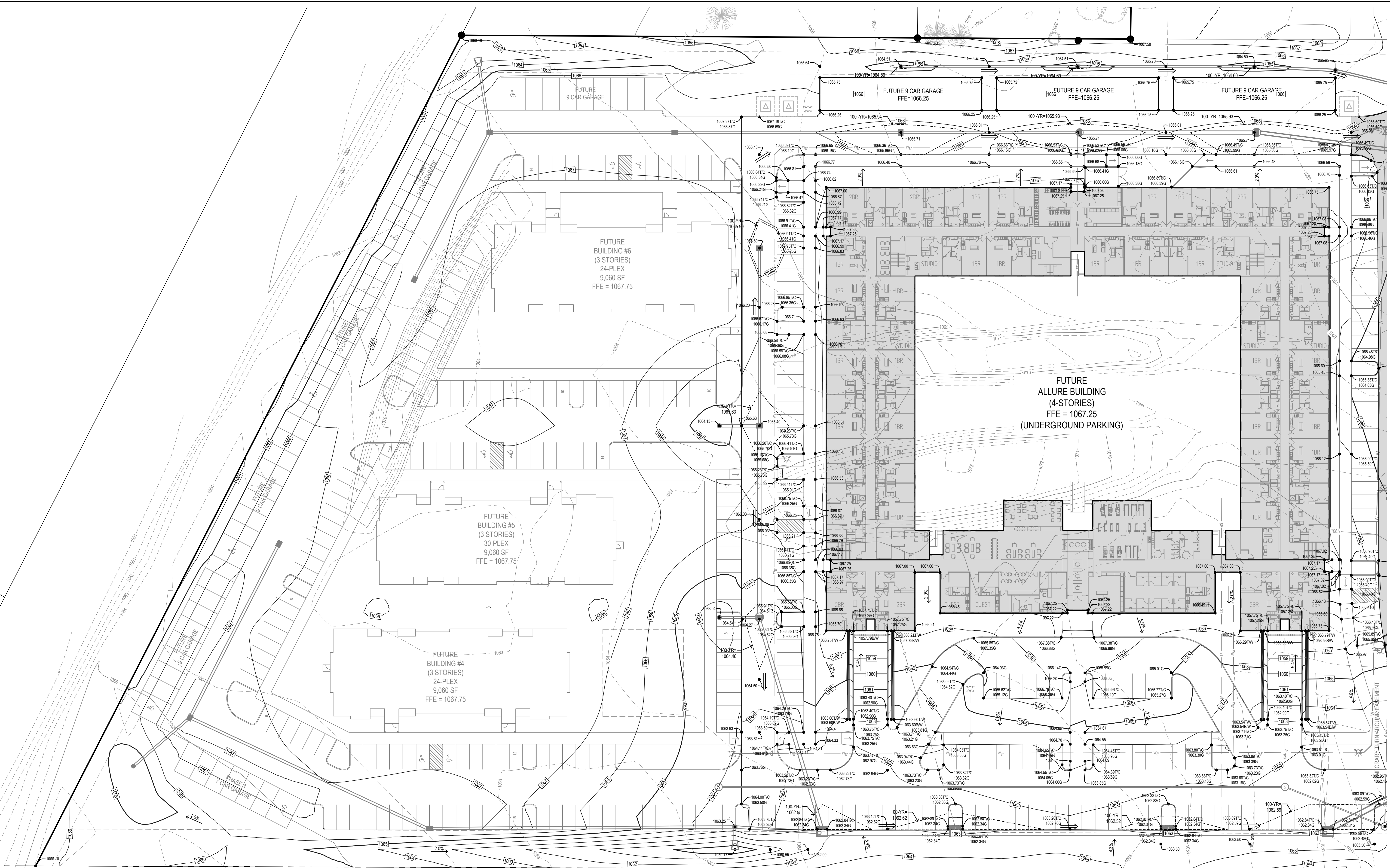
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GRADING PLAN

REFERENCE NUMBER:	
DRAWN BY:	EWM
CHECKED BY:	DB
REVISION DATE:	08-24-2021 CITY SUBMITTAL 10-05-2021 CITY SUBMITTAL 12-28-2021 CITY SUBMITTAL 08-04-2022 CITY SUBMITTAL 08-26-2022 CITY SUBMITTAL
PROJECT NUMBER:	190377-1
SHEET NUMBER:	C3.1

PRELIMINARY- NOT FOR CONSTRUCTION

8/26/2022 1:34:55 AM MILAND PROJECTS 2019190377 - 1 KETTLESTONE APARTMENTS.DWG3 GRADING.DWG



GRADING LEGEND:

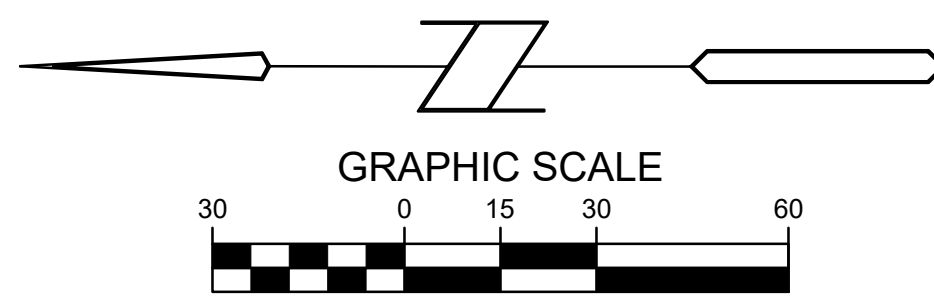
- EXISTING CONTOUR ——— 150 ———
 - PROPOSED CONTOUR ——— 150 ———
 - FINISHED GROUND ELEVATION ● 150.50
 - TOP OF CURB ELEVATION ● 150.50/C
 - GUTTER ELEVATION ● 150.50/G
 - TOP OF WALL ELEVATION ● 150.50/W
 - BOTTOM OF WALL ELEVATION ● 150.50/B/W
 - EDGE OF WALK ELEVATION ● 150.50/E/W
 - TOP OF STAIR ELEVATION ● 150.50/S
 - BOTTOM OF STAIR ELEVATION ● 150.50/S
- NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL

GRADING NOTE:

1. OWNER TO PROVIDE CITY OF WAUKEE WITH CERTIFIED GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.

TOPSOIL NOTES:

1. STRIP AND STOCKPILE THE TOP 8" OF SOIL ON ALL DISTURBED AREAS.
2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 8" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
3. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5, CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.

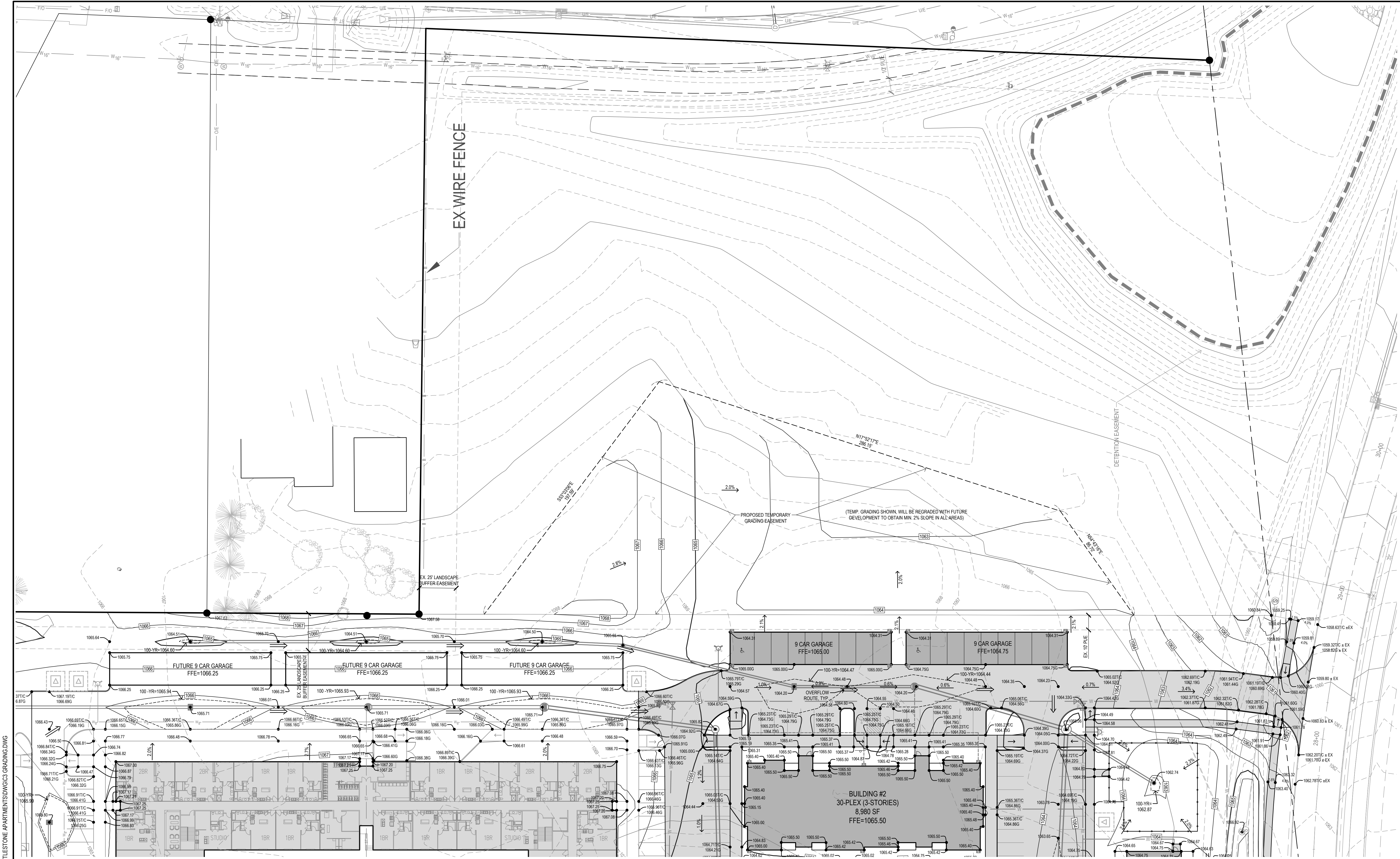


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THE PEAK AT KETTLESTONE APARTMENTS
 WAUKEE, IA
GRADING PLAN

REFERENCE NUMBER:	
DRAWN BY:	EWM
CHECKED BY:	DB
REVISION DATE:	08-24-2021 CITY SUBMITTAL 10-05-2021 CITY SUBMITTAL 12-28-2021 CITY SUBMITTAL 08-04-2022 CITY SUBMITTAL 08-26-2022 CITY SUBMITTAL
PROJECT NUMBER:	190377-1
SHEET NUMBER:	C3.2

PRELIMINARY - NOT FOR CONSTRUCTION



GRADING LEGEND:

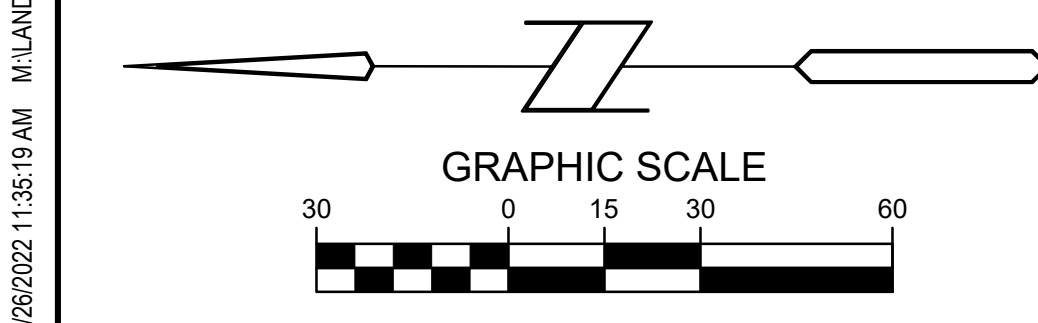
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 - PROPOSED CONTOUR - - - - - 150 - - - - -
 - FINISHED GROUND ELEVATION ● 150.50
 - TOP OF CURB ELEVATION ● 150.50/C
 - GUTTER ELEVATION ● 150.50/G
 - TOP OF WALL ELEVATION ● 150.50/W
 - BOTTOM OF WALL ELEVATION ● 150.50/BW
 - EDGE OF WALK ELEVATION ● 150.50/EW
 - TOP OF STAIR ELEVATION ● 150.50/S
 - BOTTOM OF STAIR ELEVATION ● 150.50/BS
- NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL.

GRADING NOTE:

1. OWNER TO PROVIDE CITY OF WAUKEE WITH CERTIFIED GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.

TOPSOIL NOTES:

1. STRIP AND STOCKPILE THE TOP 8" OF SOIL ON ALL DISTURBED AREAS.
2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 8" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
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4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5, CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.



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**THE PEAK AT KETTLESTONE APARTMENTS
 WAUKEE, IA
 GRADING PLAN**

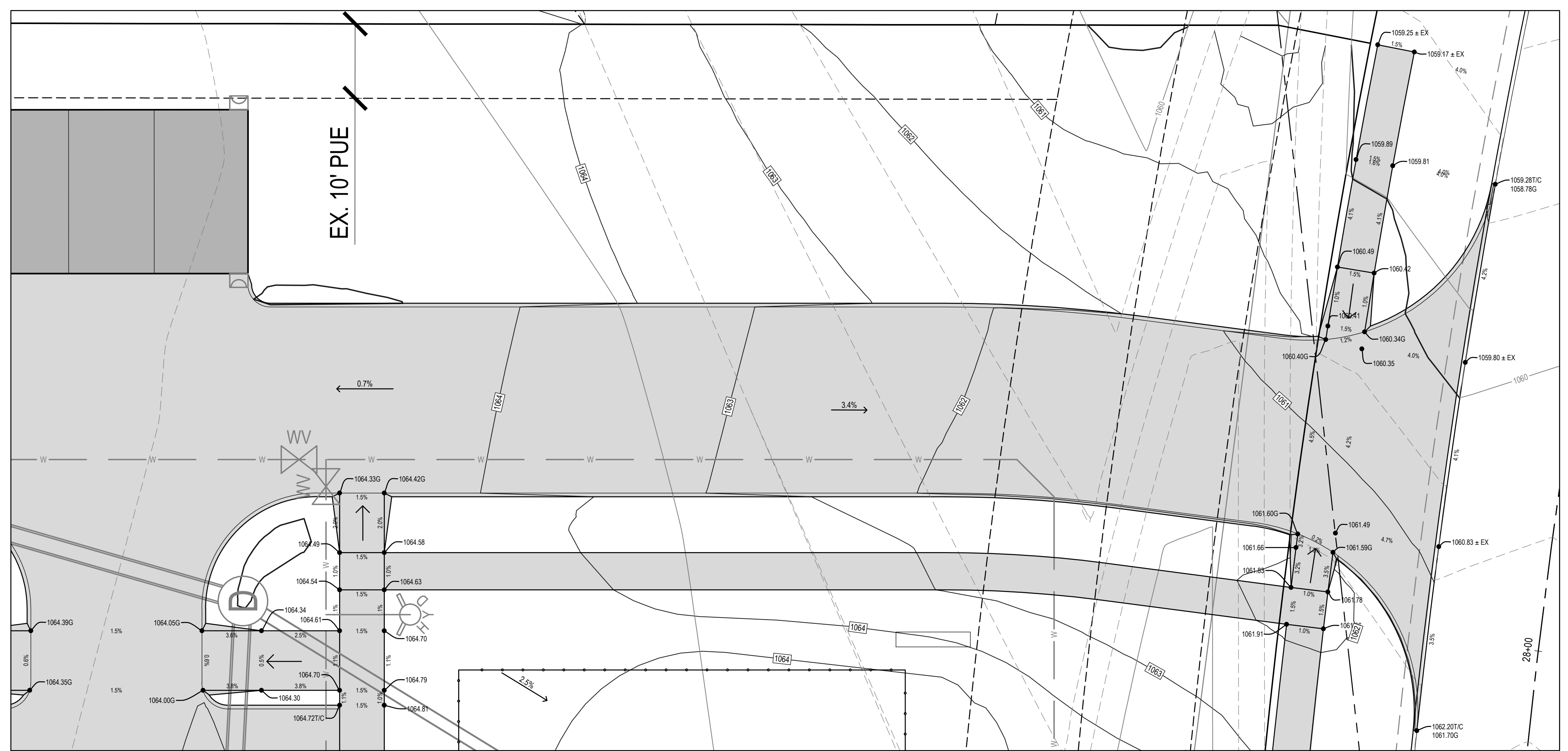
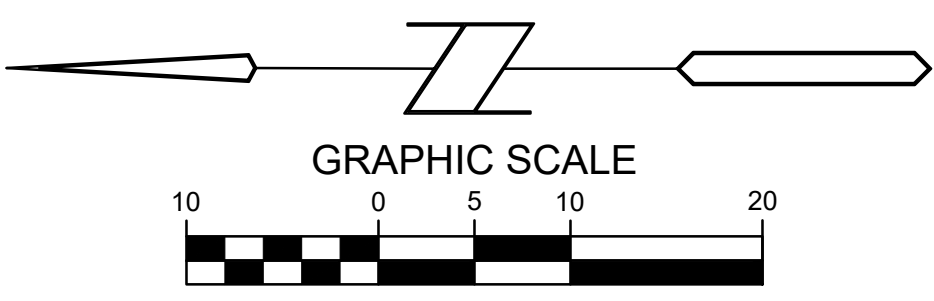
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PROJECT NUMBER:	190377-1
SHEET NUMBER:	C3.3

PRELIMINARY - NOT FOR CONSTRUCTION

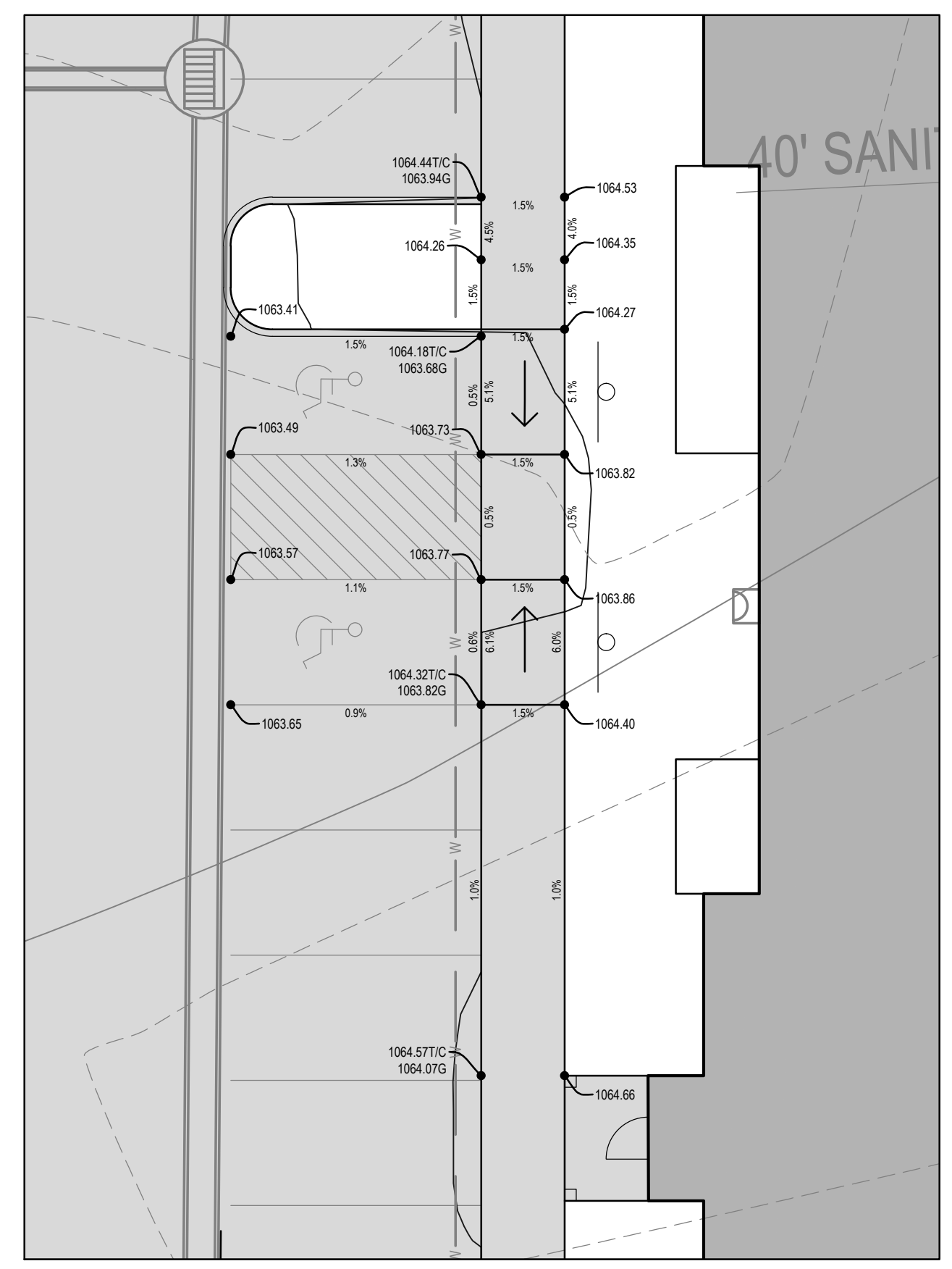
8/26/2022 1:38:30 AM MILAND PROJECTS 2019190377 - 1 KETTLESTONE APARTMENTS DWG33 GRADING.DWG



WESTERN ACCESS RAMP DETAIL
SCALE: 1" = 10'



SOUTHERN ACCESS RAMP DETAIL
SCALE: 1" = 10'



BUILDING #3 ADA DETAIL
SCALE: 1" = 10'

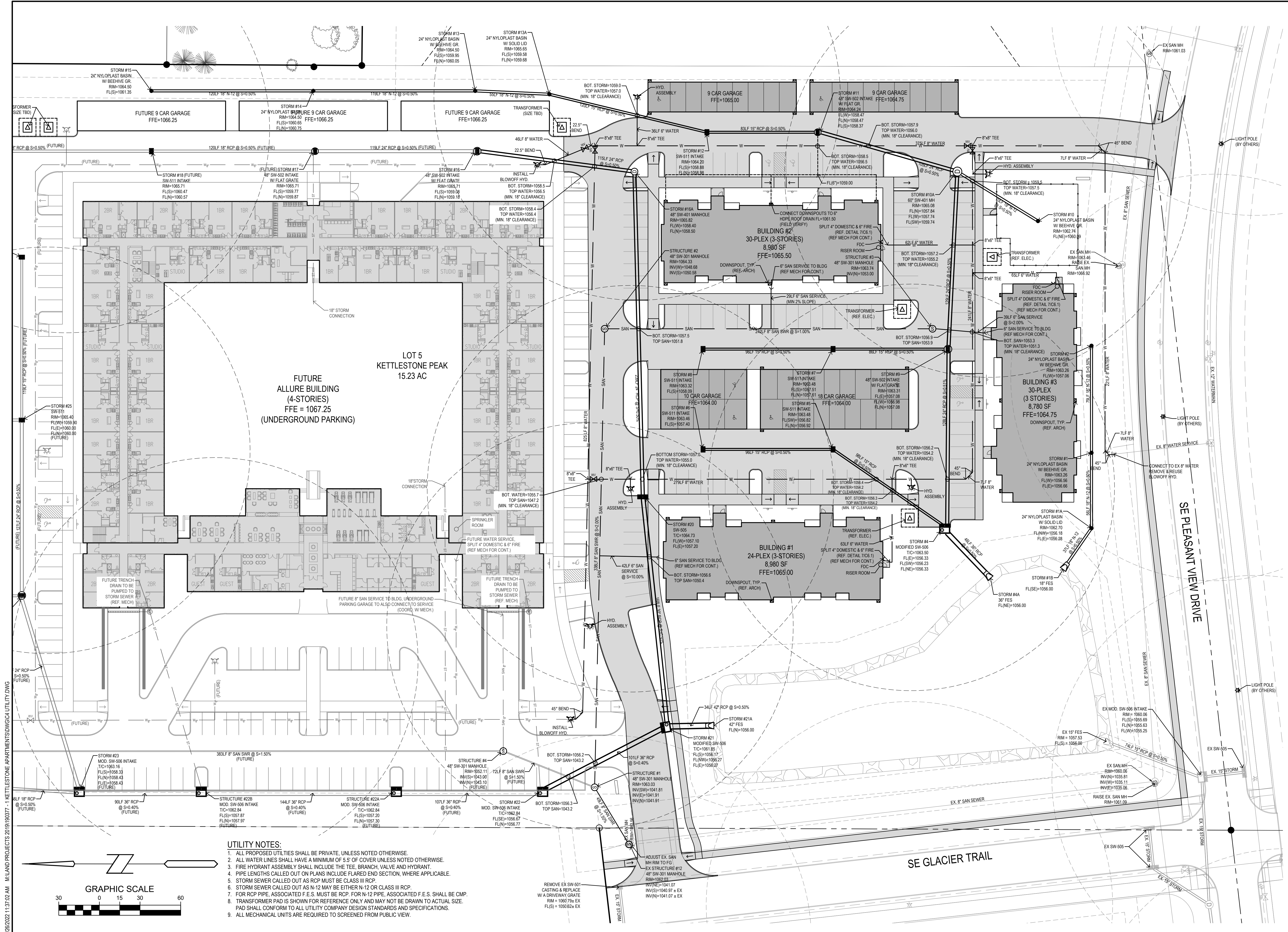
THE PEAK AT KETTLESTONE APARTMENTS
WAUKEE, IA
GRADING PLAN

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PROJECT NUMBER: 190377-1
SHEET NUMBER: C3.5

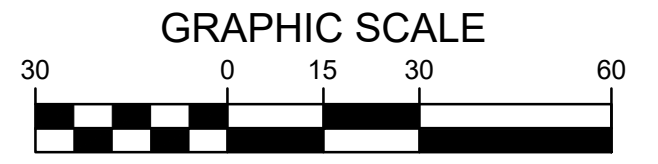
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- UTILITY NOTES:**
1. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
 2. ALL WATER LINES SHALL HAVE A MINIMUM OF 5' 0" OF COVER UNLESS NOTED OTHERWISE.
 3. FIRE HYDRANT ASSEMBLY SHALL INCLUDE THE TEE, BRANCH, VALVE AND HYDRANT.
 4. PIPE LENGTHS CALLED OUT ON PLANS INCLUDE FLARED END SECTION, WHERE APPLICABLE.
 5. STORM SEWER CALLED OUT AS RCP MUST BE CLASS III RCP.
 6. STORM SEWER CALLED OUT AS N-12 MAY BE EITHER N-12 OR CLASS III RCP.
 7. FOR RCP PIPE, ASSOCIATED F.E.S. MUST BE RCP. FOR N-12 PIPE, ASSOCIATED F.E.S. SHALL BE CMP.
 8. TRANSFORMER PAD IS SHOWN FOR REFERENCE ONLY AND MAY NOT BE DRAWN TO ACTUAL SIZE. PAD SHALL CONFORM TO ALL UTILITY COMPANY DESIGN STANDARDS AND SPECIFICATIONS.
 9. ALL MECHANICAL UNITS ARE REQUIRED TO SCREENED FROM PUBLIC VIEW.



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THE PEAK AT KETTLESTONE APARTMENTS
 WAUKEE, IA

UTILITY PLAN

REFERENCE NUMBER:
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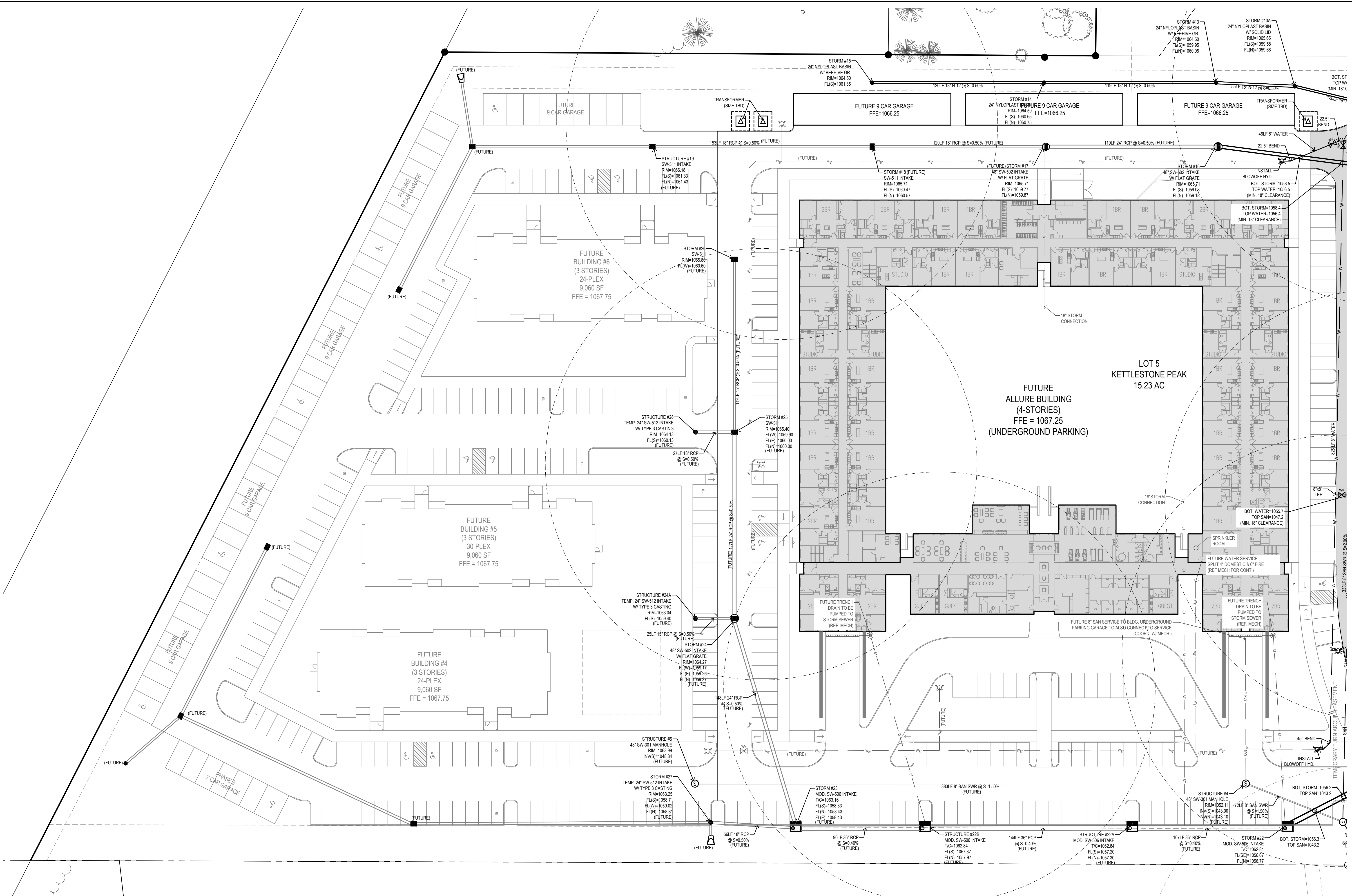
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 08-26-2022 CITY SUBMITTAL

PROJECT NUMBER:
190377-1

SHEET NUMBER:
C4.1

PRELIMINARY - NOT FOR CONSTRUCTION

8/26/2022 1:37:21 AM M:\LAND PROJECTS 2019\190377 - 1 KETTLESTONE APARTMENTS\DWG\C4 UTILITY.DWG



- UTILITY NOTES:**
1. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
 2. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5' OF COVER UNLESS NOTED OTHERWISE.
 3. FIRE HYDRANT ASSEMBLY SHALL INCLUDE THE TEE, BRANCH, VALVE AND HYDRANT.
 4. PIPE LENGTHS CALLED OUT ON PLANS INCLUDE FLARED END SECTION, WHERE APPLICABLE.
 5. STORM SEWER CALLED OUT AS RCP MUST BE CLASS III RCP.
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WAUKEE, IA
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SHEET NUMBER:	C4.2

PRELIMINARY - NOT FOR CONSTRUCTION

LANDSCAPE NOTES:

1. ALL SODDING/SEEDING & LANDSCAPE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.
2. SOD/SEED ALL DISTURBED AREAS AND WITHIN THE R.O.W. AND WITHIN THE CONTRACT LIMITS, UNLESS NOTED OTHERWISE. SOD/SEED LIMITS SHOWN ON PLAN ARE FOR REFERENCE ONLY. FINAL LIMITS MAY CHANGE BASED ON CONSTRUCTION ACTIVITIES.
3. STAKE SOD ON ALL SLOPES 3:1 OR GREATER.
4. PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, THE DRAWING SHALL PREVAIL IF A CONFLICT OCCURS.
5. ALL PLANT MATERIAL SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).
6. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF INITIAL ACCEPTANCE.
7. FOR WARRANTY PURPOSES, THE DATE OF INITIAL ACCEPTANCE SHALL BE SUBMITTED IN WRITING TO THE OWNER AND/OR OWNER'S REPRESENTATIVE AFTER ALL PLANT MATERIALS HAVE BEEN INSTALLED AND REVIEWED BY OWNER OR OWNER'S REPRESENTATIVE. PLANT MATERIALS WILL ONLY BE ACCEPTED IF THEY ARE IN AN ALIVE AND THRIVING CONDITION.
8. CONDITIONAL ACCEPTANCE OF PLANT MATERIAL MAY BE GIVEN FOR PLANTS INSTALLED IN A DORMANT CONDITION WITH INITIAL ACCEPTANCE OCCURRING THE FOLLOWING SPRING ONCE THEY ARE SHOWN TO BE ALIVE AND THRIVING.
9. IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE IDENTIFICATION TAGS AND CORDS ON ALL PLANT MATERIAL PRIOR TO THE COMPLETION OF THE CONTRACT. IDENTIFICATION TAGS (INCLUDING SIZING INFORMATION) MUST BE LEFT ON UNTIL AFTER ACCEPTANCE BY OWNER OR OWNER'S REPRESENTATIVE.
10. CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH AROUND ALL TREES, SHRUBS AND GROUND COVER BEDS TO A DEPTH OF 4 INCHES, UNLESS NOTED.
11. STAKING AND GUYING OF TREES SHALL BE AT THE DISCRETION OF THE CONTRACTOR BASED ON CURRENT ACCEPTED NURSERY STANDARDS. GENERALLY, TREES IN LARGE OPEN AREAS SUBJECT TO SIGNIFICANT WIND SHALL BE STAKED. STAKE AND WRAP TREES IMMEDIATELY AFTER PLANTING. CONTRACTOR SHALL ADJUST AND MAINTAIN GUYING TENSION THROUGHOUT THE PLANT ESTABLISHMENT PERIOD. REMOVE ALL STAKES AND GUY WIRES NO MORE THAN ONE YEAR AFTER INSTALLATION.
12. THE LANDSCAPING CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BEFORE STARTING ANY SITE WORK OR PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
13. NO LANDSCAPE MATERIAL SHALL BE SUBSTITUTED WITHOUT THE AUTHORIZATION OF THE LANDSCAPE ARCHITECT.
14. ALL EDGING SHALL BE DURAEDGE 3/16" STEEL EDGING - COLOR BLACK, OR APPROVED EQUAL.
15. CONTRACTOR SHALL BE RESPONSIBLE MAINTAINING APPROPRIATE LEVEL OF WATERING FOR ALL NEW PLANTS FOR A PERIOD OF 30 DAYS.
16. ALL SHRUB AND PERENNIAL PLANTING BEDS SHALL BE MULCHED WITH 4" THICK SHREDDED HARDWOOD MULCH.
14. ALL SHRUB AND PERENNIAL PLANTING BEDS SHALL INCORPORATE TYPAR 3301 NONWOVEN LANDSCAPE FABRIC (OR SIMILAR) AND 3" THICK LAYER OF WASHED RIVER ROCK (1.5" NOMINAL SIZE).
15. ALL BEDS TO RECEIVE GRANULAR PRE-EMERGENT WEED CONTROL BEFORE AND AFTER MULCH/ROCK IS INSTALLED.

IRRIGATION NOTES:

- FOR BIDDING PURPOSES, THIS PROJECT DOES NOT INCLUDE A SITE IRRIGATION SYSTEM.
- CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE A SEPARATE PROPOSAL FOR A SITE IRRIGATION SYSTEM. PROPOSAL SHALL BE DESIGN/BUILD FOR A COMPLETE OPERATIONAL IRRIGATION SYSTEM APPROPRIATE FOR THE SITE. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DESIGN, COORDINATION, TESTING, PERMITS, INSPECTIONS, ETC.

GENERAL LANDSCAPE REQUIREMENTS

TOTAL AREA (PHASE 1)	478,484 SF
TOTAL REQUIRED OPEN SPACE (20%)	9,696 SF
GENERAL OPEN SPACE REQUIREMENT	
TOTAL REQUIRED OVERSTORY TREES (1.5 PER 1000 SF)	144
TOTAL REQUIRED UNDERSTORY TREES (0.5 PER 1000 SF)	48
TOTAL REQUIRED SHRUBS (2 PER 1000 SF)	192
BUFFER PLANTING REQUIREMENT - WEST AND SOUTH (25' WIDE)	
TOTAL BUFFER LENGTH	1,879
TOTAL REQUIRED OVERSTORY TREES (1.5 / 50LF)	57
TOTAL REQUIRED EVERGREEN TREES (2.5 / 50 LF)	94
TOTAL REQUIRED UNDERSTORY TREES (2.5 / 50 LF)	94
TOTAL REQUIRED SHRUBS (15 / 50 LF)	564
BUFFER PLANTING REQUIREMENT - NORTHEAST (25' WIDE)	
TOTAL BUFFER LENGTH	477
TOTAL REQUIRED OVERSTORY TREES (1.5 / 50LF)	15
TOTAL REQUIRED EVERGREEN TREES (2.5 / 50 LF)	24
TOTAL REQUIRED UNDERSTORY TREES (2.5 / 50 LF)	24
TOTAL REQUIRED SHRUBS (15 / 50 LF)	144
REQUIRED STREET TREES (SEE PLEASANT VIEW DRIVE)	
TOTAL LENGTH OF STREET FRONTAGE	536
REQUIRED OVERSTORY TREES (1 / 40 LF)	14

LEGEND

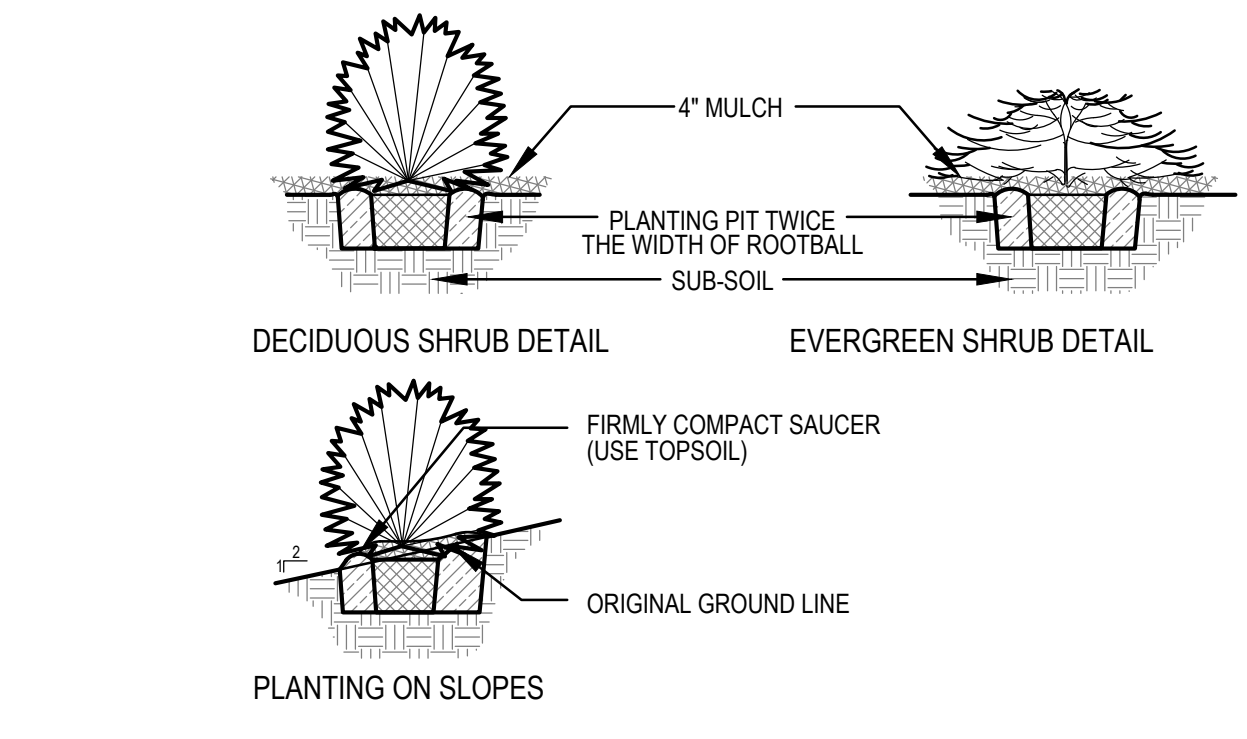
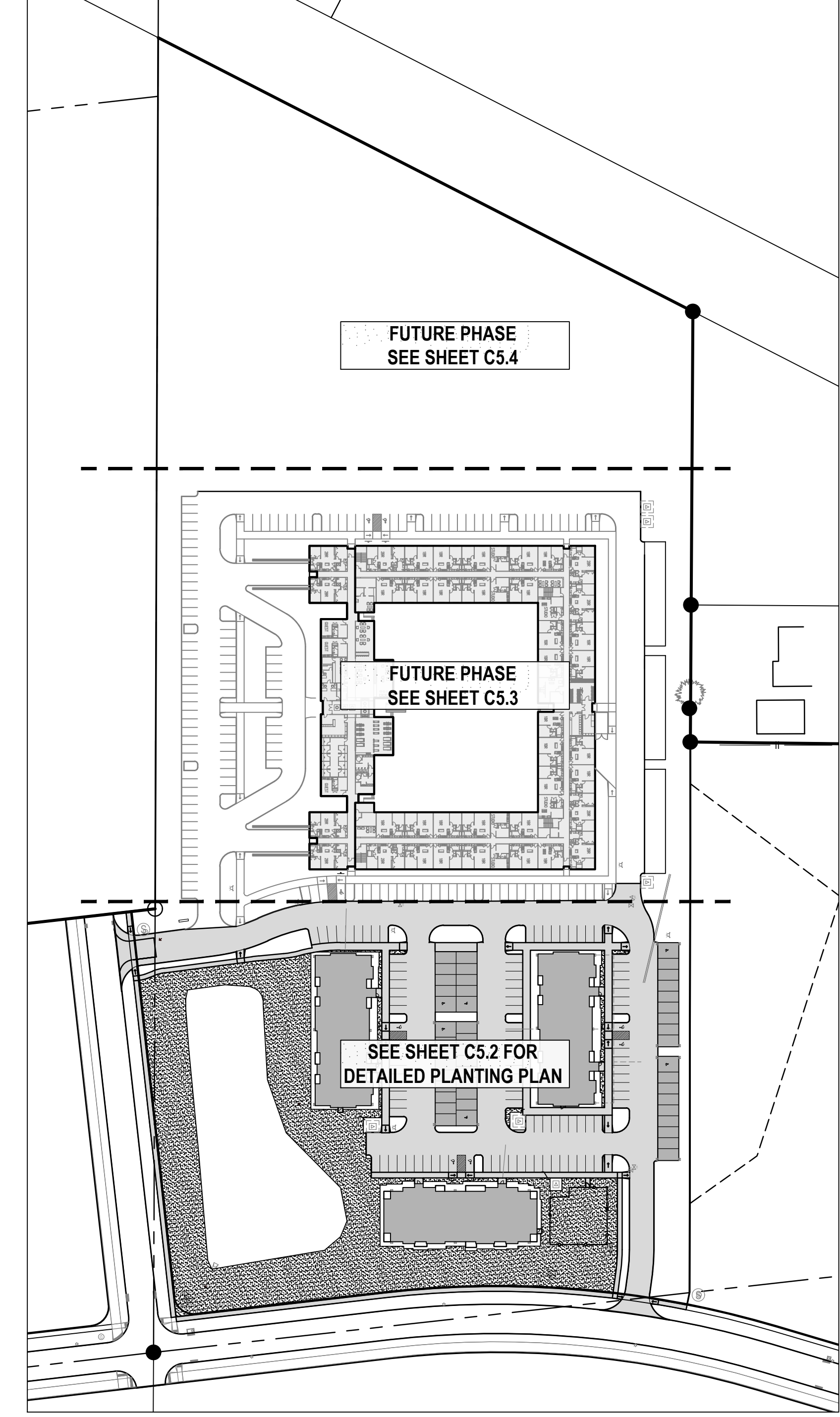
- SOD:** PROVIDE AND INSTALL SOD FROM LOCAL SUPPLIERS. AREAS TO BE SODDED MUST BE FREE OF ALL CONSTRUCTION DEBRIS AND ANY DIRT CLUMPS OVER 1" IN DIAMETER. THOROUGHLY WATER SOD UPON INSTALLATION. CONTRACTOR TO MAINTAIN WATERING UNTIL SOD IS ESTABLISHED (ROOTS KNITTED INTO SUBSURFACE)
- SEED:** MIX TO BE "SUBDIVISION" BY UNITED SEEDS (OR APPROVED EQUAL). SEED AT A RATE OF 100 LBS PER ACRE. SEEDING DATES, SITE PREPARATION, SEEDING INSTALLATION, WATER REQUIREMENTS, FERTILIZING, AND MOWING PER UNITED SEEDS TECH BULLETIN FOR SEED TYPE. OVERSEEDING (IF REQUIRED) TO BE INSTALLED AT 220 LBS PER ACRE.
- HYDRO MULCH:** HYDRO MULCH ALL SEEDED AREAS: WOOD CELLULOSE HYDRAULIC MULCH WITH TACKIFIER SHALL BE APPLIED AT A RATE OF 2,500 LBS PER ACRE.
- FERTILIZER:** FERTILIZE ALL SEED TYPE I AREAS WITH PRODUCT SPECIFIED ABOVE AT RATE OF 250 LBS/ ACRE.
- ESTABLISHMENT:** SATISFACTORY SEEDED LAWN: AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. (0.92 SQ. M) AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES. REESTABLISH LAWNS THAT DO NOT COMPLY WITH REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.

PLANTING SCHEDULE (PHASE 1 - SHEET C5.2))

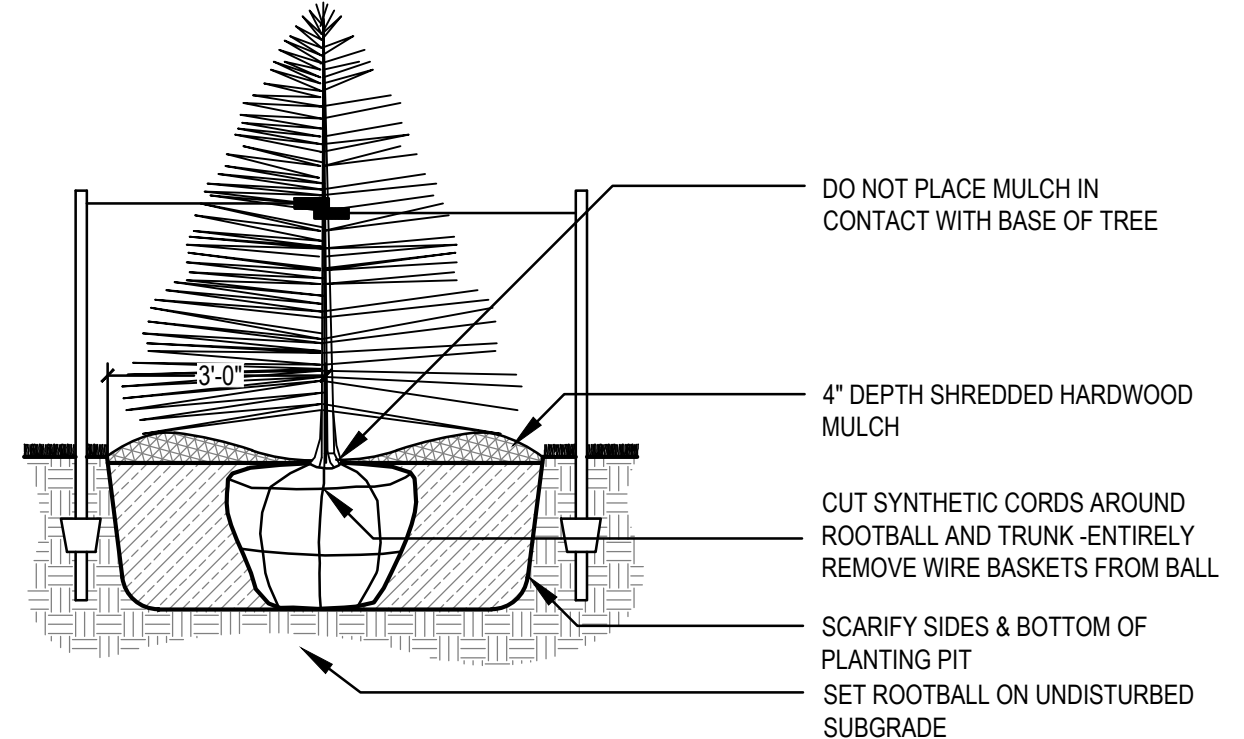
CODE	QUAN	COMMON NAME	LATIN NAME	SIZE	ROOT	NOTES
OVERSTORY TREES						
OG	12	OCTOBER GLORY MAPLE	ACER RUBRUM 'OCTOBER GLORY'	2.0" CAL	B&B	MATCHED SPECIMENS
MM	12	MARMO MAPLE	ACER X FREEMANI 'MARMO'	2.0" CAL	B&B	MATCHED SPECIMENS
RB	19	HERITAGE RIVER BIRCH	BETULA NIGRA 'HERITAGE'	8" HT	B&B	MATCHED SPECIMENS (CLUMP FORM)
AH	0	AMERICAN HORNBEAM	CARPINUS CAROLINIANA	2.0" CAL	B&B	MATCHED SPECIMENS
CH	3	COMMON HACKBERRY	CELTIS OCCIDENTALIS	2.0" CAL	B&B	MATCHED SPECIMENS
SH	21	SKYLINE HONEYLOCUST	GLEDTISIA TRIACANTHOS 'INERMIS 'SKYLINE'	2.0" CAL	B&B	MATCHED SPECIMENS
KC	14	KENTUCKY COFFEETREE	GYMNOCLADUS DIOICUS	2.0" CAL	B&B	MATCHED SPECIMENS
TT	2	TULIP TREE	LIRIODENDRON TULIPIFERA	2.0" CAL	B&B	MATCHED SPECIMENS
WO	2	WHITE OAK	QUERCUS ALBA	2.0" CAL	B&B	MATCHED SPECIMENS
SW	9	SWAMP WHITE OAK	QUERCUS BICOLOR	2.0" CAL	B&B	MATCHED SPECIMENS
CO	2	CHINKAPIN OAK	QUERCUS MUEHLENBERGII	2.0" CAL	B&B	MATCHED SPECIMENS
RO	8	RED OAK	QUERCUS RUBRA	2.0" CAL	B&B	MATCHED SPECIMENS
BC	9	BALD CYPRESS	TAXODIUM DISTICHUM	2.0" CAL	B&B	MATCHED SPECIMENS
BO	0	BUR OAK	QUERCUS MACROCARPA	2.0" CAL	B&B	MATCHED SPECIMENS
TC	0	LITTLE LEAF LINDEN	TILIA CORDATA	2.0" CAL	B&B	MATCHED SPECIMENS
RL	0	REDMOND LINDEN	TILIA AMERICANA	2.0" CAL	B&B	MATCHED SPECIMENS
BU	0	OHIO BUCKEYE	AESCULUS GLABRA	2.0" CAL	B&B	MATCHED SPECIMENS
ORNAMENTAL TREES						
ER	2	EASTERN REDBUD	CERCIS CANADENSIS	1.5" CAL	B&B	MATCHED SPECIMENS
PF	12	PRAIRIE FIRE CRABAPPLE	MALUS X 'PRAIRIE FIRE'	1.5" CAL	B&B	MATCHED SPECIMENS
SS	18	SNOWDRIFT CRABAPPLE	MALUS X 'SNOWDRIFT'	1.5" CAL	B&B	MATCHED SPECIMENS
ST	15	SARGENT TINA CRABAPPLE	MALUS X 'TINA'	1.5" CAL	B&B	MATCHED SPECIMENS
RS	0	ROYAL STAR MAGNOLIA	MAGNOLIA STELLATA	1.5" CAL	B&B	MATCHED SPECIMENS
NP	31	NEWPORT PLUM	PRUNUS CERASIFERA	1.5" CAL	B&B	MATCHED SPECIMENS
EVERGREEN TREES						
WP	0	WHITE PINE	PINUS STROBUS	6"	B&B	FULL FORM TO GROUND
NS	2	NORWAY SPRUCE	PICEA ABIES	6"	B&B	FULL FORM TO GROUND
BH	22	BLACK HILLS SPRUCE	PICEA GLAUCA DENSATA	6"	B&B	FULL FORM TO GROUND
DF	17	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	6"	B&B	FULL FORM TO GROUND
SHRUBS						
WB	0	CHICAGOLAND GREEN BOXWOOD	BUXUS 'GLENCOE'	#5	CONT	FULL FORM - MATCHED
LL	0	LITTLE LIME HYDRANGEA	HYDRANGEA PANICULATA 'JANE'	#3	CONT	FULL FORM - MATCHED
LD	81	LITTLE DEVIL NINEBARK	PHYSCARPUS OPULIFOLIUS 'LITTLE DEVIL'	#3	CONT	FULL FORM - MATCHED
GL	65	GROW LO SUMAC	RHUS AROMATICA 'GROW LOW'	#5	CONT	FULL FORM - MATCHED
GF	61	GOLD FLAME SPIREA	SPIRAEA BUMALDA 'GOLDFLAME'	#5	CONT	FULL FORM - MATCHED
DK	16	DWARF KOREAN LILAC	SYRINGA MEYER 'PALABIN'	#5	CONT	FULL FORM - MATCHED
AV	105	ARROWWOOD VIBURNUM	VIBURNUM DENTATUM	#5	CONT	FULL FORM - MATCHED
CV	71	COMPACT VIBURNUM	VIBURNUM TRILOBUM 'COMPACTA'	#5	CONT	FULL FORM - MATCHED
ORNAMENTAL GRASSES						
KF	235	KARL FOERSTER FEATHER REED GRASS	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	#1	CONT	FULLY ROOTED IN CONTAINER
PV	0	SHENANDOAH SWITCHGRASS	PANICUM VIRGATUM 'SHENANDOAH'	#1	CONT	FULLY ROOTED IN CONTAINER
PD	8	PRAIRIE DROPSIDE	SPOROBOLUS HETEROLEPIS	#1	CONT	FULLY ROOTED IN CONTAINER
PERENNIALS						
SD	30	STELLA D'ORO DAYLILY	HEMEROCALLIS X 'STELLA D'ORO'	#1	CONT	FULLY ROOTED IN CONTAINER

NOTE: IN ADDITION TO CALIPER SIZES NOTED ABOVE, ALL PLANT MATERIAL MUST ALSO MEET THE REQUIRED MINIMUM FOR THE CITY OF WAUKEE: OVERSTORY TREES - 8' MIN, UNDERSTORY TREES - 6' MIN, EVERGREEN TREES, 6' MIN.

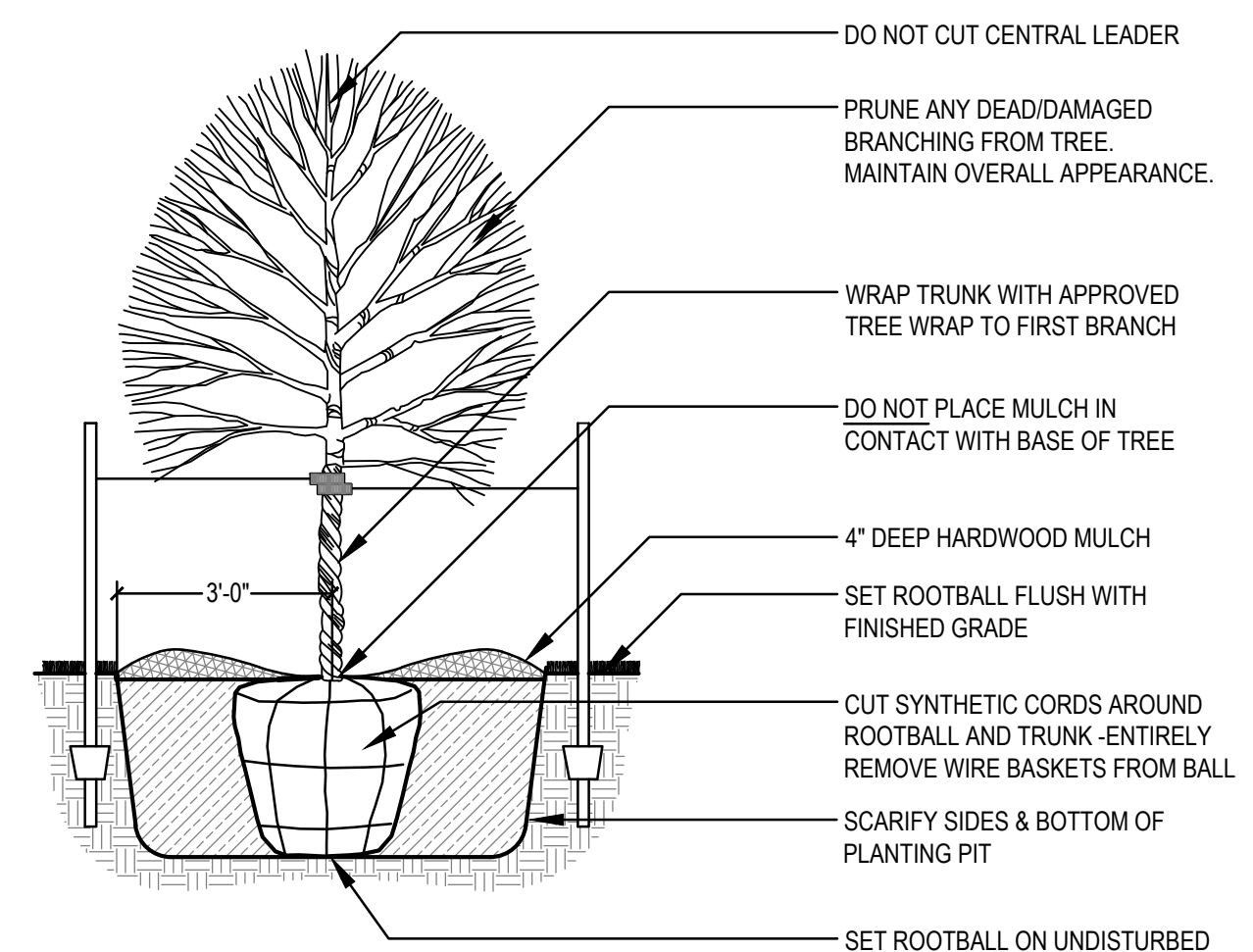
KEY PLAN



SHRUB PLANTING (TYP)
SCALE: NOT TO SCALE



EVERGREEN TREE PLANTING (B&B)
SCALE: NOT TO SCALE



DECIDUOUS TREE PLANTING (TYP.)
SCALE: NOT TO SCALE

STAKING ORIENTATION
NORTH NORTH
2 STAKES - 3" CAL. & LESS
3 STAKES - GREATER THAN 3" CAL.
USE HOSE GUARDS AROUND TRUNK ON STAKING WIRE. TIE WIRE TO STEEL POSTS PLACED OUTSIDE PLANT PIT.
LEAVE STAKES IN PLACE NO MORE THAN 1 YEAR FROM INSTALLATION. CONTRACTOR RESPONSIBLE FOR REMOVAL.

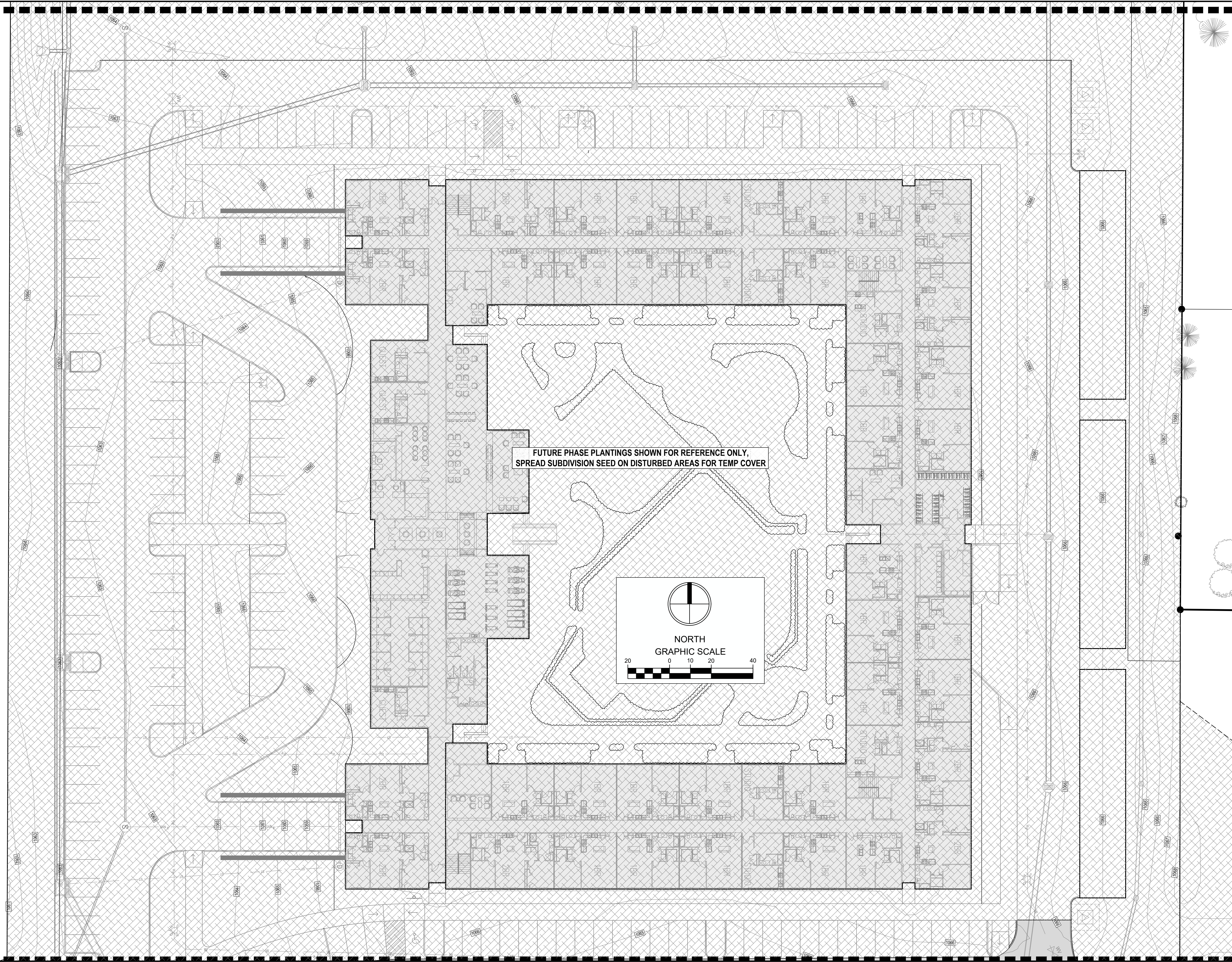
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Phone: (515)276-0467 Fax: (515)276-0217
Civil Engineering & Land Surveying
Established 1959

THE PEAK AT KETTLESTONE APARTMENTS
WAUKEE, IA
LANDSCAPE DETAILS

REFERENCE NUMBER:
DRAWN BY: EWM
CHECKED BY: DB
REVISION DATE:
08-24-2021 CITY SUBMITTAL
10-05-2021 CITY SUBMITTAL
12-28-2021 CITY SUBMITTAL
08-04-2022 CITY SUBMITTAL
08-26-2022 CITY SUBMITTAL
PROJECT NUMBER:
190377-1
SHEET NUMBER:
C5.1

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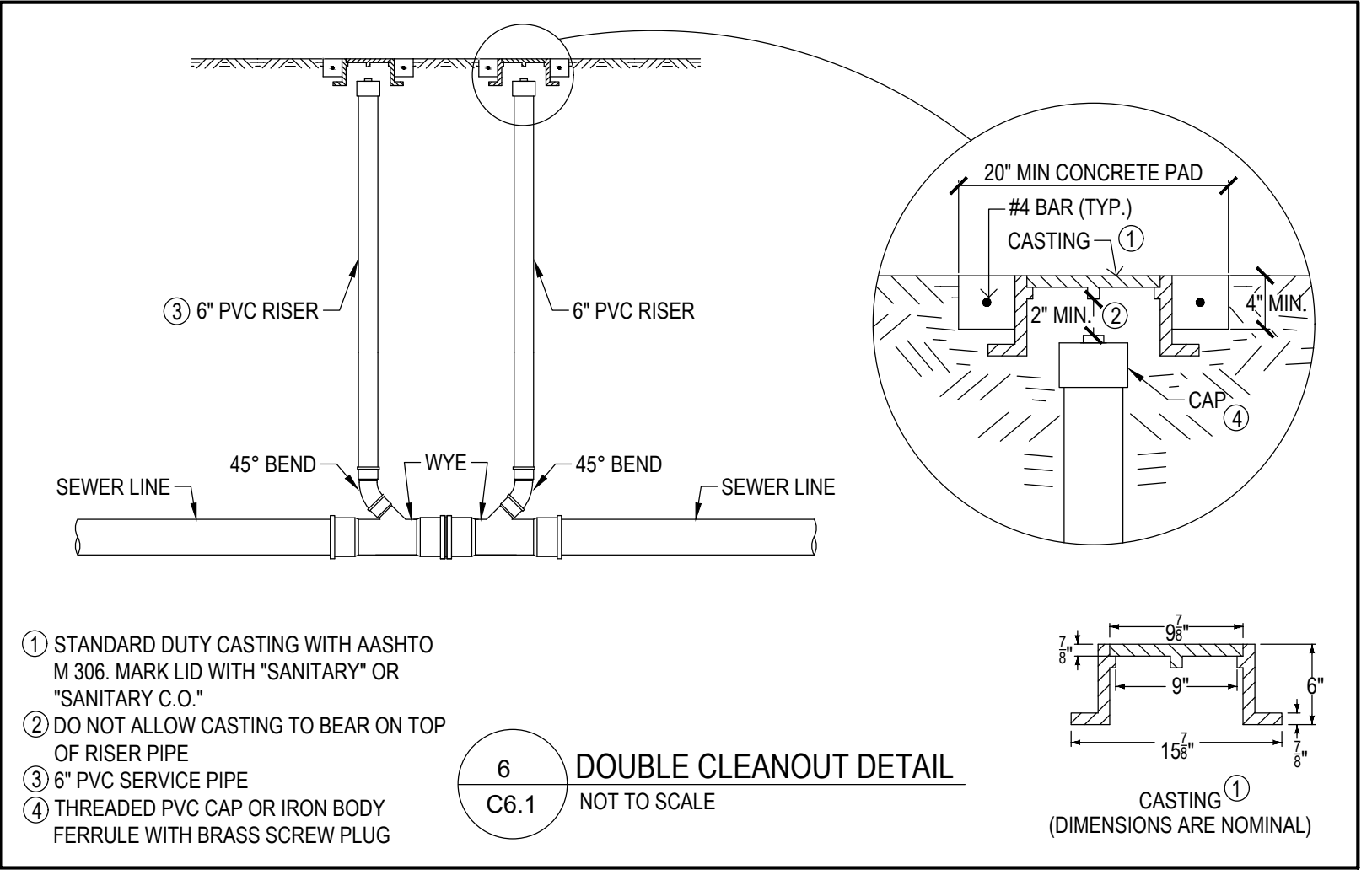
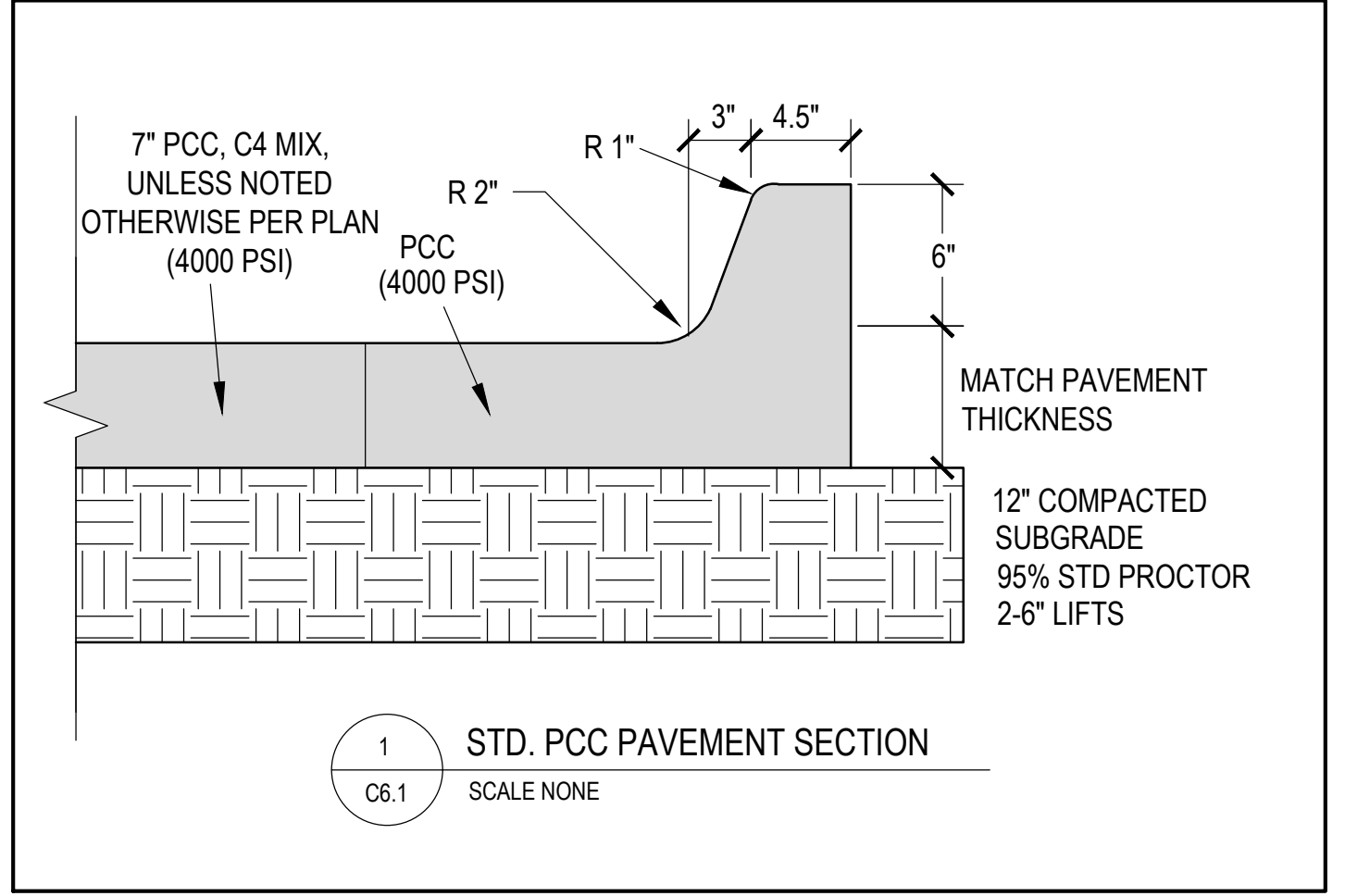
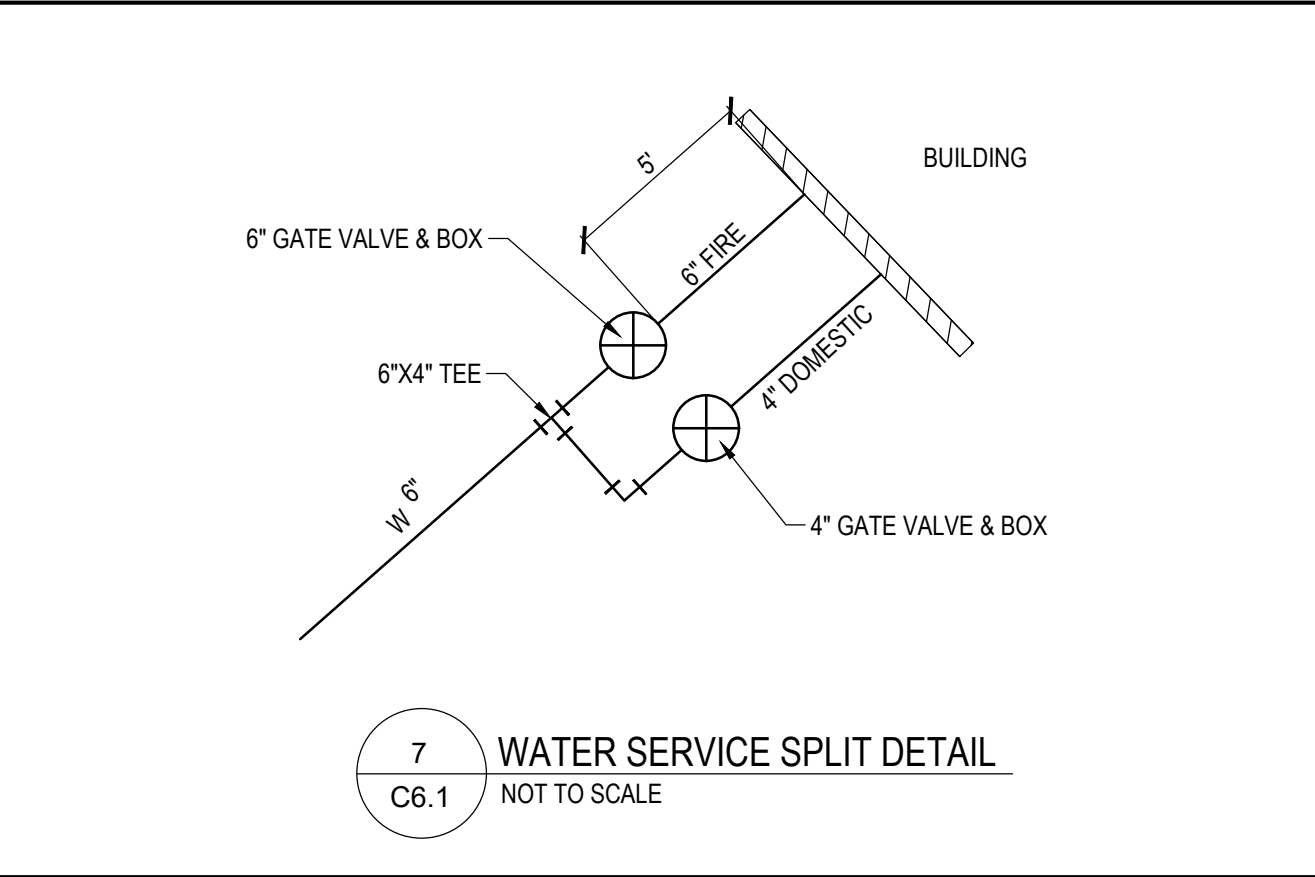
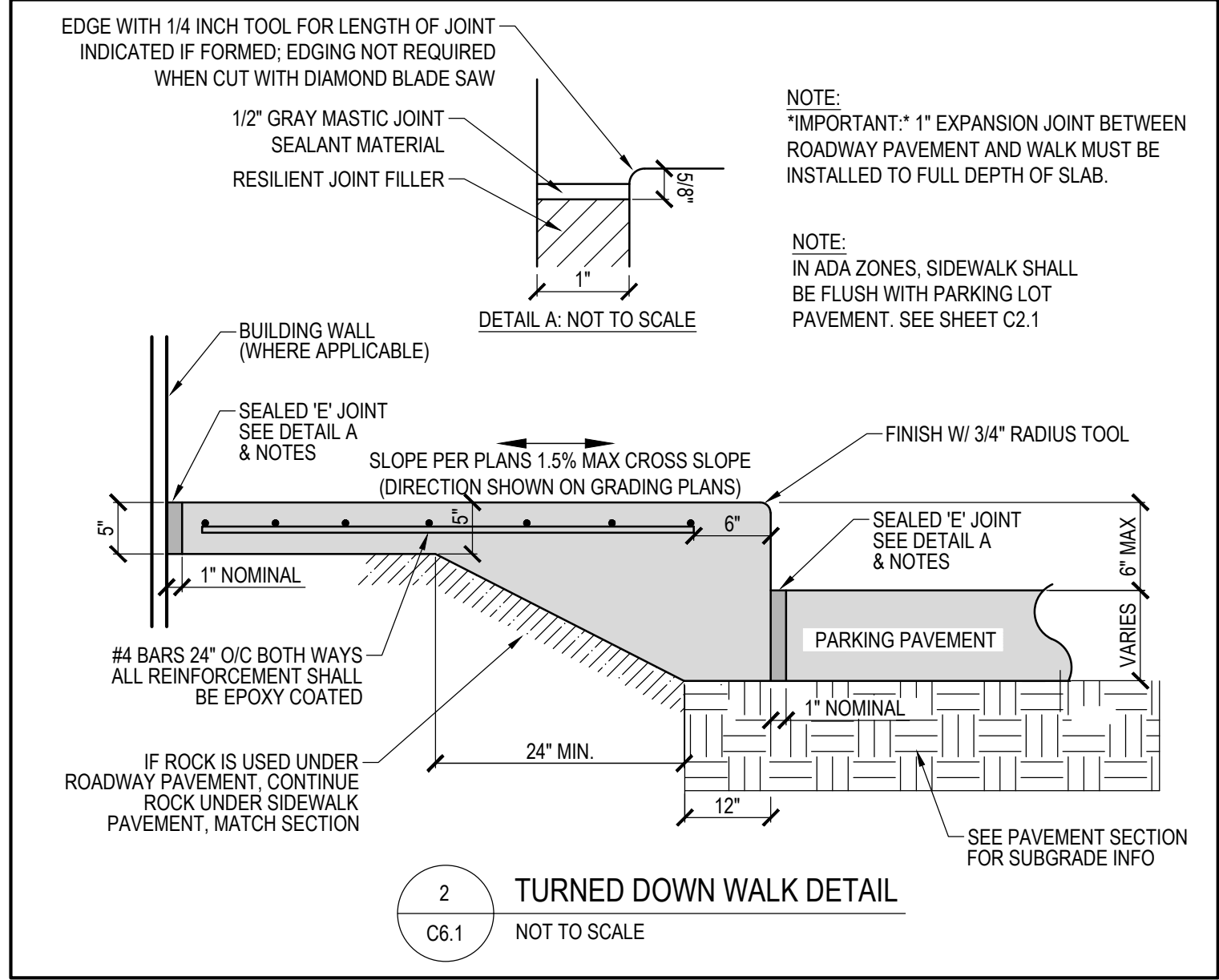
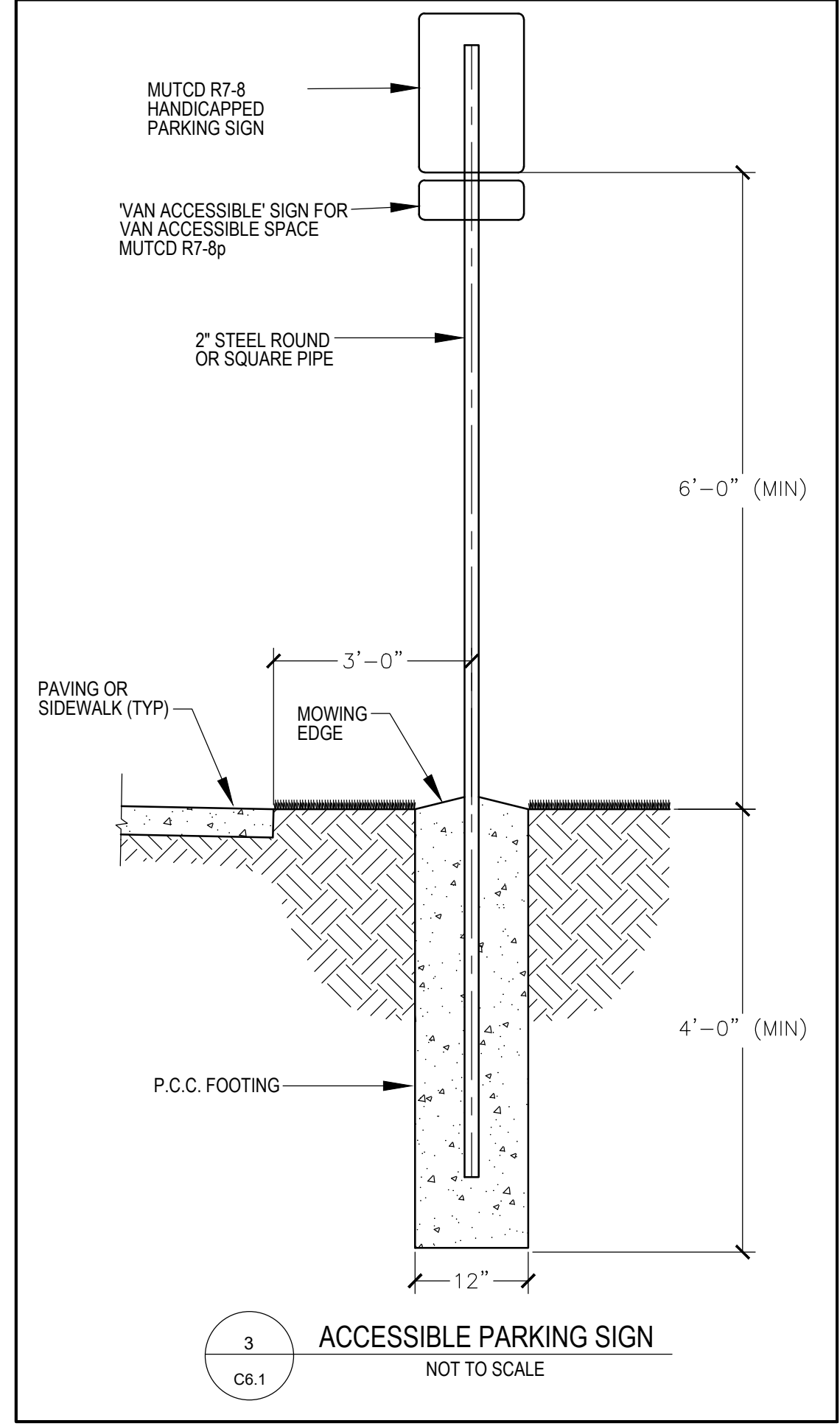
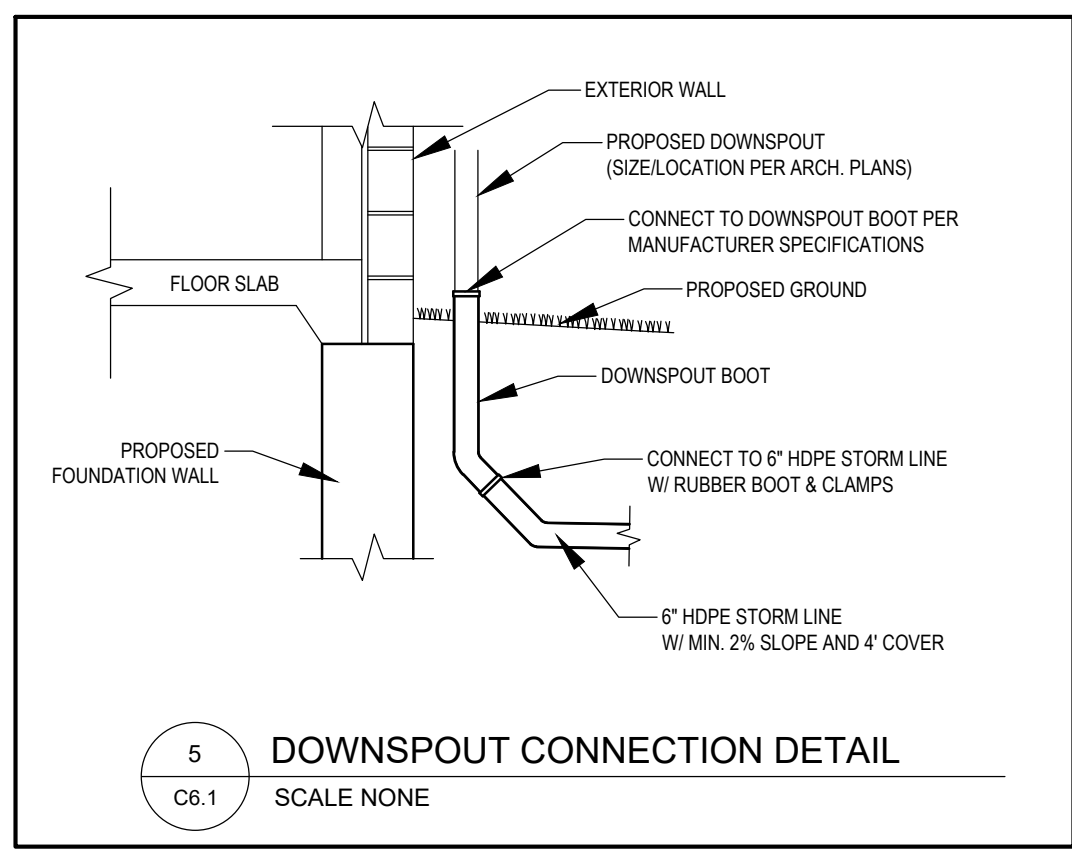
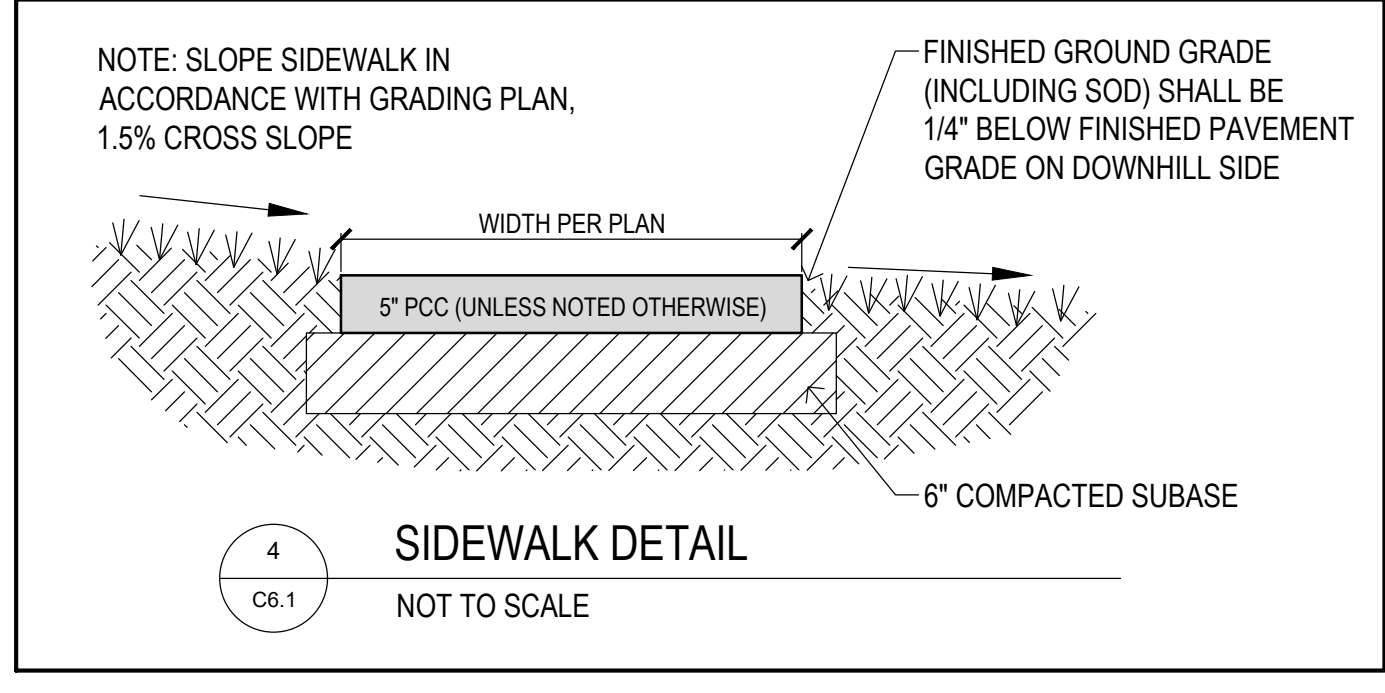
THE PEAK AT KETTLESTONE APARTMENTS
WAUKEE, IA
LANDSCAPE PLAN

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PROJECT NUMBER:	190377-1
SHEET NUMBER:	C5.3

PRELIMINARY- NOT FOR CONSTRUCTION

MILLAND PROJECTS 201910377 - 1 KETTLESTONE APARTMENTS 08/24/2021 DBE/MS/DWG



THE PEAK AT KETTLESTONE APARTMENTS
WAUKEE, IA

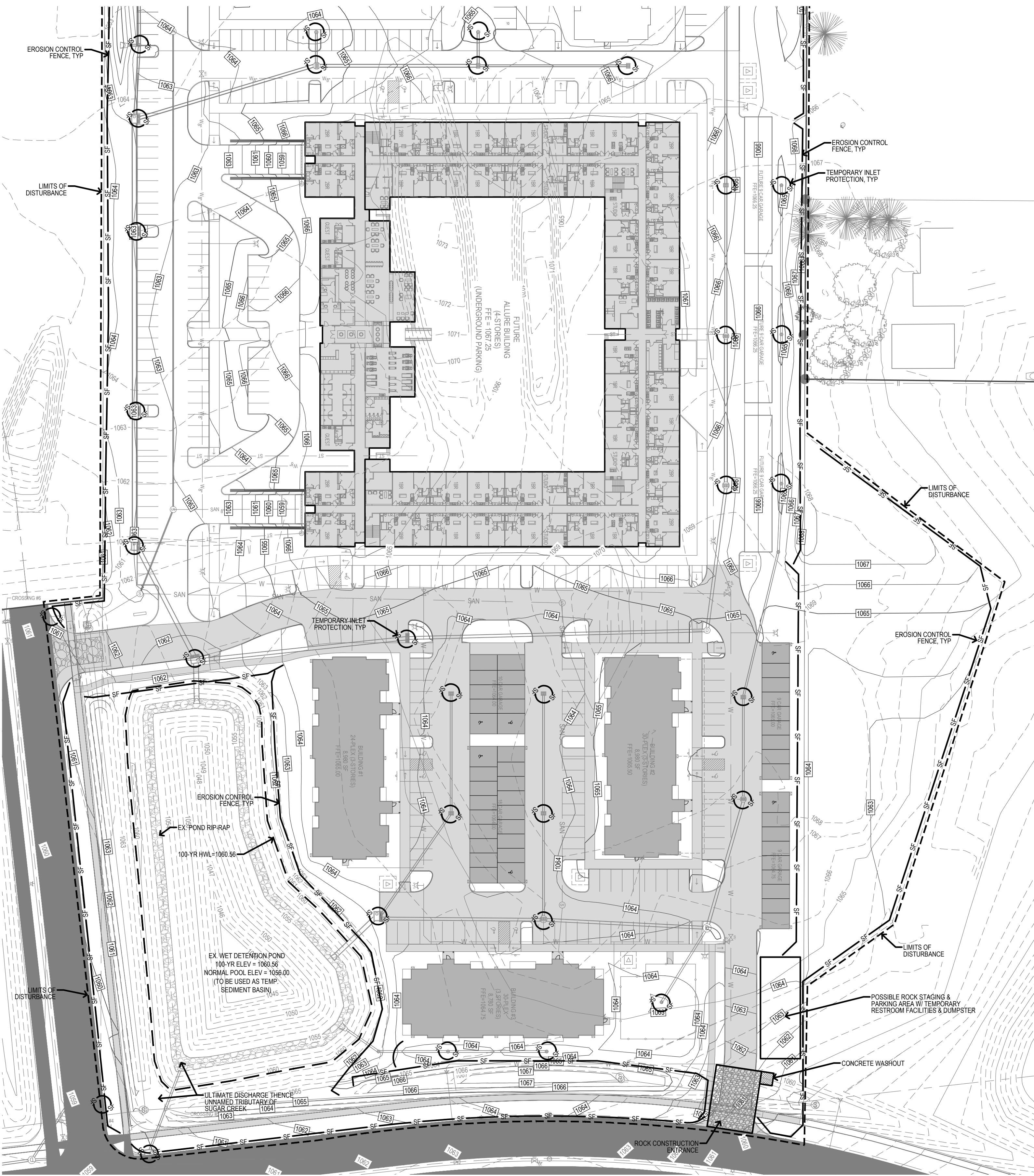
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PROJECT NUMBER:	190377-1
SHEET NUMBER:	C6.1

DETAILS SHEET

PRELIMINARY- NOT FOR CONSTRUCTION

STORM WATER POLLUTION PREVENTION PLAN



PROPERTY DESCRIPTION:

LOT 5 KETTLESTONE PEAK
DALLAS COUNTY
WAUKEE, IOWA

SAID PROPERTY BEING SUBJECT TO AND TOGETHER WITH ANY AND ALL EASEMENTS AND RESTRICTIONS OF RECORD.

SAID TRACT OF LAND CONTAINS 15.23 ACRES.

ADDRESS:

1300 SE PLEASANT VIEW DRIVE
WAUKEE, IOWA

OWNER/PREPARED FOR:

KETTLESTONE PEAK LLC
J LARSON HOMES LLC
5721 MERLE HAY ROAD, SUITE 18
JOHNSTON, IOWA 50131
ATTN: JOHN LARSON
PHONE: (515) 491-4090
EMAIL: JOHNLARSON89@GMAIL.COM

EROSION CONTROL QUANTITIES:

DISTURBED AREA	15.2 ACRES
SILT FENCE	5,234 LF
INLET PROTECTION	33 EA
CONSTRUCTION ENTRANCE	1 EA
CONCRETE WASHOUT	1 EA
PERMANENT SOD	2.2 AC
PERMANENT SEEDING (SUBDIVISION MIX)	10.7 AC
TEMPORARY SEEDING (SUDAS TYPE 4)	AS NECESSARY

*SEE LANDSCAPE PLAN FOR PERMANENT SEED/SOD TYPES & LOCATIONS.

*NOTE: EROSION CONTROL QUANTITIES ARE PROVIDED FOR CITY REQUIREMENT ONLY AND ARE A ROUGH ESTIMATE. CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AS NECESSARY TO MEET SITE CONDITIONS.

EROSION CONTROL NOTES:

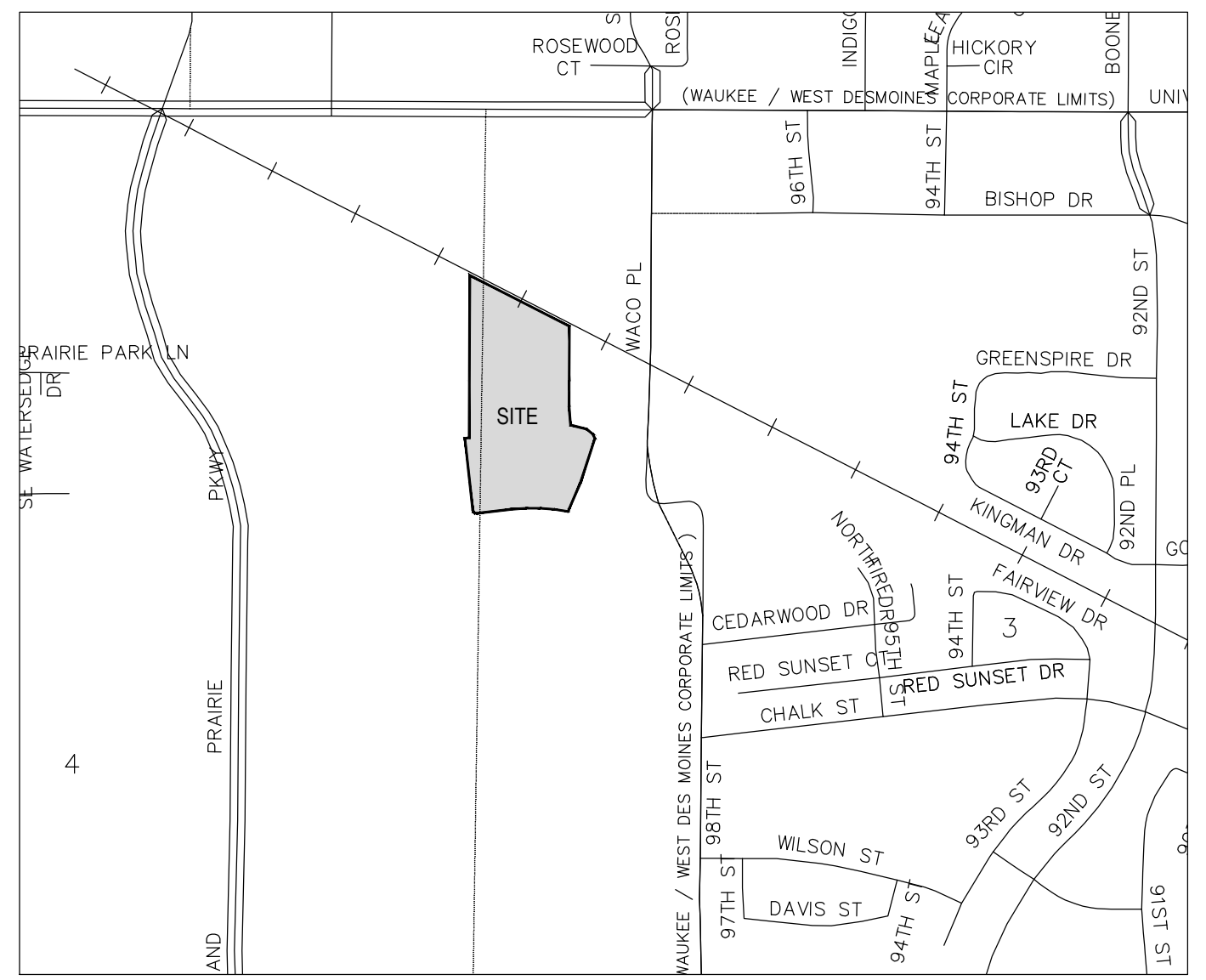
- SEE SUPPLEMENTAL DETAIL STORM WATER POLLUTION PLAN NARRATIVE FOR ALL EROSION CONTROL MEASURES, ADDITIONAL DETAILS AND NOTE. ADDITIONAL NOTES AND MEASURES IN NARRATIVE SHALL BE CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE ORIGINAL BID.
- SWPPP PLAN AND NARRATIVE ARE CONSIDERED A LIVING DOCUMENT AND WILL NEED PERIODIC UPDATES AND ADJUSTMENTS AS NECESSARY DEPENDING ON SITE CONDITIONS TO ASSURE COMPLIANCE WITH NPDES GENERAL PERMIT NO. 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UPDATE THE SWPPP AND IMPLEMENT ANY AND ALL MEASURES NECESSARY TO COMPLY WITH SAID PERMIT NO. 2.
- INSTALL PERIMETER SILT FENCE AS SHOWN ON PLANS PRIOR TO CONSTRUCTION.
- INSTALL INTAKE PROTECTION WITH SILT FENCE IMMEDIATELY AFTER STORM SEWER CONSTRUCTION.
- INSTALL FINISHED PAVING INLET PROTECTION IMMEDIATELY AFTER PAVING IS COMPLETED AROUND INTAKE.
- OTHER EROSION CONTROL TYPES MAY NOT BE SUBSTITUTED FOR SILT FENCE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A CONCRETE WASHOUT IN ACCORDANCE WITH NPDES GENERAL PERMIT NO. 2 DURING ALL CONCRETE WORK. CONCRETE WASHOUT SHALL MEET SUDAS SPEC 11050.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING TEMPORARY RESTROOM FACILITIES. SANITARY WASTE SHALL BE DISPOSED OF PER ALL FEDERAL, STATE AND LOCAL REGULATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.
- THIS PROJECT INCLUDES SAWCUTTING OR CONCRETE GRINDING SO PROTECTION OF STORM SEWERS AND DRAINAGE WAYS WILL NEED TO BE PROVIDED FROM SLURRY FROM THE CONCRETE OPERATIONS TO DISCHARGE OFF-SITE. SEE SWPPP SHEET AND NARRATIVE FOR ADDITIONAL DETAILS.
- CONTRACTOR SHALL PROVIDE APPROPRIATE CONTROLS TO PREVENT DISCHARGES FROM ANY AND ALL DEWATERING ACTIVITIES.
- SEE LANDSCAPE PLAN FOR FINAL STABILIZATION INCLUDING SEEDING AND SODDING AREAS.
- PER NPDES GENERAL PERMIT NO. 2, IF CONSTRUCTION ACTIVITY IS NOT PLANNED FOR AT LEAST 14 DAYS, ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY BY TEMPORARY EROSION CONTROL MEASURES.
- THE FOLLOWING DISCHARGES ARE PROHIBITED: WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OIL, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS, FUEL, OILS OR OTHER POLLUTANTS USED IN VEHICLES AND EQUIPMENT OPERATION AND MAINTENANCE, AND SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

EROSION CONTROL REMOVAL NOTES:

- AFTER FINAL STABILIZATION HAS OCCURRED, AS DEFINED IN NPDES GENERAL PERMIT NO. 2, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO: SILT FENCE, INLET PROTECTION, AND TEMPORARY STANDPIPES.

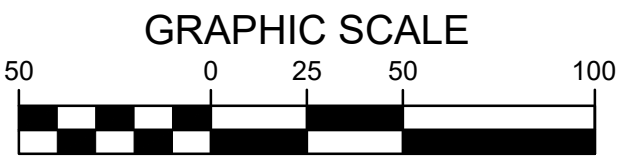
TOPSOIL NOTES:

- STRIP AND STOCKPILE THE TOP 8" OF SOIL ON ALL DISTURBED AREAS.
- RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 8" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
- TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
- TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS, REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.



LEGEND:

- 120--- EXISTING CONTOUR
- 120--- PROPOSED CONTOUR
- SF--- SILT FENCE
- SAN--- SANITARY SEWER
- ST--- STORM SEWER
- W--- WATER LINE
- G--- GAS LINE
- UE--- UNDERGROUND ELECTRIC
- OE--- OVERHEAD ELECTRIC
- TELE--- TELEPHONE LINE
- F/O--- FIBER OPTIC
- CATV--- CABLE TV
- ⊙ STORM MANHOLE
- ⊠ CURB INTAKE
- ⊕ SURFACE INTAKE
- ⊖ FLARED END SECTION
- ⊙ SANITARY MANHOLE
- ⊙ CLEANOUT
- ⊙ FIRE HYDRANT
- ⊙ SPRINKLER
- ⊙ IRRIGATION CONTROL VALVE
- ⊙ WATER MANHOLE
- ⊙ WELL
- ⊙ WATER VALVE
- ⊙ WATER SHUT OFF
- ⊙ YARD HYDRANT
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC RISER
- ⊙ ELECTRIC VAULT
- ⊙ POWER POLE
- ⊙ TRANSFORMER POLE
- ⊙ LIGHT POLE
- ⊙ ELECTRIC JUNCTION BOX
- ⊙ ELECTRIC PANEL
- ⊙ TRANSFORMER
- ⊙ GROUND LIGHT
- ⊙ GUY WIRE
- ⊙ ELECTRIC HANDHOLE
- ⊙ GAS METER
- ⊙ GAS VALVE
- ⊙ AIR CONDITIONING UNIT
- ⊙ TELEPHONE RISER
- ⊙ TELEPHONE VAULT
- ⊙ TELEPHONE MANHOLE
- ⊙ TRAFFIC SIGNAL MANHOLE
- ⊙ FIBER OPTIC RISER
- ⊙ FIBER OPTIC FAULT
- ⊙ CABLE TV RISER
- ⊙ SIGN



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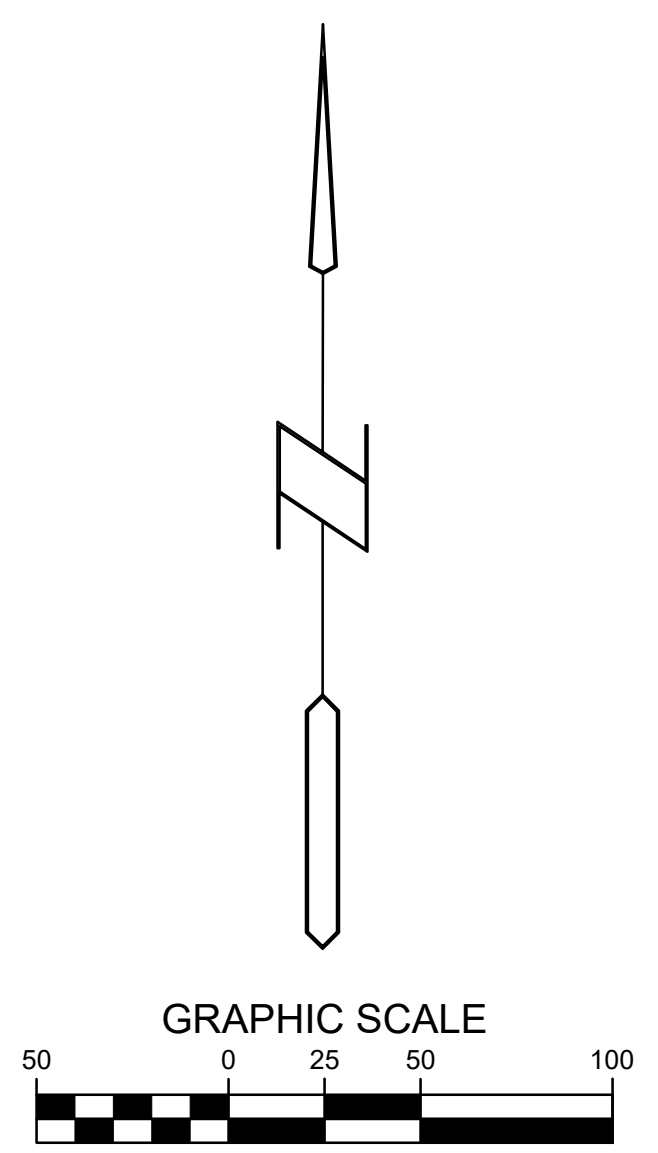
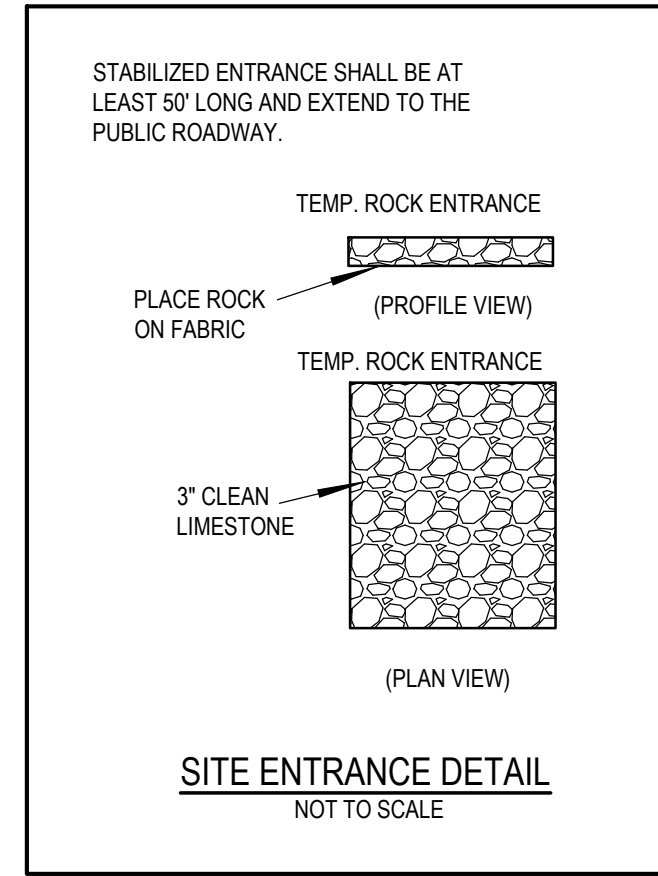
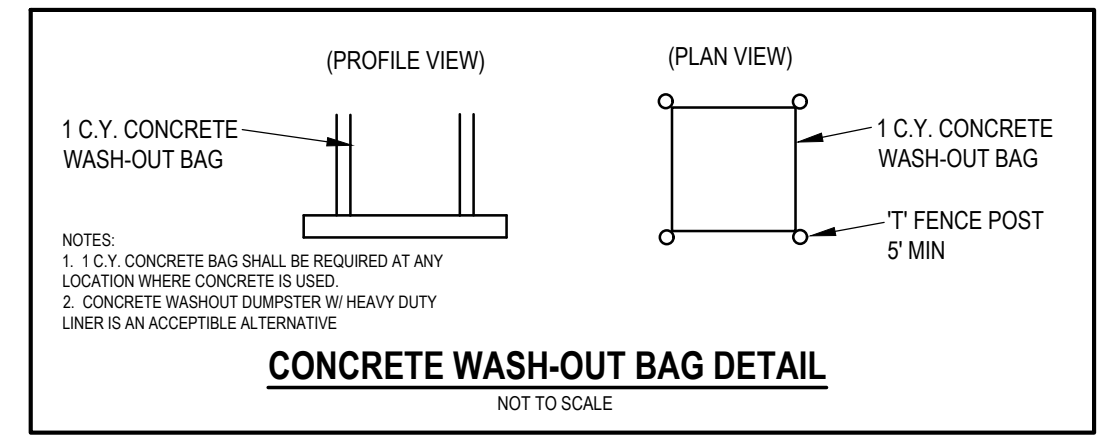
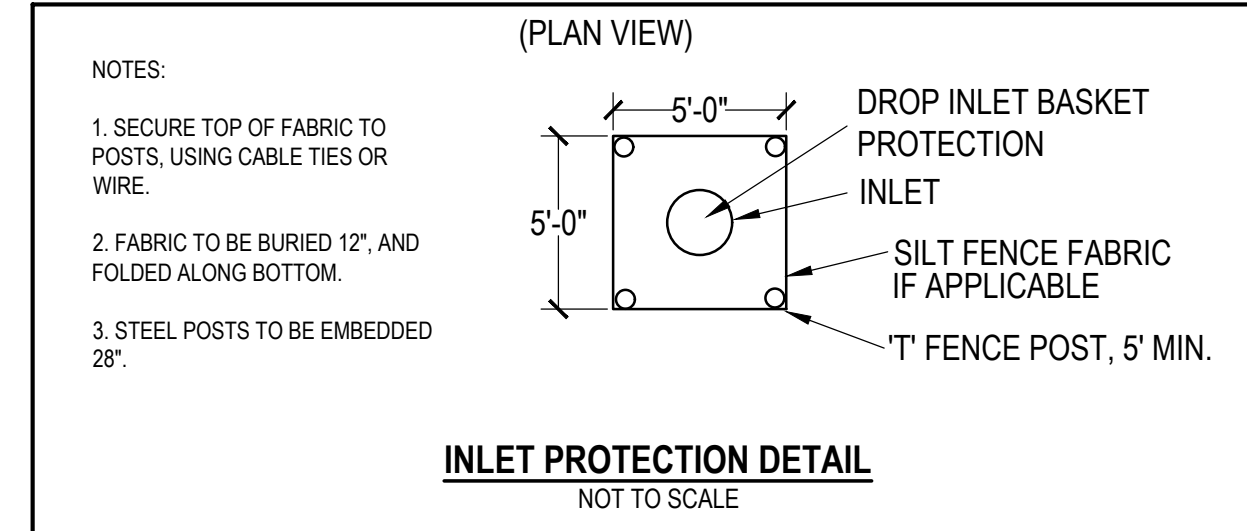
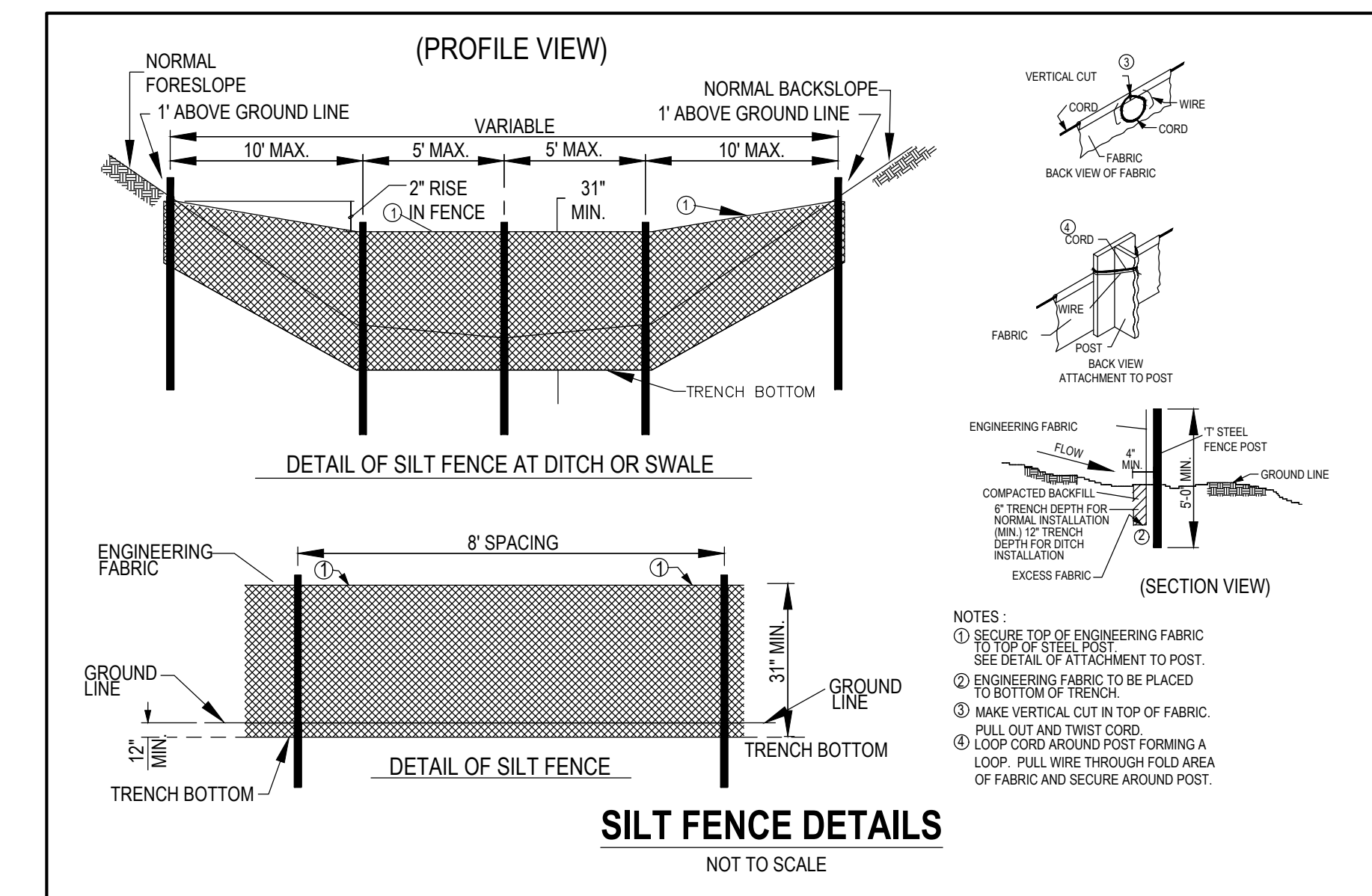
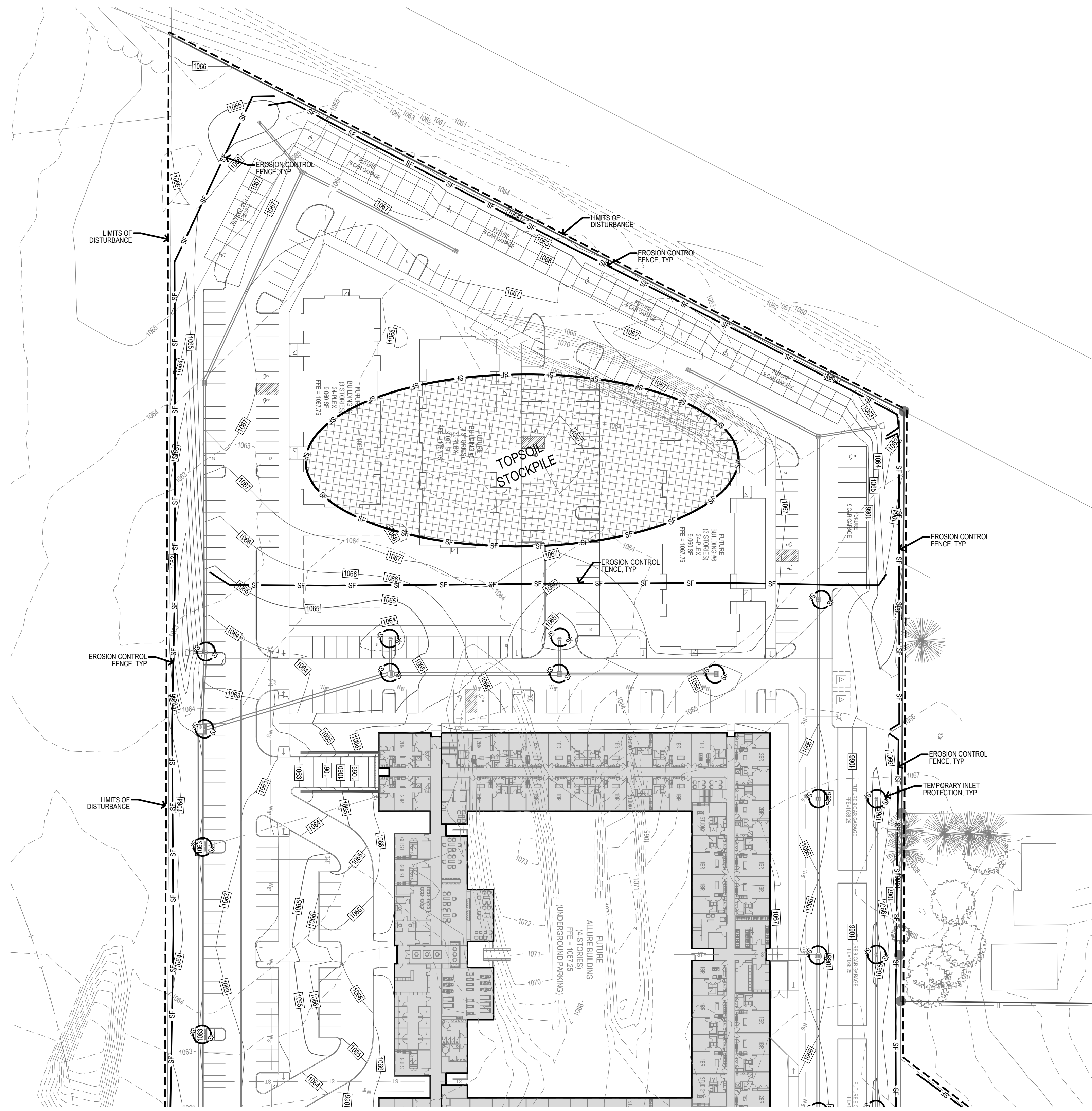


UTILITY NOTE:
THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS AND ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS OF ALL UTILITIES MUST BE ASCERTAINED IN THE FIELD. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.

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STORM WATER POLLUTION PREVENTION PLAN



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