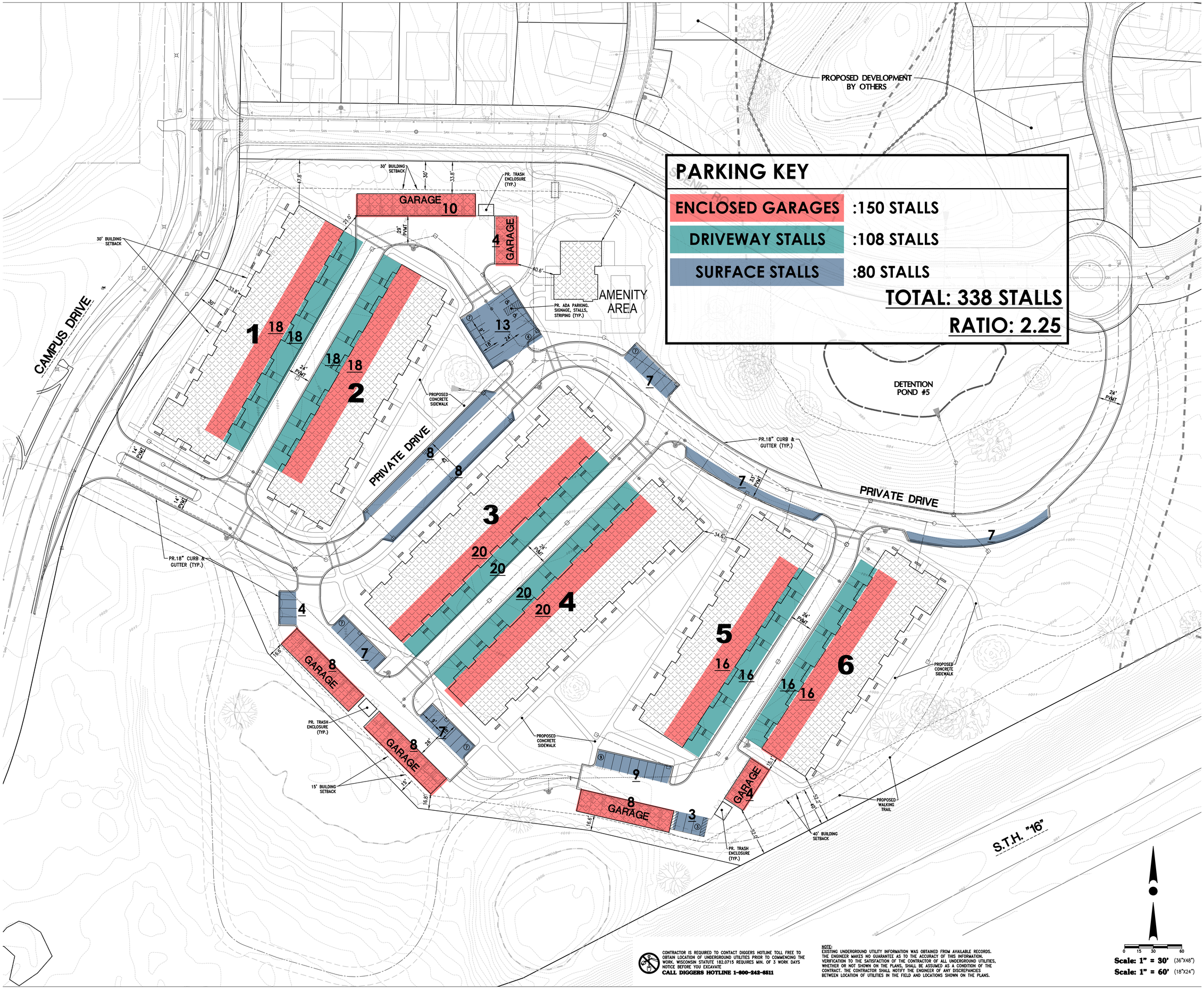


PARKING KEY

ENCLOSED GARAGES	:150 STALLS
DRIVEWAY STALLS	:108 STALLS
SURFACE STALLS	:80 STALLS

TOTAL: 338 STALLS

RATIO: 2.25

CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE
CALL DIGGERS HOTLINE 1-800-242-8511

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0 15 30 60

Scale: 1" = 30' (36"X48")

Scale: 1" = 60' (18"X24")

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CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
HARTLAND, WI 53029

Date Issued: 09/10/2020

RINKA project #: 191010

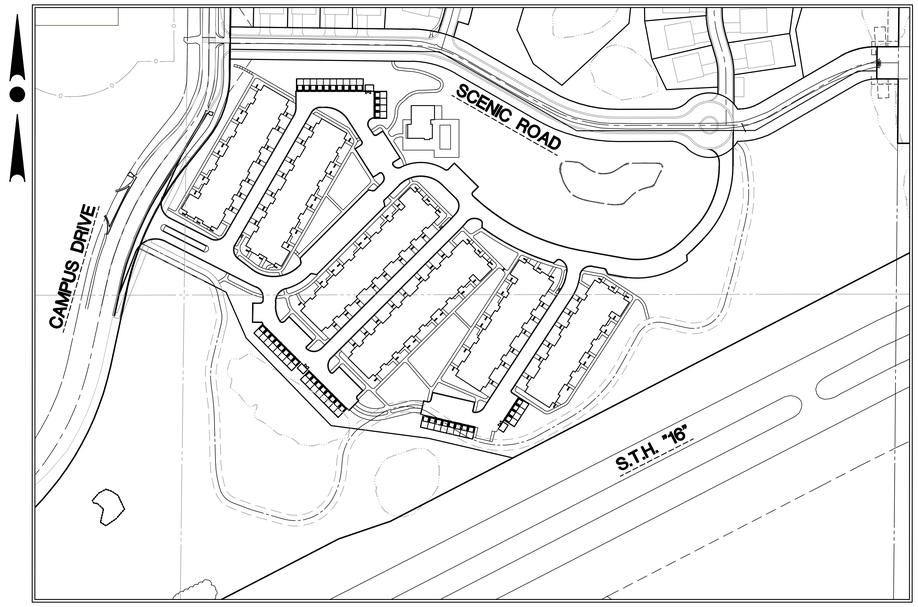
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PROPOSED SITE PLAN

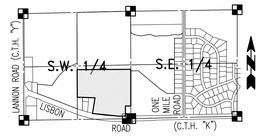
Sheet # **C0.20**

CATALYST HARTLAND APARTMENTS

DEVELOPMENT PLANS
CAMPUS DRIVE
VILLAGE OF HARTLAND, WISCONSIN



SITE PLAN
SCALE: 1" = 100'



LOCALITY MAP:
S.W. 1/4 & S.E. 1/4,
SEC. 32, T. 8 N., R. 20 E.
SCALE: 1"=2000'

GENERAL NOTES

THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.

- STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION (SSSWCW)
- THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
- WDNR STORMWATER RUNOFF TECHNICAL STANDARDS.
- WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION.
- VILLAGE OF HARTLAND STANDARDS & REQUIREMENTS FOR DEVELOPMENT, LATEST EDITION.

THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.

EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, AN APPROVED EROSION CONTROL PLAN WILL BE PROVIDED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY IMPLEMENTING THE APPROVED PLAN.

THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY FLOOR, CURB OR PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.

THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION (CALL DIGGERS HOTLINE AT 800-242-8511). COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY

EXISTING UTILITY INFORMATION IS SHOWN FROM SURVEY WORK, FIELD OBSERVATIONS, AVAILABLE PUBLIC RECORDS, AND AS-BUILT DRAWINGS. EXACT LOCATIONS AND ELEVATIONS OF UTILITIES SHALL BE DETERMINED PRIOR TO INSTALLING NEW WORK. EXCAVATE TEST PITS AS REQUIRED.

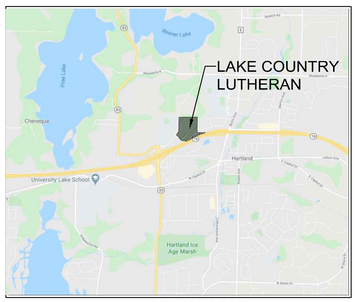
PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION.

ALL TRENCHING SHALL BE PERFORMED ACCORDING TO OSHA STANDARDS.

ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.

THE CONTRACTOR SHALL CLEAN ALL ADJACENT STREETS OF ANY SEDIMENT OR DEBRIS AS REQUIRED BY MUNICIPAL ORDINANCE.



LOCATION MAP
NOT TO SCALE

DEVELOPER:
CATALYST CONSTRUCTION
833 E. MICHIGAN ST. #1000
MILWAUKEE, WI 53202
PHONE: (414) 727-6840

SHEET INDEX

CIVIL		
T1	–	COVER SHEET
C0.10	–	EXISTING SITE PLAN
C0.20	–	PROPOSED SITE PLAN
C0.30	–	PROPOSED PHASING PLAN
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C1.01–C1.04	–	MASTER GRADING & DRAINAGE PLANS
C2.00	–	EROSION CONTROL PLAN
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C3.00	–	SANITARY SEWER & WATER MAIN SYSTEM PLAN
C3.01	–	ROADWAY & SANITARY SEWER PLAN & PROFILE
C3.02	–	WATER MAIN PLAN & PROFILE
C4.00	–	STORM SEWER SYSTEM PLAN
C4.01–C4.02	–	STORM SEWER PLAN
C5.00	–	INTERSECTION DETAIL
C6.00–C6.02	–	CONSTRUCTION DETAILS & SPECIFICATIONS

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CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
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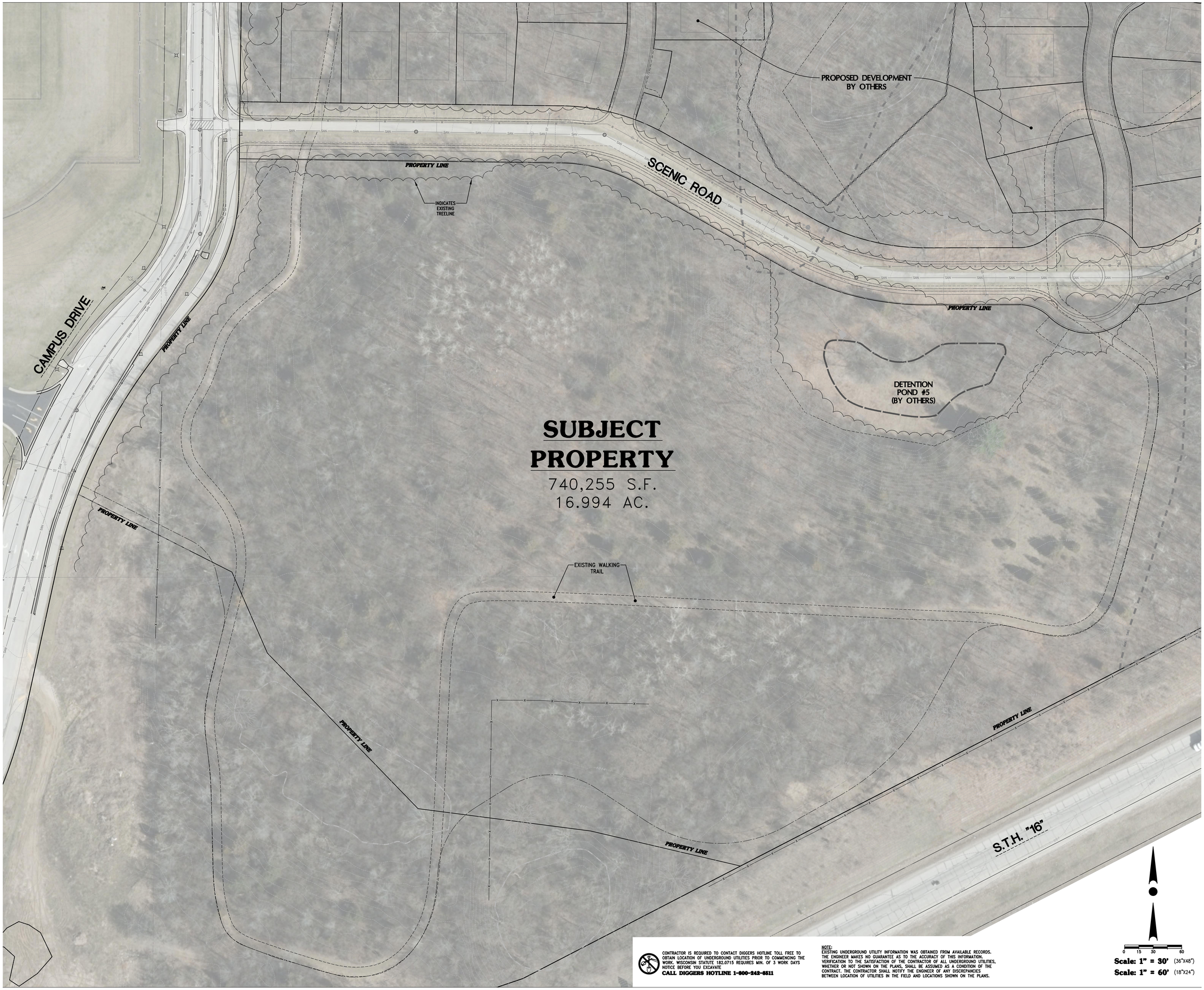
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Sheet Title

COVER SHEET

Sheet #
T1



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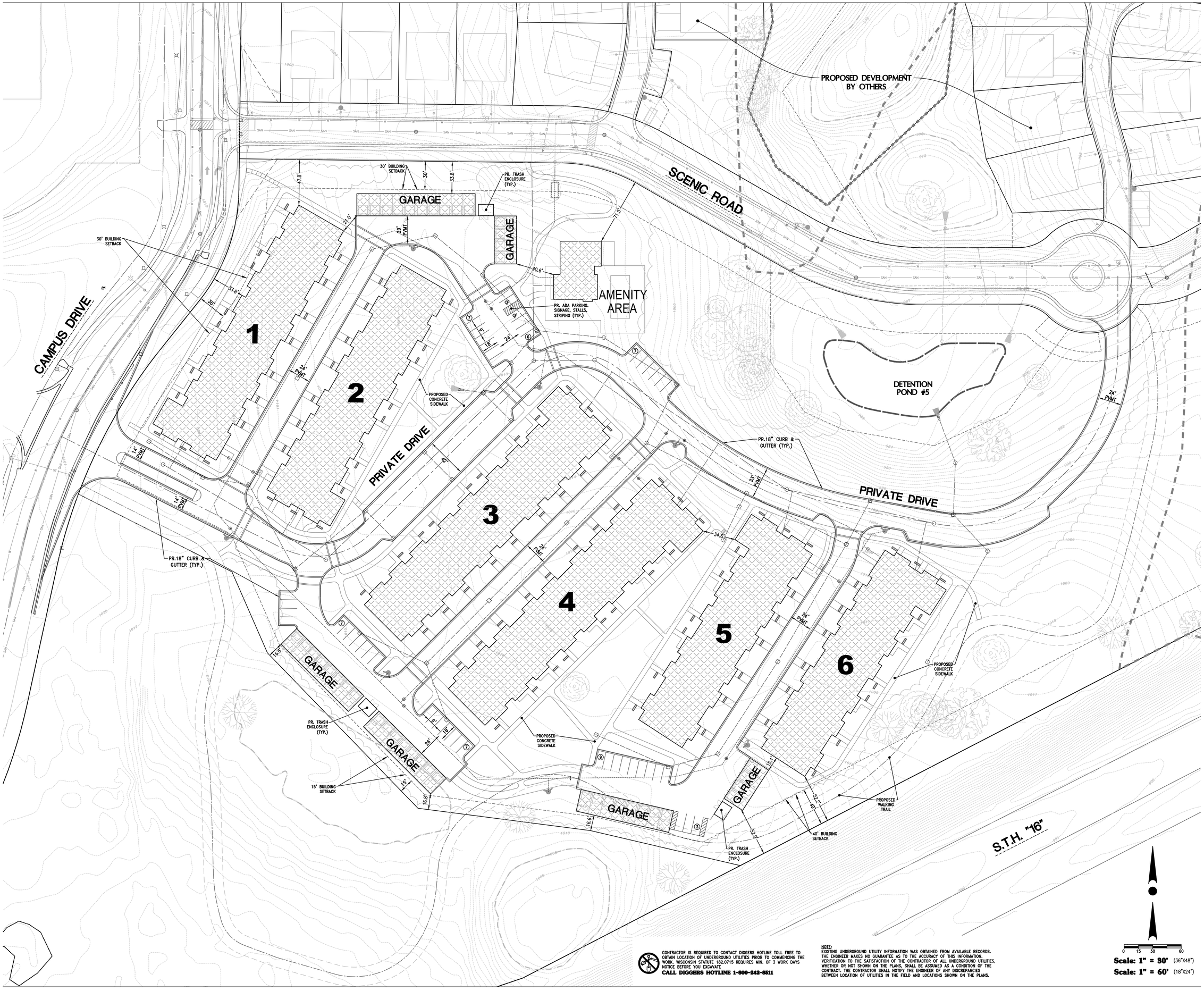
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Sheet Title

EXISTING SITE PLAN

Sheet #
C0.10



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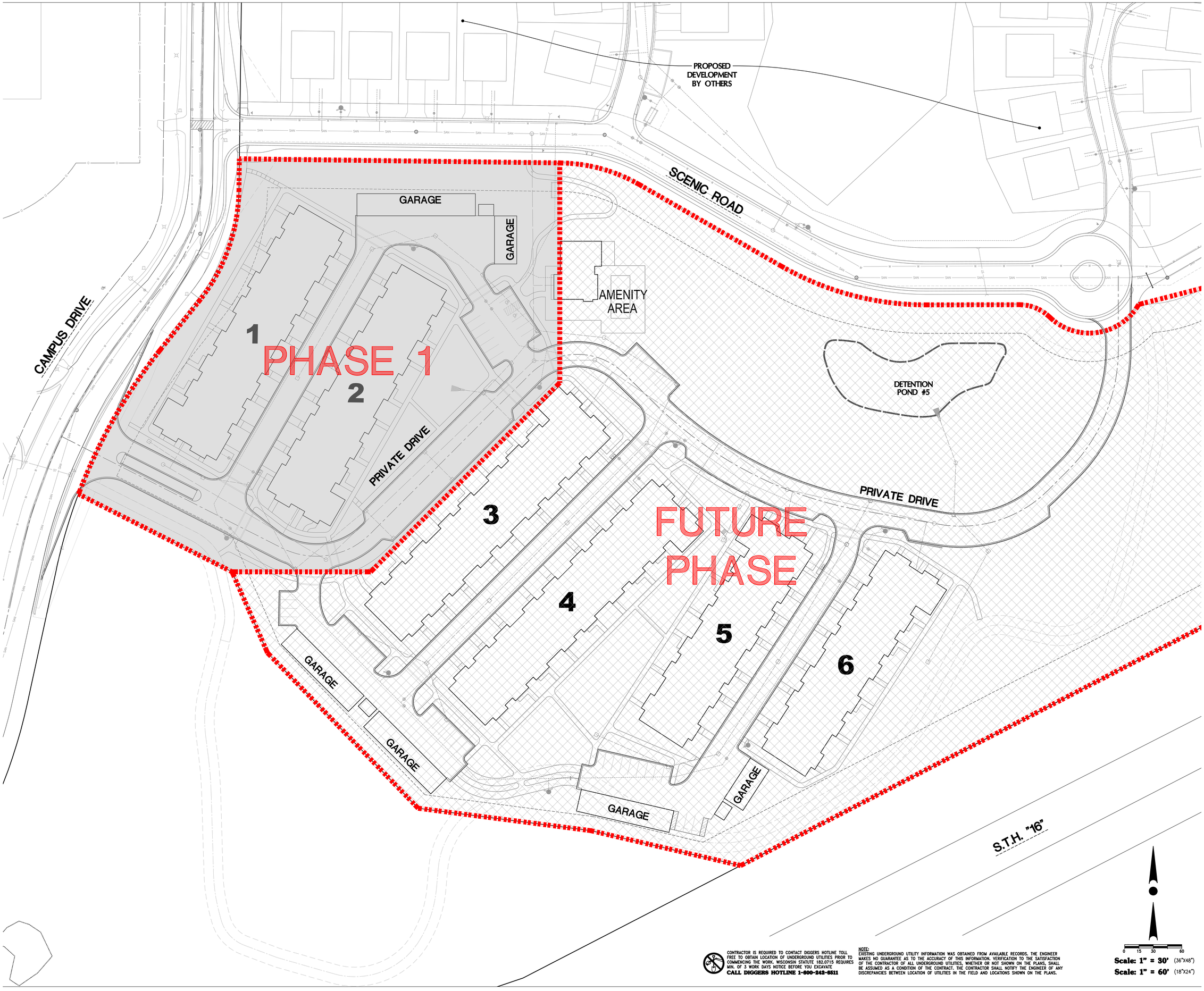
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Sheet Title

PROPOSED SITE PLAN

Sheet # **C0.20**



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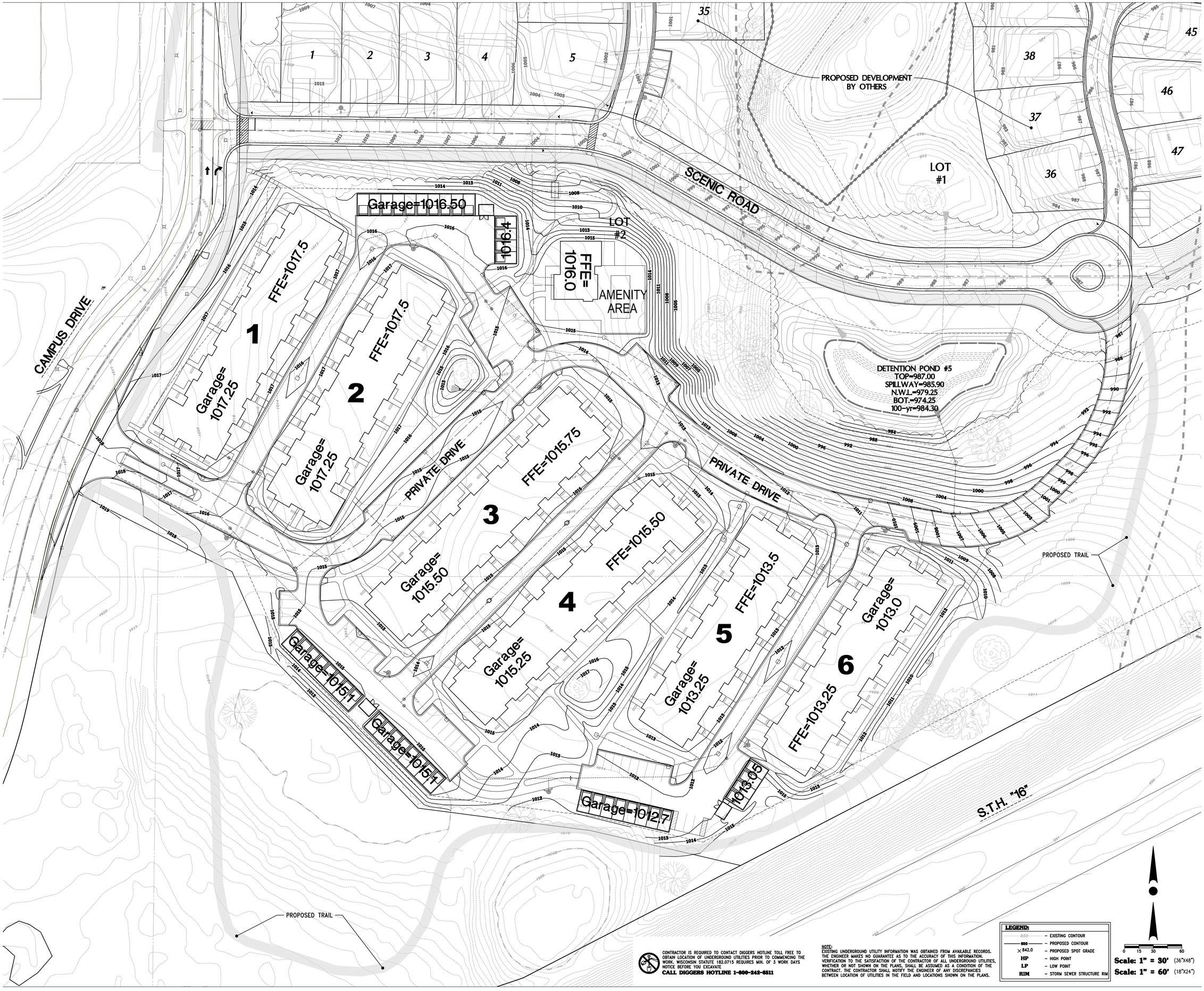
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RINKA project #: 191010
Sheet Title

PROPOSED PHASING PLAN

Sheet # **C0.30**



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LEGEND:	
850	– EXISTING CONTOUR
850	– PROPOSED CONTOUR
× 842.0	– PROPOSED SPOT GRADE
HP	– HIGH POINT
LP	– LOW POINT
RIM	– STORM SEWER STRUCTURE RIM

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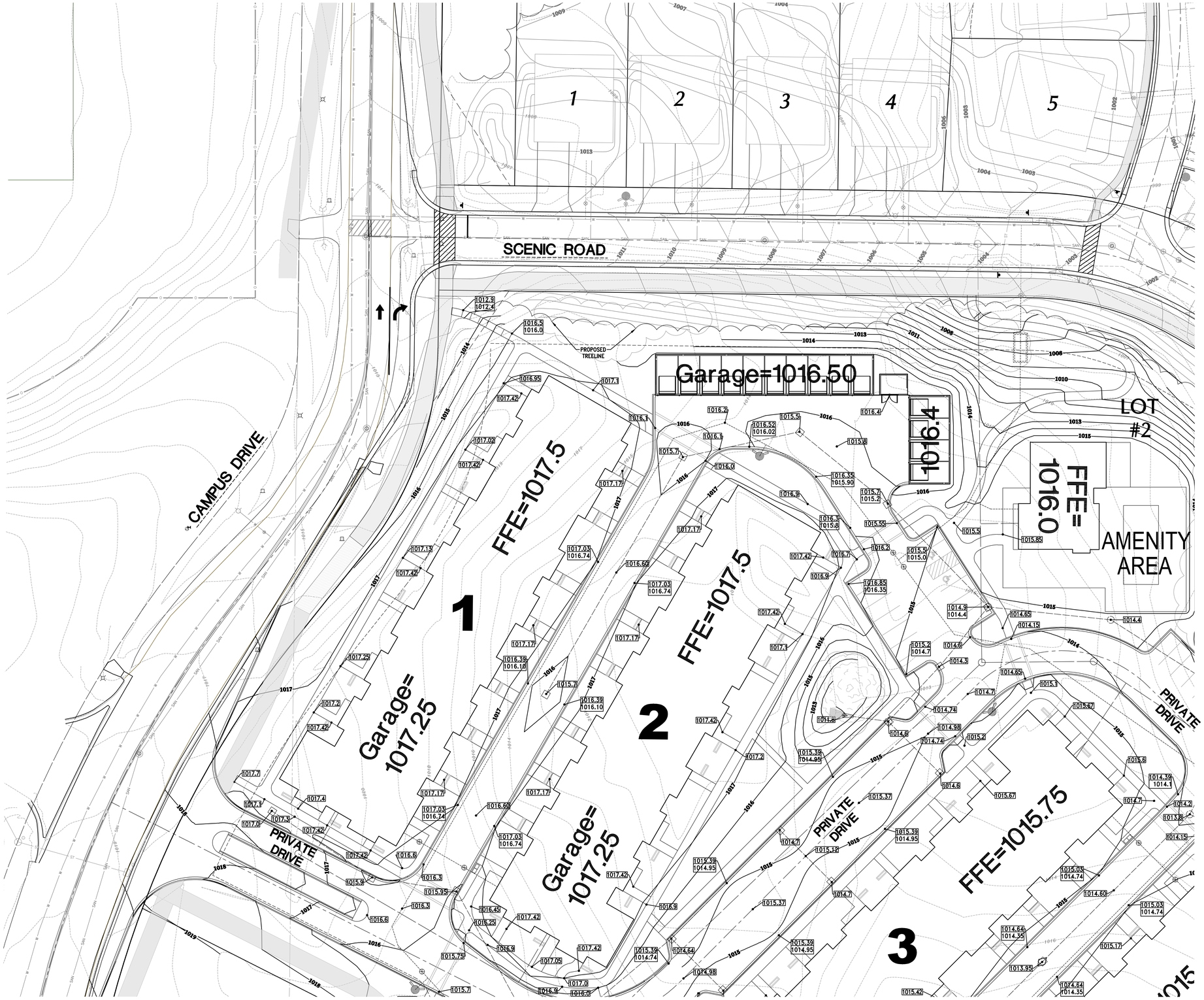
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Sheet Title

OVERALL GRADING PLAN

Sheet # **C1.00**

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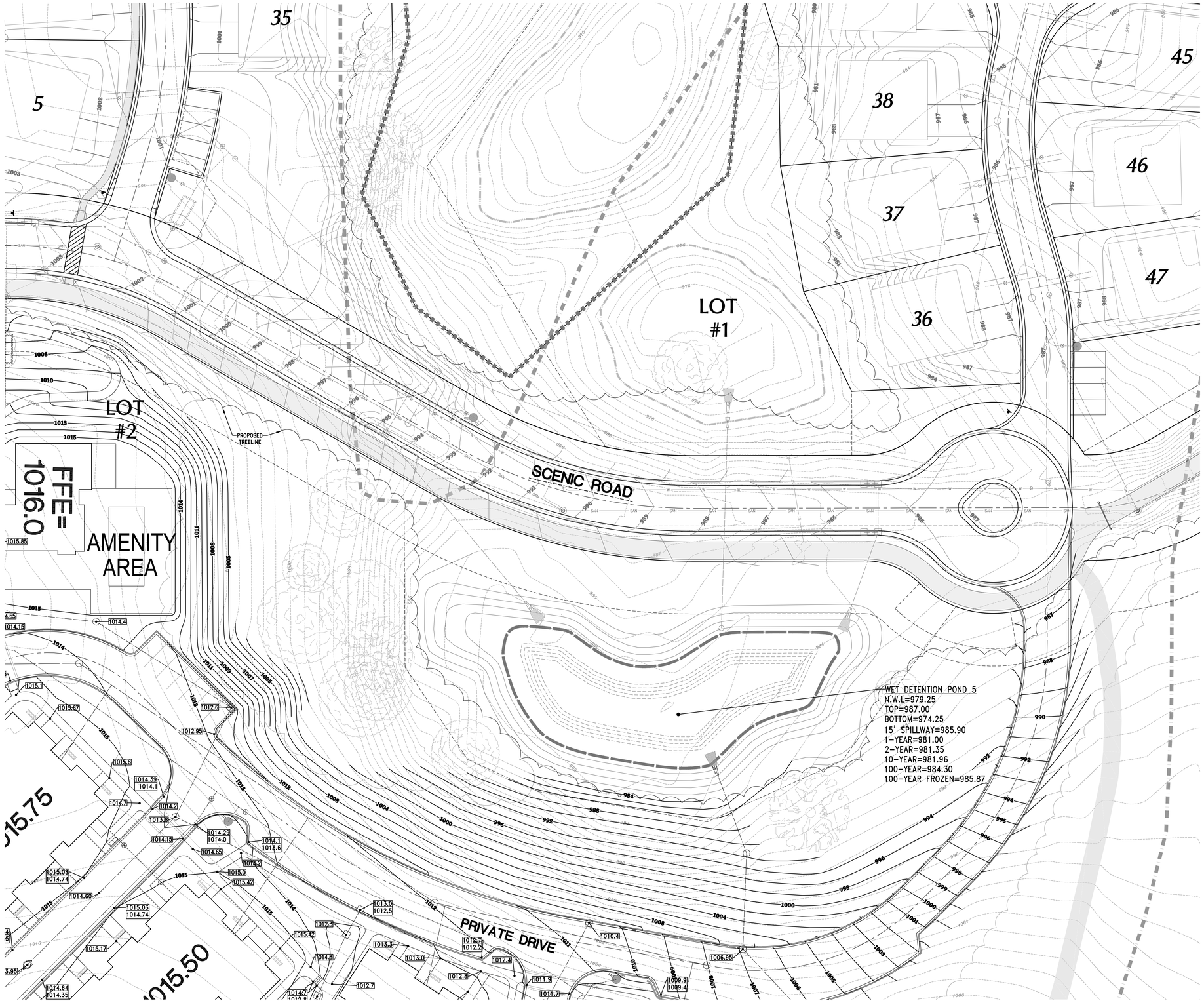
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HARTLAND, WI 53029

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RINKA project #: 191010
Sheet Title

MASTER GRADING & DRAINAGE PLAN

Sheet #
C1.01



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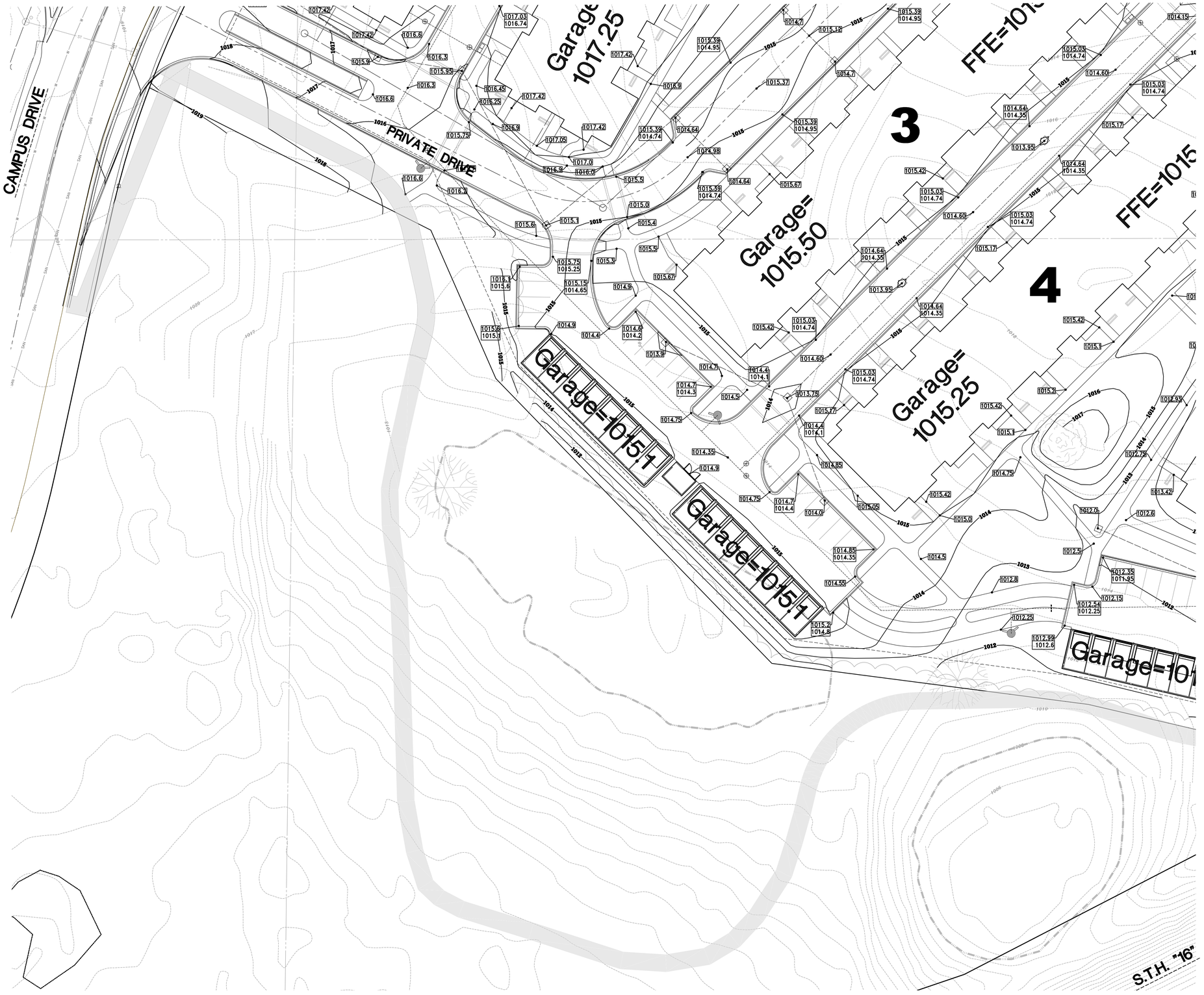
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Sheet Title

MASTER GRADING & DRAINAGE PLAN

Sheet #
C1.02



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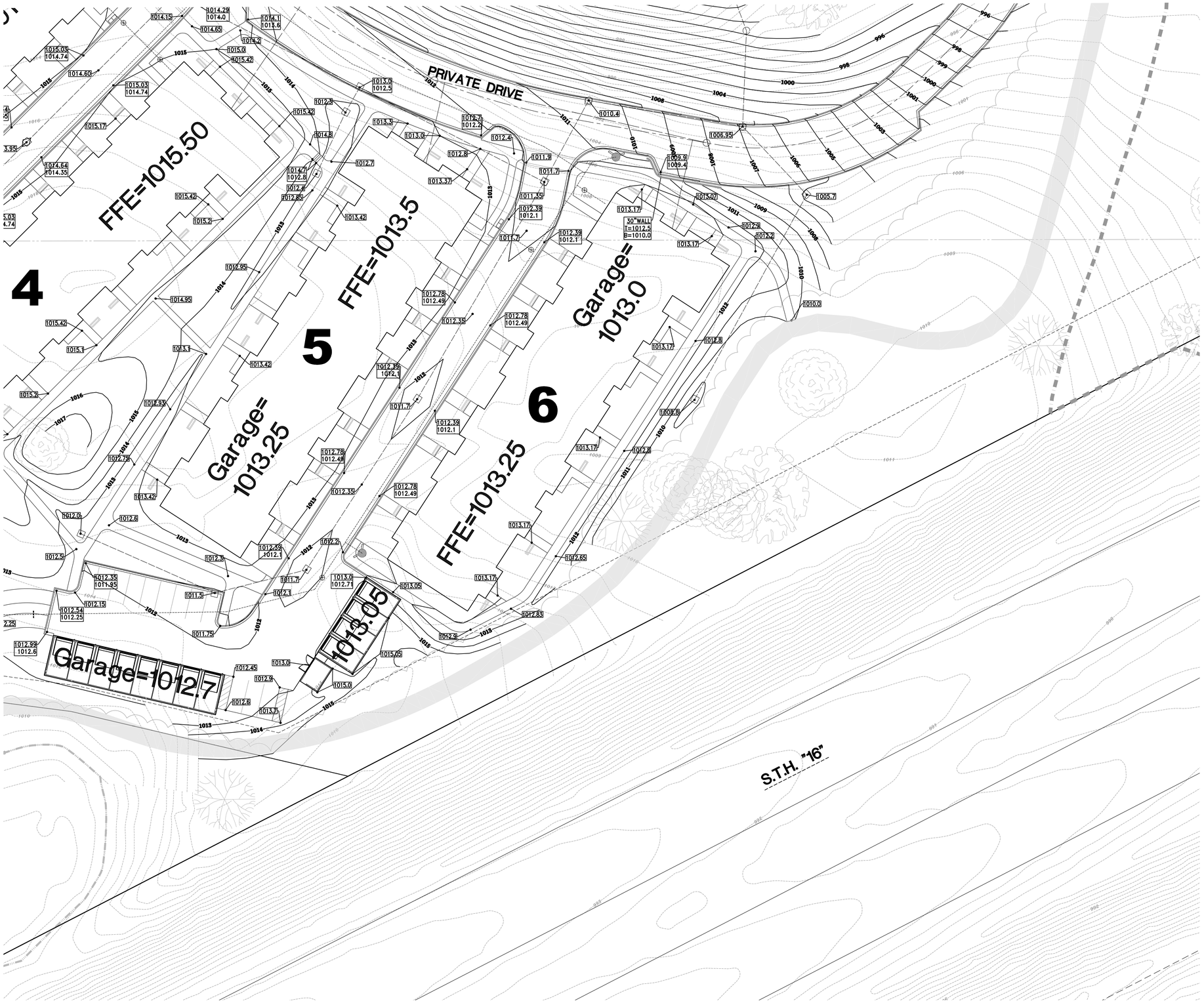
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Sheet Title

MASTER GRADING & DRAINAGE PLAN

Sheet # **C1.03**



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△ Revisions
Date Revised 10/13/2020

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CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
HARTLAND, WI 53029

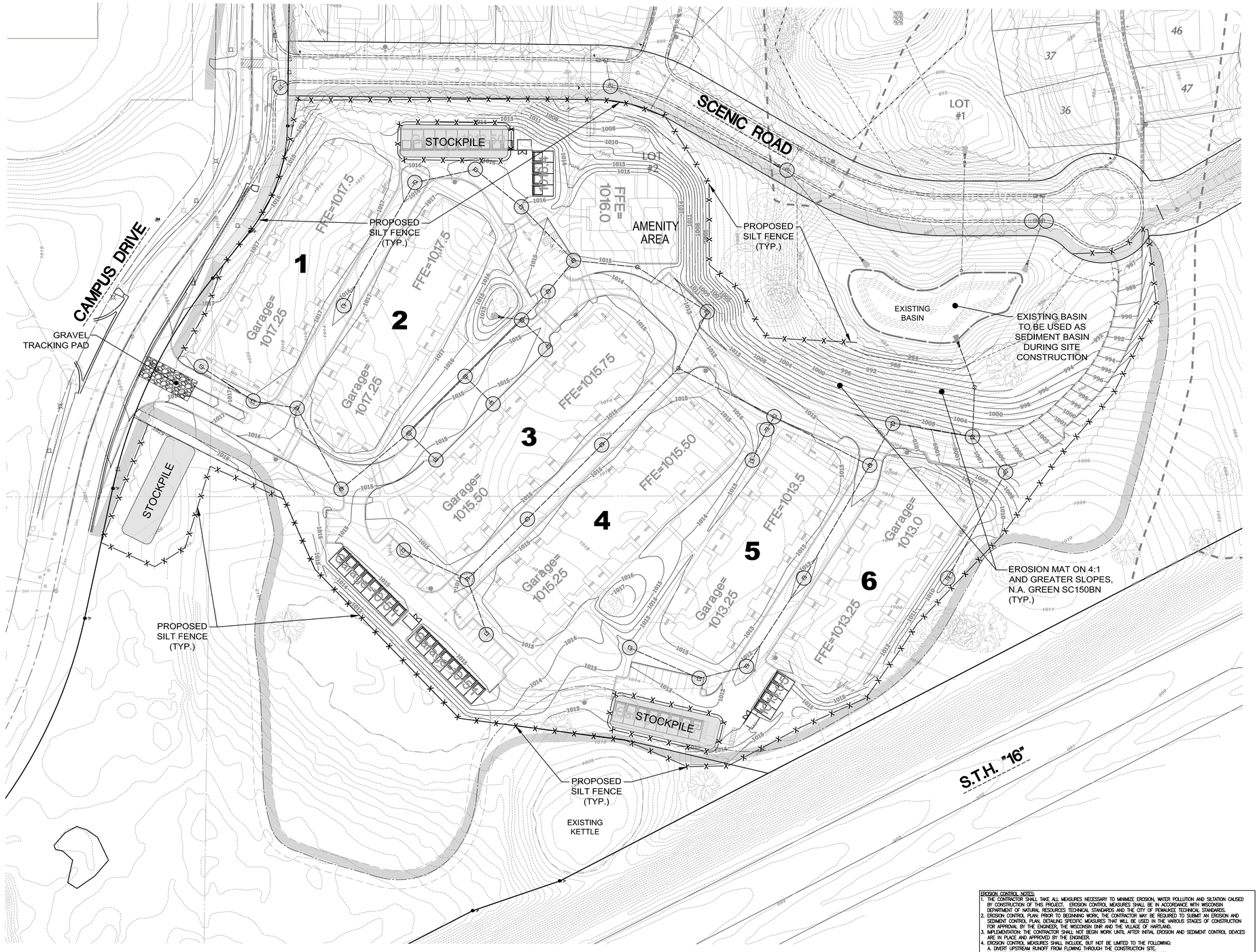
Date Issued: 09/10/2020

RINKA project #: 191010

Sheet Title

MASTER GRADING & DRAINAGE PLAN

Sheet # **C1.04**



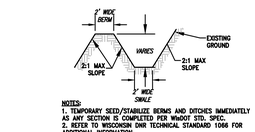
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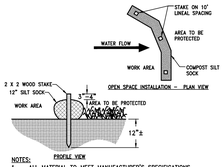
INLET PROTECTION NOTE:
TYPE D INLET PROTECTION SHALL BE USED FOR INLETS AT DEAD LOW SPOTS AND ALL OTHERS WITHIN THE ROADWAY. TYPE A INLET PROTECTION SHALL BE USED FOR FIELD INLETS.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES, CONSERVATION PRACTICE STANDARD:
1052 – NON-CHANNEL EROSION MAT
1053 – CHANNEL EROSION MAT
1055 – SEDIMENT BALE BARRIER (NON-CHANNEL)
1056 – SILT FENCE
1060 – STORM INLET PROTECTION FOR CONST. SITES
1062 – DITCH CHECK
1057 – STONE TRACKING PAD AND TIRE WASHING
1058 – MULCHING FOR CONSTRUCTION SITES
1059 – TEMPORARY SEEDING
1061 – DE-WATERING (IF REQUIRED)
1063 – SEDIMENT TRAP
1064 – SEDIMENT BASIN



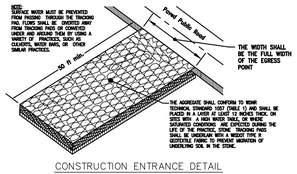
NOTES:
1. TEMPORARY SEED/STABILIZE BERMS AND DITCHES IMMEDIATELY AS ANY SECTION IS COMPLETED PER WHDOT STD. SPEC.
2. REFER TO WISCONSIN DNR TECHNICAL STANDARD 1066 FOR ADDITIONAL INFORMATION.

DIVERSION BERM/SWALE DETAIL
NO SCALE



NOTES:
1. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS
2. REFER TO MANUFACTURERS AND/OR SUPPLIERS SPECIFICATIONS FOR INSTALLATION RECOMMENDATIONS.
3. ACTUAL LOCATION MAY BE FIELD ADJUSTED TO MINIMIZE DISTURBANCE TO EXISTING VEGETATION.
4. INSTALL EVERY 200' OR 2' GRADE DROP IN SWALES.

STRAW WATTLE DITCH CHECK INSTALLATION DETAIL
NO SCALE



CONSTRUCTION ENTRANCE DETAIL
NO SCALE

LATE SEASON STABILIZATION NOTES:
THE OBJECTIVE IS TO STABILIZE THE SITE WITH 70% VEGETATIVE COVERAGE OF ALL PERVIOUS DISTURBED AREAS BEFORE THE END OF THE GROWING SEASON. THIS WILL BE DONE BY SEEDING OF ALL DISTURBED AREAS WITH PERMANENT VEGETATION BY SEPTEMBER 15. IF THIS DEADLINE IS MISSED, THEN STABILIZATION WILL BE COMPLETED BY:

1. SEEDING OF ALL DISTURBED AREAS WITH TEMPORARY SEED MIX (OATS, WINTER WHEAT, ANNUAL RYE) BY OCTOBER 15. PERMANENT SEED MIX MUST THEN BE IMPLEMENTED BY JUNE 1 OF THE FOLLOWING YEAR.
2. IF THE OCTOBER 15 DEADLINE IS MISSED, COVERAGE OF ALL DISTURBED AREAS BY NOVEMBER 1 WITH:
   a. TOPSOIL, SEED, AND THE MATERIAL CALLED FOR IN THE APPROVED STABILIZATION PLANS, WHERE TOPSOIL, SEED, AND EROSION CONTROL MATTING IS CALLED FOR.
   b. TOPSOIL, SEED, AND TYPE A SOIL STABILIZER FROM THE WDOT PRODUCT ACCEPTABILITY LIST OR OTHER METHOD APPROVED BY THE VILLAGE FOR ALL AREAS WHERE SEED, TOPSOIL, AND MULCH IS CALLED FOR IN THE APPROVED PLANS.
3. IF THE NOVEMBER 1 DEADLINE HAS BEEN MISSED, AND THE CITY STAFF HAS DETERMINED THAT IT IS INFEASIBLE TO RE-APPLY TOPSOIL, THE PERMIT APPLICANT SHALL:
   a. APPLY TYPE A SOIL STABILIZER FROM THE WDOT PRODUCT ACCEPTABILITY LIST TO ALL DISTURBED AREAS.
   b. INSTALL DITCH CHECKS IN ALL DITCHES WITH SLOPE GREATER THAN 0.5% AT INTERVALS SUCH THAT THE TOP OF THE DOWNHILL DITCH CHECK IS AT THE ELEVATION OF THE FOOT OF THE UPHILL DITCH CHECK. DITCH CHECKS SHALL BE EITHER:
      I. TRIANGULAR FOAM-CORE
      II. STONE INSTALLED PER THE WDNR TECHNICAL STANDARD
      III. COMPOST-FILLED TUBES, OR
      IV. A COMPARABLE PRODUCT AS APPROVED BY THE CITY STAFF.

CONSTRUCTION SEQUENCE PLAN
1. INSTALL TRACKING PAD AND SILT FENCE AROUND THE PERIMETER OF THE SITE.
2. CLEAR AND GRUB SITE.
3. STRIP TOPSOIL AND STOCKPILE AS NECESSARY. SEED AND STABILIZE STOCKPILES IMMEDIATELY UPON COMPLETION OF STOCKPILING.
4. CONSTRUCT TEMPORARY DIVERSION BERMS AND SWALES (WITH DITCH CHECKS) TO DIRECT SITE RUNOFF TO SEDIMENT BASIN. SEED & STABILIZE IMMEDIATELY UPON COMPLETION OF GRADING.
5. ROUGH GRADE SITE. NOTE THAT ROUGH GRADING MAY OCCUR CONCURRENT WITH CONSTRUCTION OF THE DIVERSION SWALES.
6. INSTALL SANITARY SEWER AND WATER MAIN. COMPLETE ALL TESTING AND CONTACT VILLAGE PRIOR TO CONNECTING TO EXISTING MAINS. NOTE THAT THIS STEP MAY BEGIN CONCURRENT WITH ROUGH GRADING ONCE THE UTILITY AREAS HAVE BEEN GRADED TO SUBGRADE.
7. INSTALL STORM SEWER AND ASSOCIATED EROSION CONTROL MEASURES PER EROSION CONTROL PLAN. NOTE THAT THIS STEP MAY BEGIN CONCURRENT WITH SANITARY SEWER AND WATER MAIN INSTALLATION.
8. FINISH GRADE THE SITE. NOTE THAT THIS STEP MAY OCCUR CONCURRENT WITH STORM SEWER INSTALLATION.
9. INSTALL STONE BASE COURSE, CONSTRUCT CURB AND PLACE BINDER COURSE PAVEMENT. NOTE THAT THIS STEP MAY BEGIN CONCURRENT WITH FINISH GRADING.
10. REMOVE TRACKING PAD ONCE ROADS ARE COMPLETED. RESTORE DISTURBED AREA.
11. REPREAD TOPSOIL AND PLACE SEED, MULCH, MATTING AND OTHER SITE STABILIZERS AS NEEDED. NOTE THAT THIS STEP MAY BEGIN CONCURRENT WITH FINISH GRADING AND ROAD CONSTRUCTION. ALSO NOTE THAT ANY AREAS, SUCH AS POND SLOPES, THAT ARE FINISH GRADED AND TOPSOILED SHALL BE SEEDED, MULCHED AND/OR MATTED IMMEDIATELY AFTER TOPSOIL IS PLACED.
12. REMOVE CONSTRUCTION EROSION CONTROL MEASURES AFTER SITE IS STABILIZED (SUBSTANTIALLY VEGETATED) AND ALL CONSTRUCTION IS COMPLETE.

STOCKPILE LOCATION NOTE:
STOCKPILE AREAS MAY BE LOCATED WHERE CONTRACTOR FEELS MOST CONVENIENT, WITH PRIOR ENGINEER APPROVAL.

EROSION CONTROL NOTES:
1. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS AND THE CITY OF PEWAUKEE TECHNICAL STANDARDS.
2. EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, THE CONTRACTOR MAY BE REQUIRED TO SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN, DETAILING SPECIFIC MEASURES THAT WILL BE USED IN THE VARIOUS STAGES OF CONSTRUCTION FOR APPROVAL BY THE ENGINEER, THE WISCONSIN DNR AND THE VILLAGE OF HARTLAND.
3. IMPLEMENTATION: THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL AFTER INITIAL EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
4. EROSION CONTROL MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   A. DIVERT UPSTREAM RUNOFF FROM FLOWING THROUGH THE CONSTRUCTION SITE.
   B. PROTECT DOWNSTREAM OR ADJACENT WATERWAYS AND WETLANDS WITH SILT FENCE.
   C. DELAY STRIPPING TOPSOIL UNTIL REQUIRED FOR CONSTRUCTION.
   D. PLACE STRAW WATTLES OR SILT LOGS IN DITCHES AND OTHER DRAINAGE WAYS TO COLLECT SEDIMENT AND TO SLOW THE VELOCITY OF RUNOFF.
   E. PROTECT STORM SEWER INLETS AND THE UPSTREAM END OF CULVERTS WITH STRAW WATTLES OR SILT LOGS.
   F. PROMPT REMOVAL OF EXCAVATED MATERIAL.
   G. PROPER STORAGE OF BACKFILL AND BEDDING MATERIALS INCLUDING PLACING SILT FENCE OR EROSION CONTROL BALES ON THE DOWNSLOPE SIDES OF SPOIL PILES.
   H. CONSTRUCTION OF TRACKING PAD TO CONSTRUCTION SITE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO ROADWAYS.
   I. PROMPT (SAME DAY) CLEANUP OF MATERIAL TRACKED ONTO ADJACENT STREETS.
   J. TIMELY RESTORATION OF DAMAGE SURFACE AREAS.
   K. ALL AREAS THAT WILL REMAIN DISTURBED AFTER OCTOBER 15, MUST BE TEMPORARY SEEDED AS OF THAT DATE.
5. TEMPORARY EROSION CONTROL MEASURES.
   A. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY EROSION CONTROL MEASURES, WHERE EROSION IS LIKELY TO BE A PROBLEM, PRIOR TO BEGINNING WORK ON THOSE SECTION(S) OF THE PROJECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL AFTER PERMANENT EROSION CONTROL, SUCH AS SEEDING OR SODDING, HAS BEEN ESTABLISHED.
   B. IN THE EVENT THE PERMANENT EROSION CONTROL MEASURES ARE NOT FULLY IMPLEMENTED IN CURRENT CONSTRUCTION SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL AFTER PERMANENT MEASURES HAVE BEEN COMPLETED IN THE FOLLOWING YEAR.
6. ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN DAYS MUST BE IMMEDIATELY RESTORED WITH SEED AND MULCH.
7. TRENCH DEWATERING SHALL BE IN ACCORDANCE WITH WDNR AND THE VILLAGE OF HARTLAND TECHNICAL STANDARDS.
   A. ALL PUMPED EFFLUENT FROM DEWATERING OPERATIONS (TRENCH DEWATERING OR OTHERWISE) SHALL BE DISCHARGED TO A GEOTEXTILE FILTER BAG CONFORMING TO WDNR CONSERVATION PRACTICE STANDARD 1061. THE GEOTEXTILE FILTER BAG SHALL BE PLACED ON UNDISTURBED/STABILIZED GROUND AND DISCHARGE TO A SEDIMENT BASIN OR TRAP. SHOULD NO BASIN EXIST, THE GEOTEXTILE BAG SHALL BE PLACED ON FILTER FABRIC AND SURROUNDED BY A SEDIMENT BALE BARRIER CONFORMING TO CONSERVATION PRACTICE STANDARD 1055. THE FILTER FABRIC SHALL BE BROUGHT UP THE SIDES AND OVER THE TOP OF THE HAY BALES AND SECURED. DISCHARGE SHALL NOT BE ALLOWED TO FLOW OVER UNPROTECTED GROUND. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS PRIOR TO SEDIMENT REMOVAL.
8. INSTALL SILT FENCE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DETAILS
9. ALL RIP RAP AT PIPE OUTLETS SHALL BE 3'x5' MEDIUM RIP RAP OVER TYPE HR FABRIC PER WDOT SPECIFICATIONS UNLESS OTHERWISE DESIGNATED.
10. EROSION CONTROL INSPECTION AND MAINTENANCE
    A. INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER SITE RECEIVES 0.5" OF RAIN IN A 24-HOUR PERIOD DURING CONSTRUCTION.
    B. REPAIR OR REPLACE EROSION CONTROLS THAT ARE DAMAGED OR FAILING.
11. ALL AREAS TO BE SEEDED AND MULCHED SHALL USE WDOT SEED MIXTURE NO. 20. MULCH SHALL APPLIED PER WDOT SPECIFICATIONS USING METHOD B FOR PLACEMENT.

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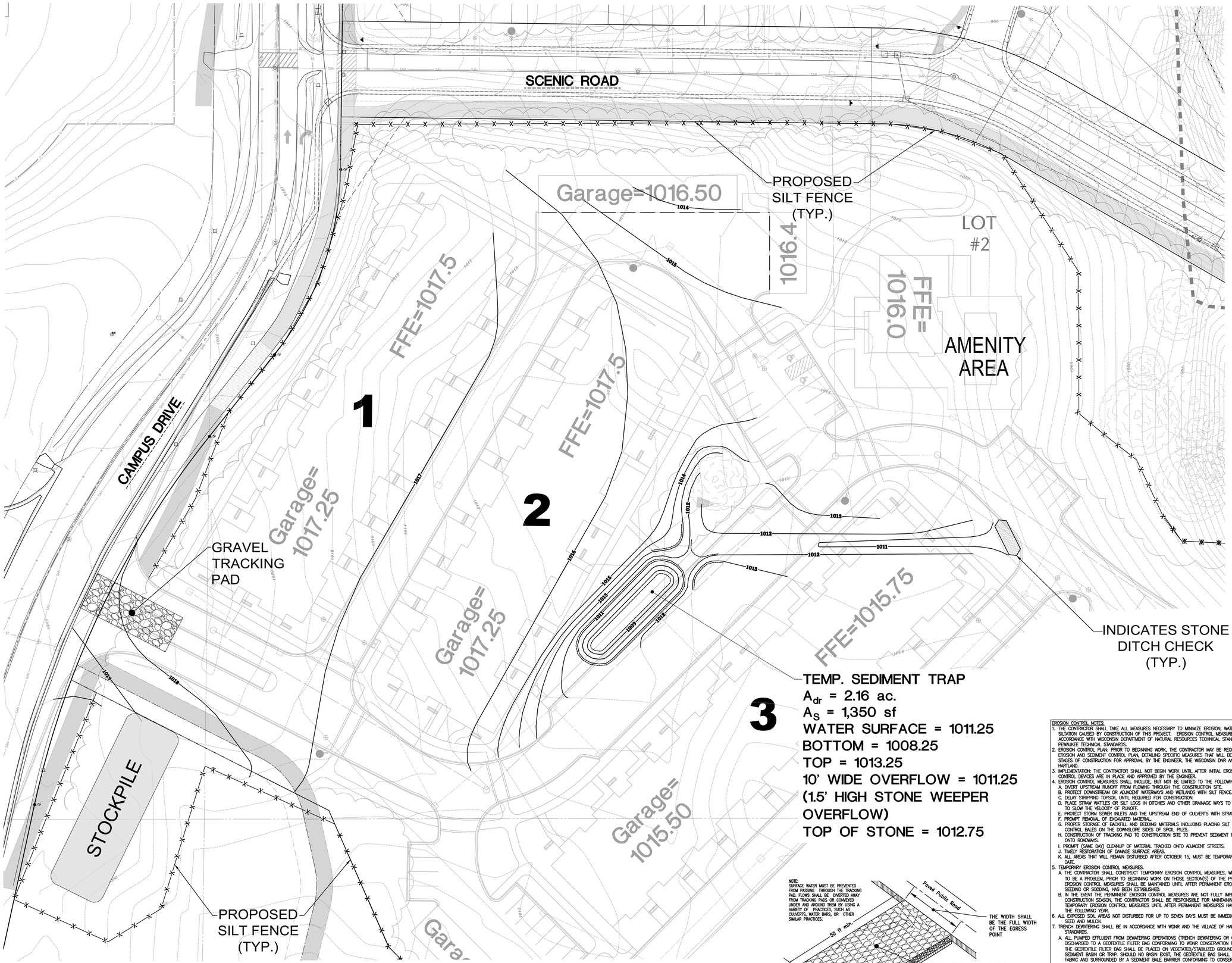
RINKA project #: 191010

Sheet Title

EROSION CONTROL PLAN

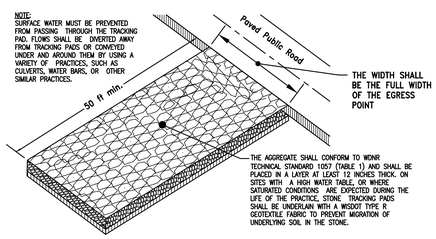
Sheet # **C2.00**

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Scale: 1" = 20' (36"X48")
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NOTE:
SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY FROM TRACKING PADS OR CONVEYED UNDER AND AROUND THEM BY USING A VARIETY OF PRACTICES, SUCH AS CULVERTS, WATER BARS, OR OTHER SIMILAR PRACTICES.



CONSTRUCTION ENTRANCE DETAIL
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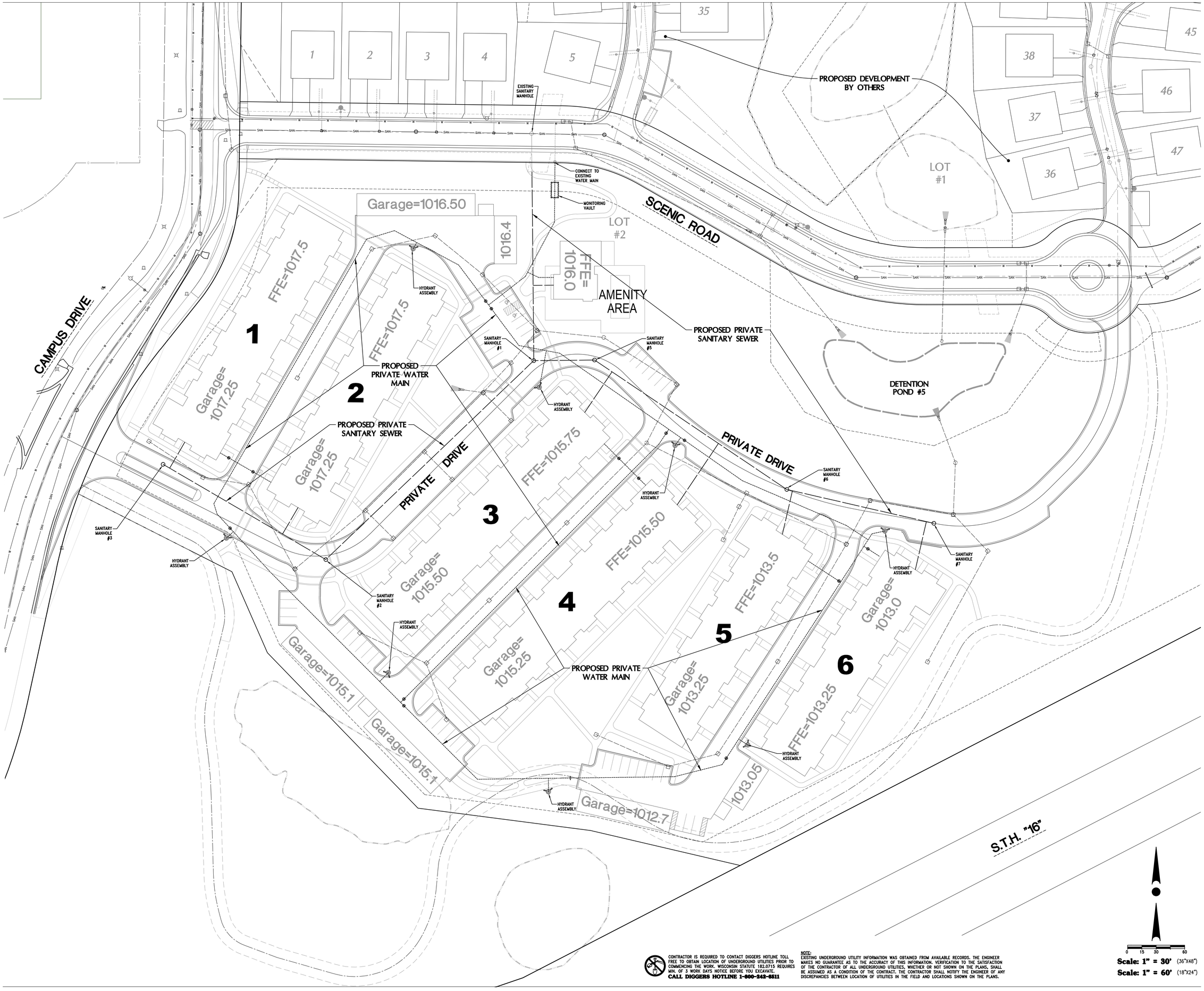
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Sheet Title

PH. 1 GRADING & EROSION CONTROL PLAN

Sheet # **C2.01**



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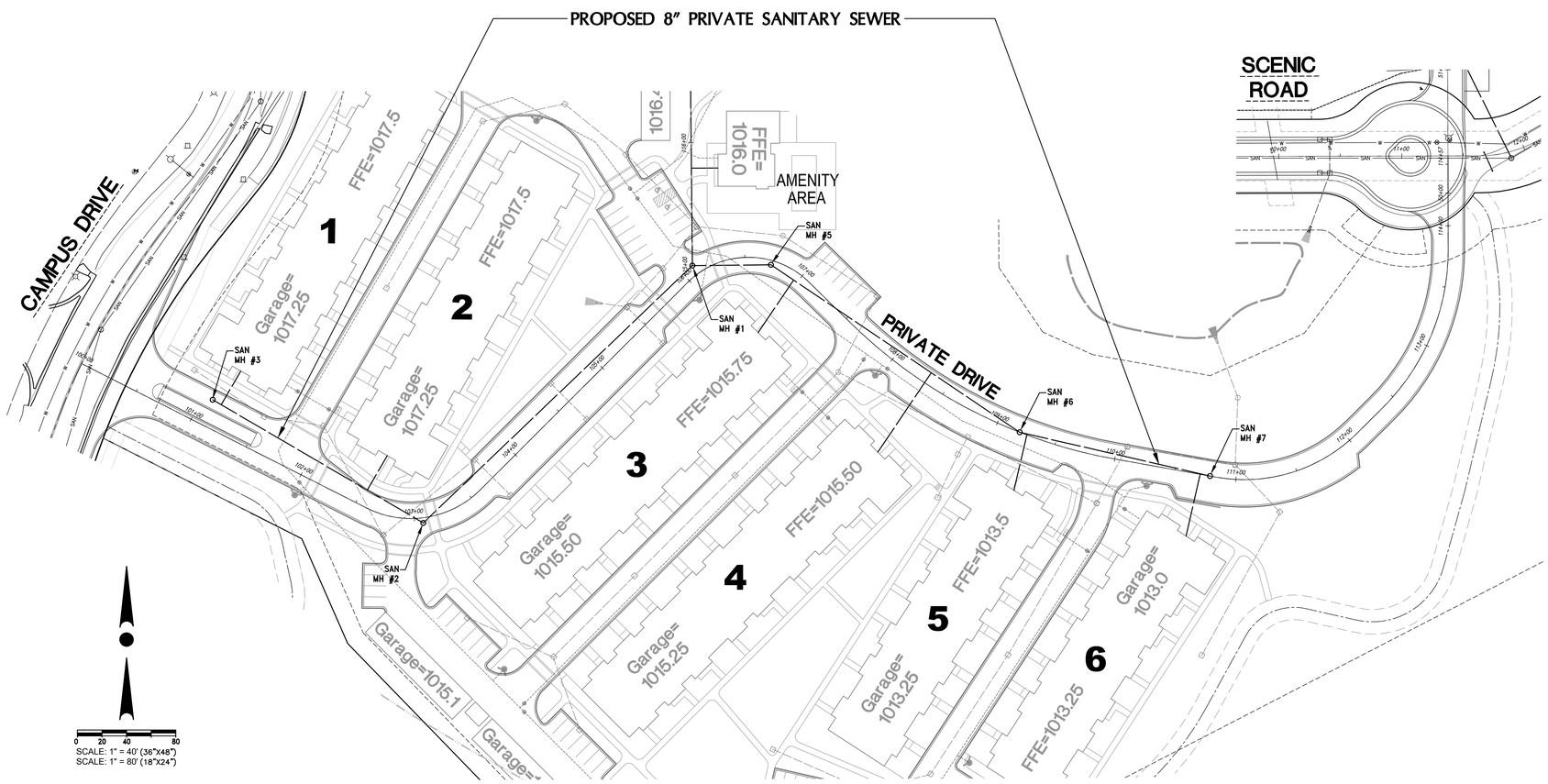
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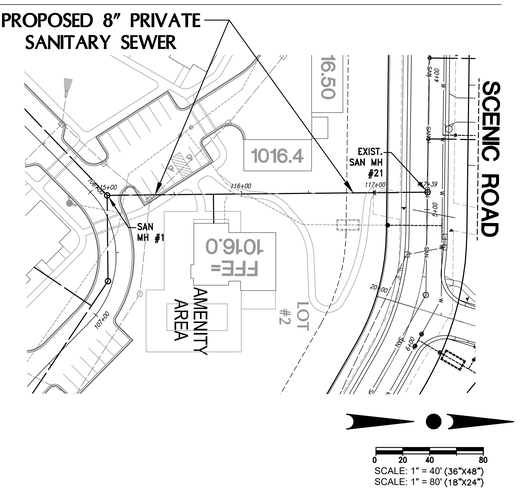
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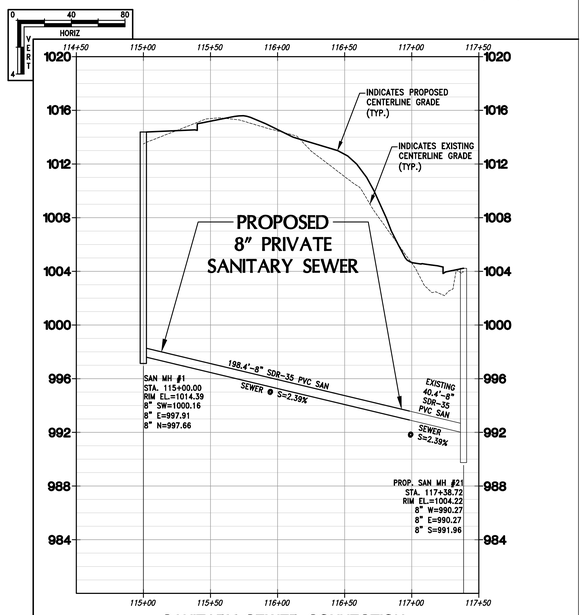
Sheet Title

SANITARY SEWER & WATER MAIN SYSTEM PLAN

Sheet #
C3.00



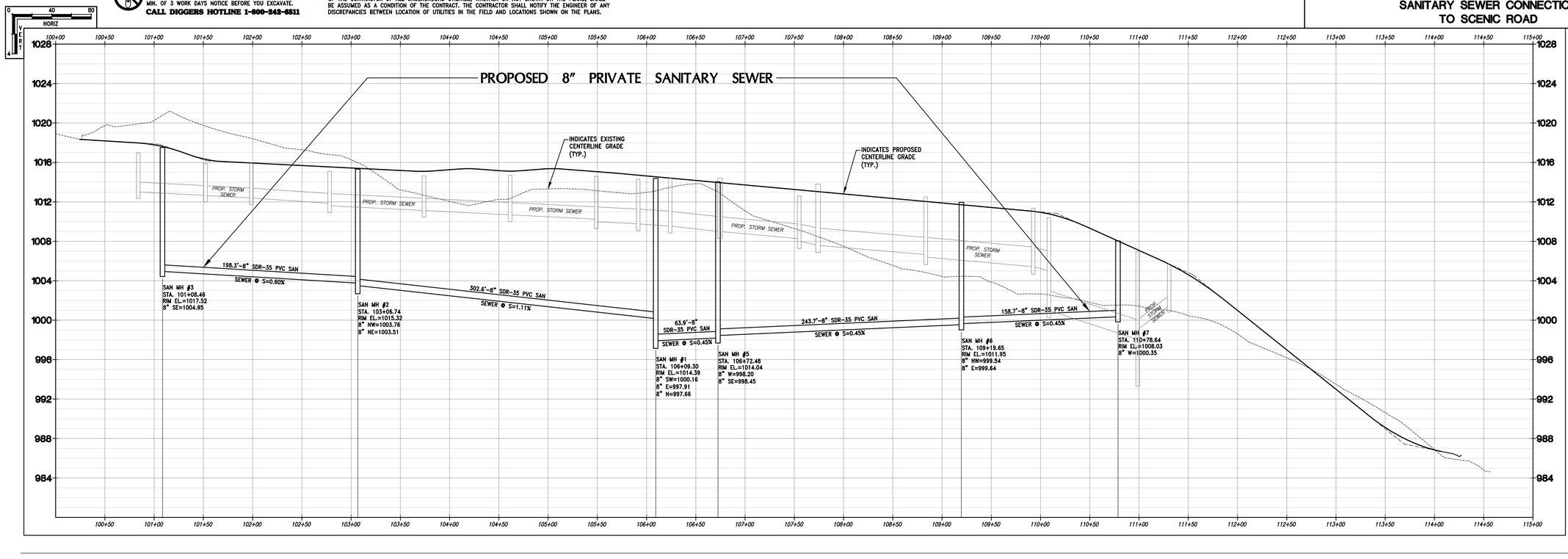




SANITARY SEWER CONNECTION TO SCENIC ROAD

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CALL DIGGERS HOTLINE 1-800-242-8511

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Date Revised 10/13/2020

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CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
HARTLAND, WI 53029

Date Issued: 09/10/2020

RINKA project #: 191010

Sheet Title

ROADWAY & SANITARY SEWER PLAN & PROFILE

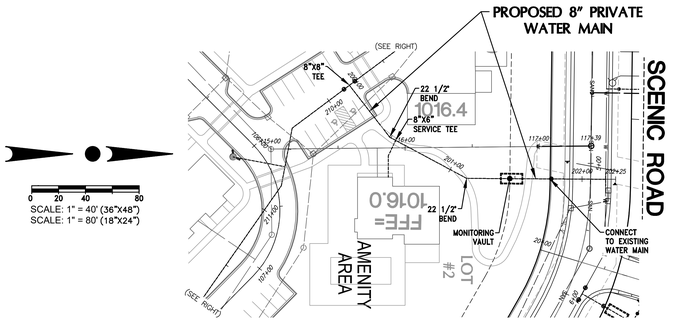
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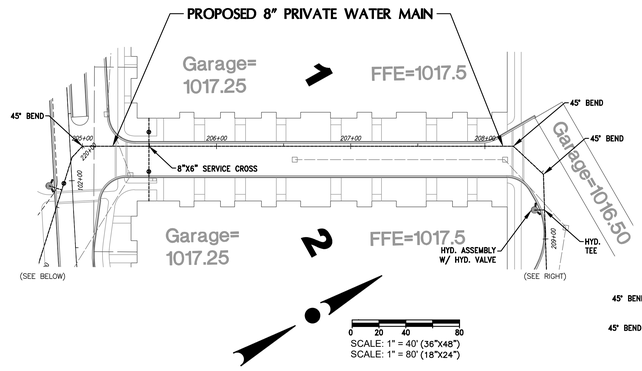
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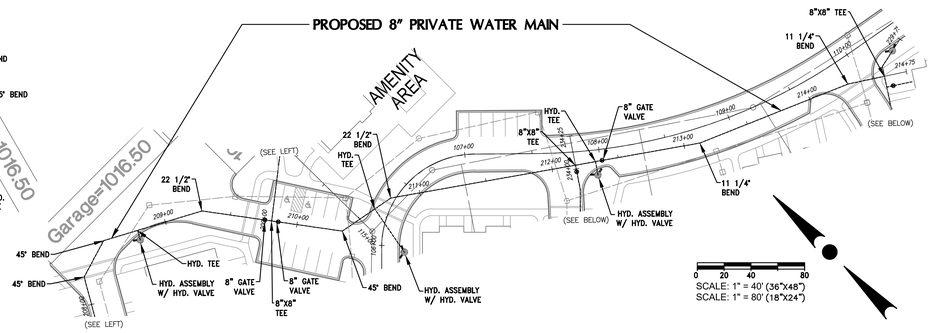
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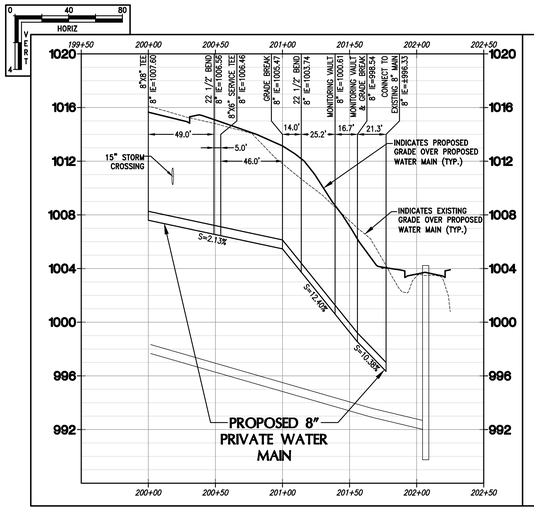
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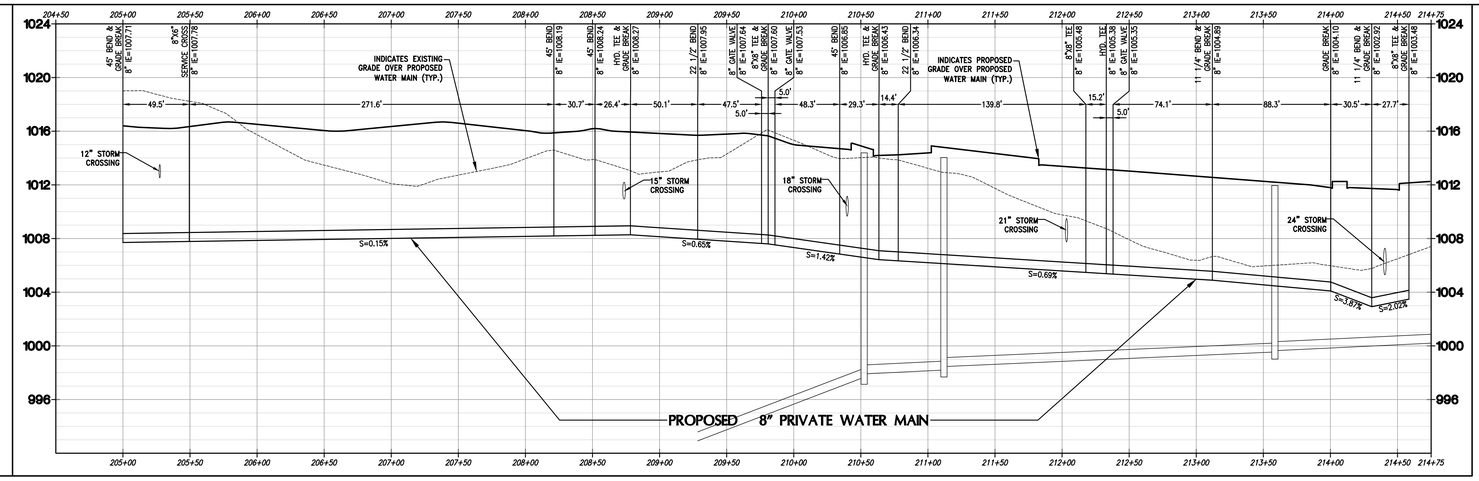
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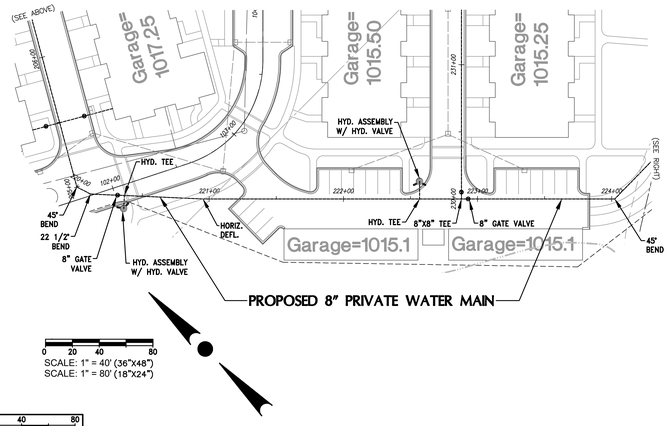


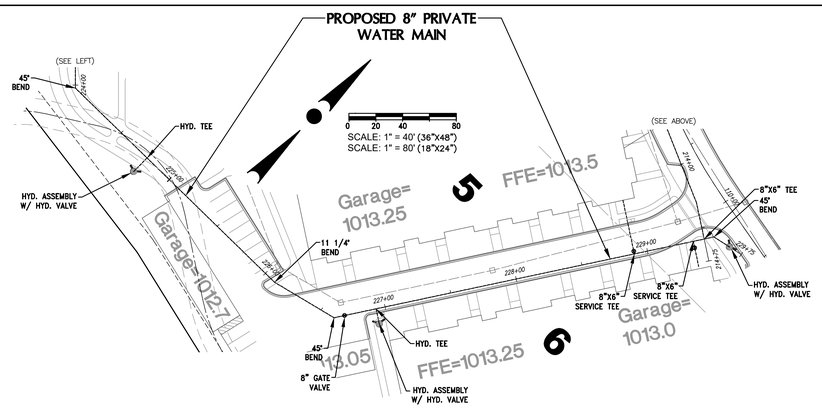


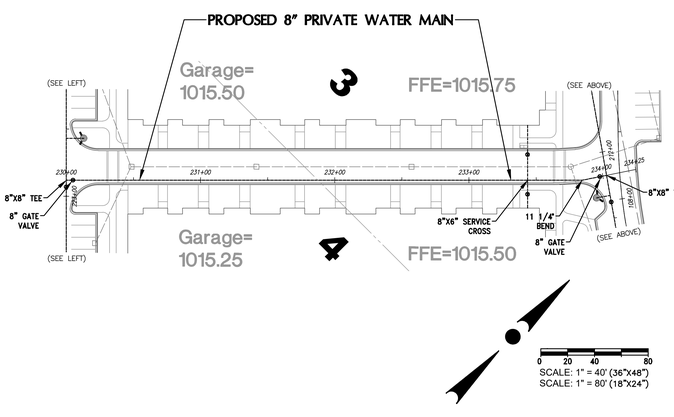


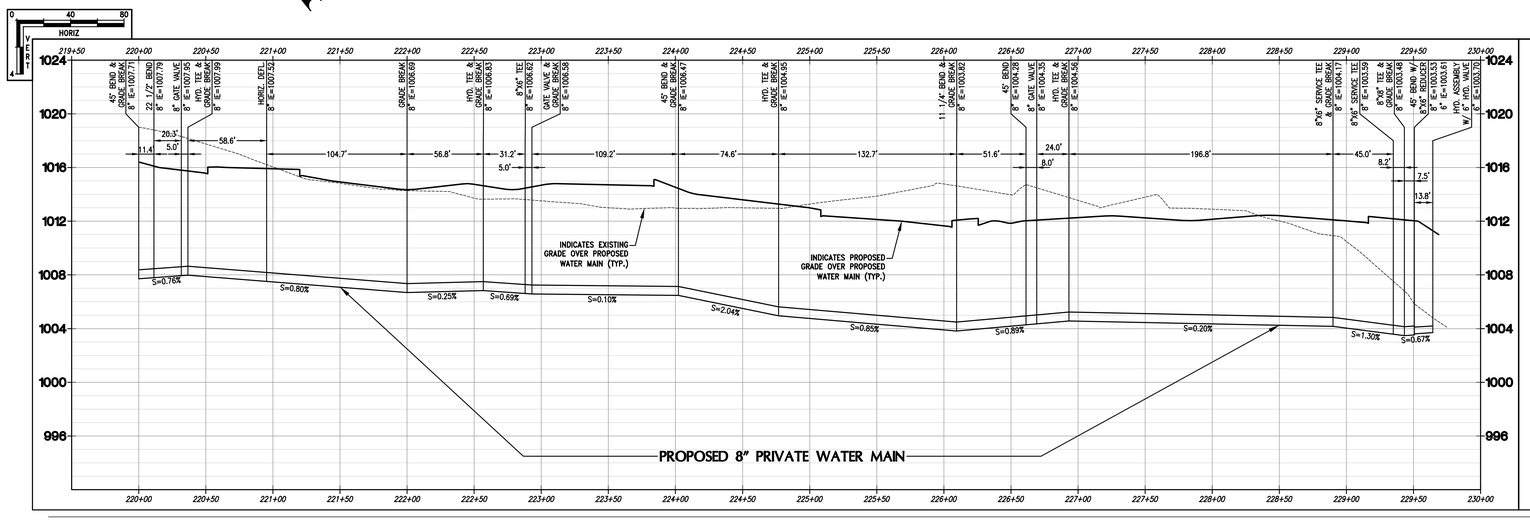


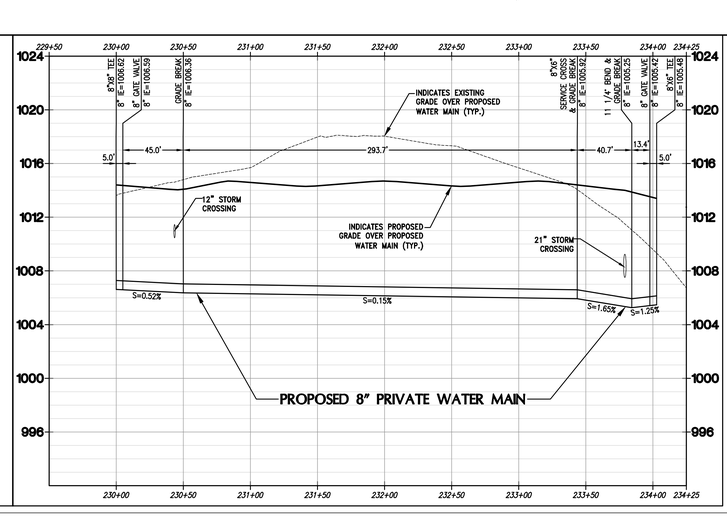












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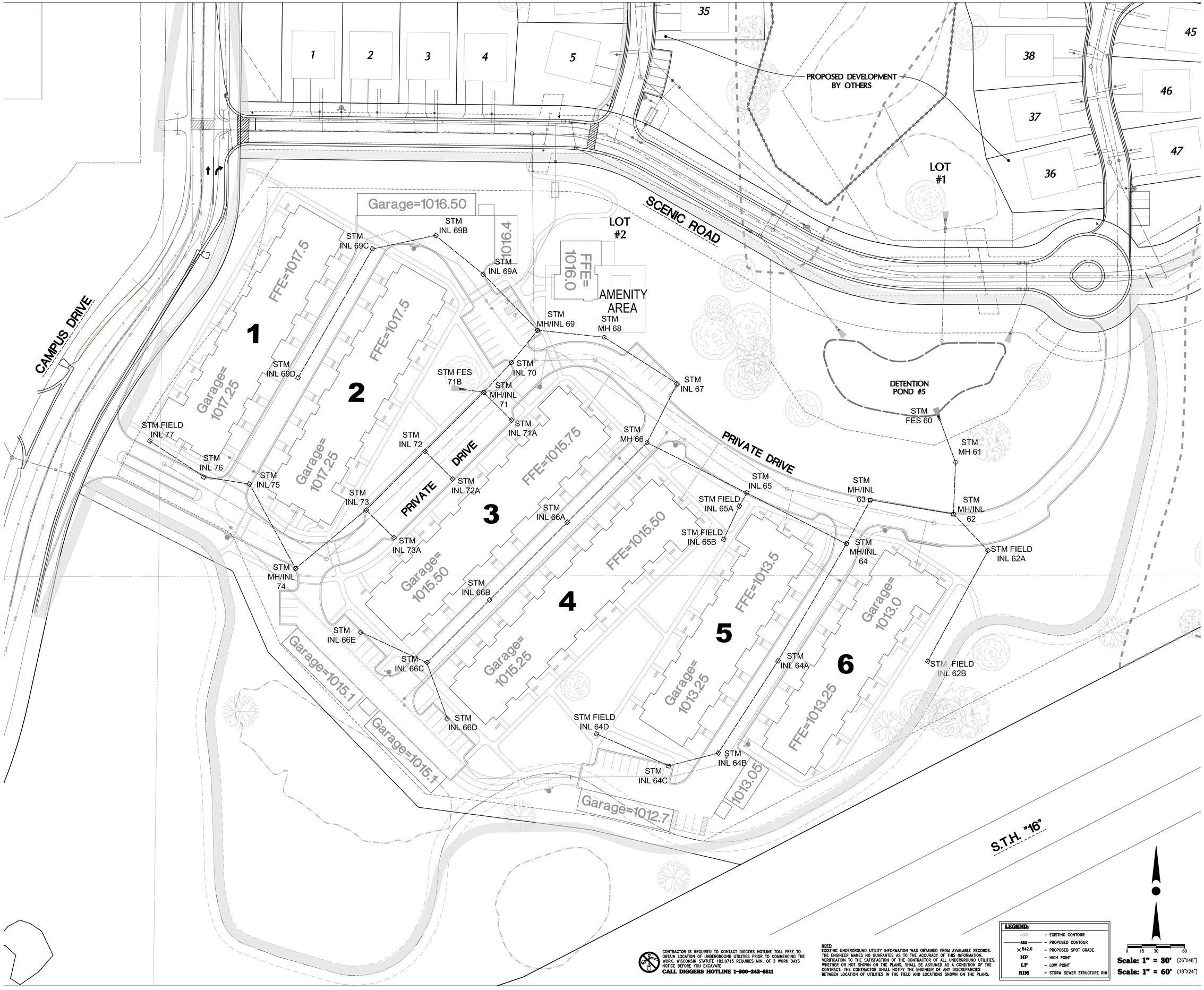
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Sheet Title

WATER MAIN PLAN & PROFILE

Sheet #
C3.02

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LEGEND:

850	– EXISTING CONTOUR
850	– PROPOSED CONTOUR
× 842.0	– PROPOSED SPOT GRADE
HP	– HIGH POINT
LP	– LOW POINT
RIM	– STORM SEWER STRUCTURE RIM

0 15 30 60

Scale: 1" = 30' (36"X48")
Scale: 1" = 60' (18"X24")

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STORM SEWER SYSTEM PLAN

Sheet #
C4.00

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HP	– HIGH POINT
LP	– LOW POINT
RIM	– STORM SEWER STRUCTURE RIM

0 10 20 40

Scale: 1" = 20' (36"X48")

Scale: 1" = 40' (18"X24")

CAMPUS DRIVE

PRIVATE DRIVE

PRIVATE DRIVE

PRIVATE DRIVE

SCENIC ROAD

STM FIELD INL 77
RIM EL.=1017.00
12" SE=1013.00

SEWER ⌀ S=0.51%
68.8'-12" RCP STM

STM INL 78
RIM EL.=1015.90
12" NW=1012.85
12" E=1012.65

SEWER ⌀ S=0.51%
48.2'-12" RCP STM

STM MH/INL 75
RIM EL.=1015.95
12" SE=1012.40
12" W=1012.40

SEWER ⌀ S=0.54%
101.1'-12" RCP STM

STM MH/INL 74
RIM EL.=1015.10
12" NW=1011.85
15" NE=1011.60

186.6'-15" RCP STM
SEWER ⌀ S=0.60%

STM INL 73
RIM EL.=1014.64
15" SW=1011.12
15" NE=1011.12
12" SE=1011.37

STM INL 69D
RIM EL.=1015.70
12" NE=1012.20

156.9'-12" RCP STM
SEWER ⌀ S=0.92%

STM INL 69C
RIM EL.=1015.70
15" E=1011.17
12" SW=1011.42

SEWER ⌀ S=0.89%
40.1'-10" RCP STM

STM INL 69B
RIM EL.=1015.50
15" W=1010.83
15" SE=1010.83

STM INL 66E
RIM EL.=1012.57
12" SE=1010.78

SEWER ⌀ S=0.60%
76.6'-12" RCP STM

STM INL 734
RIM EL.=1014.64
12" NW=1011.62

42.6'-12" RCP STM
SEWER ⌀ S=0.60%

81.5'-15" RCP STM
SEWER ⌀ S=0.60%

STM INL 66C
RIM EL.=1013.75
12" S=1010.40
15" NE=1010.15
12" NW=1010.40

62.6'-12" RCP STM
SEWER ⌀ S=0.56%

STM INL 66D
RIM EL.=1014.00
12" N=1010.75

81.0'-15" RCP STM
SEWER ⌀ S=0.51%

STM INL 72
RIM EL.=1014.70
15" SW=1010.68
15" NE=1010.68
12" SE=1010.93

42.0'-12" RCP STM
SEWER ⌀ S=0.60%

82.5'-15" RCP STM
SEWER ⌀ S=0.60%

STM INL 72A
RIM EL.=1014.70
12" NW=1011.18

12" FES
IE=1011.80

S=5.00%
SEWER ⌀
26.2'-12"
RCP STM

STM MH/INL 71
RIM EL.=1014.60
18" NE=1009.99
15" SW=1010.24
12" W=1010.49
12" SE=1010.49

STM INL 69A
RIM EL.=1015.20
15" NW=1010.50
15" SE=1010.50

SEWER ⌀ S=0.51%
63.0'-15" RCP STM

STM INL 68B
RIM EL.=1013.95
15" SW=1009.68
15" NE=1009.68

116.6'-15" RCP STM
SEWER ⌀ S=0.56%

STM INL 71A
RIM EL.=1014.60
12" NW=1010.91

42.0'-12" RCP STM
SEWER ⌀ S=1.90%

STM INL 70
RIM EL.=1014.30
18" NE=1009.77
18" SW=1009.77

44.2'-18" RCP STM
SEWER ⌀ S=0.60%

SEWER ⌀ S=0.60%
62.1'-15" RCP STM

STM INL 66A
RIM EL.=1013.95
15" SW=1009.10
15" NE=1009.10

116.1'-15" RCP STM
SEWER ⌀ S=0.60%

STM MH/INL 69
RIM EL.=1014.40
18" SW=1009.55
18" E=1009.55
15" NW=1009.80

SEWER ⌀ S=0.60%
50.3'-18" RCP STM

STM MH 68
RIM EL.=1014.40
18" W=1008.99
18" SE=1008.99

STM FIELD INL 64D
RIM EL.=1012.00
12" SE=1008.75

SEWER ⌀ S=0.50%
63.1'-12" RCP STM

STM INL 64C
RIM EL.=1011.50
15" E=1008.08
12" NW=1008.33

SEWER ⌀ S=1.40%
40.0'-15" RCP STM

STM MH 66
RIM EL.=1013.80
21" NE=1007.59
21" SE=1007.59
15" SW=1008.09

SEWER ⌀ S=0.60%
69.7'-21" RCP STM

SEWER ⌀ S=0.60%
91.0'-18" RCP STM

STM INL 67
RIM EL.=1012.60
18" NW=1008.26
21" SW=1008.01

SEWER ⌀ S=0.60%
76.8'-21" RCP STM

Garage=1015.1

Garage=1012.7

Garage=1013.25

Garage=1015.50

Garage=1015.25

Garage=1016.50

Garage= 1017.25

Garage= 1017.25

FFE=1017.5

FFE=1017.5

FFE=1015.75

FFE=1015.50

1016.4

FFE= 1016.0

AMENITY AREA

LOT #2

1 2 3 4

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HARTLAND, WI 53029

Date Issued: 09/10/2020

RINKA project #: 191010

Sheet Title

STORM SEWER PLAN

Sheet # **C4.01**

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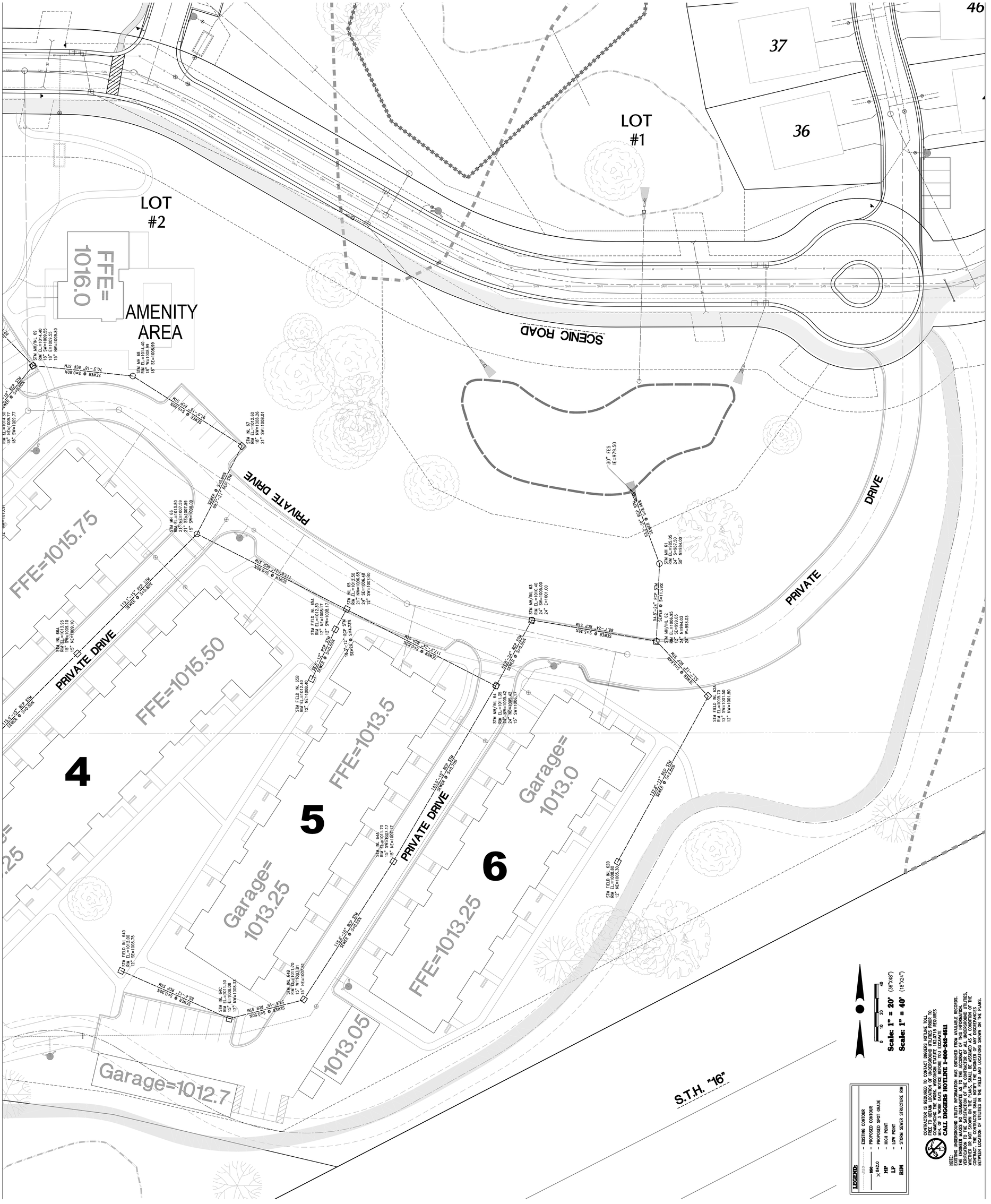
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Sheet Title

STORM SEWER PLAN

Sheet # **C4.02**

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LEGEND:

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- ×842.0 – PROPOSED SPOT GRADE
- HP – HIGH POINT
- LP – LOW POINT
- RIM – STORM SEWER STRUCTURE RIM

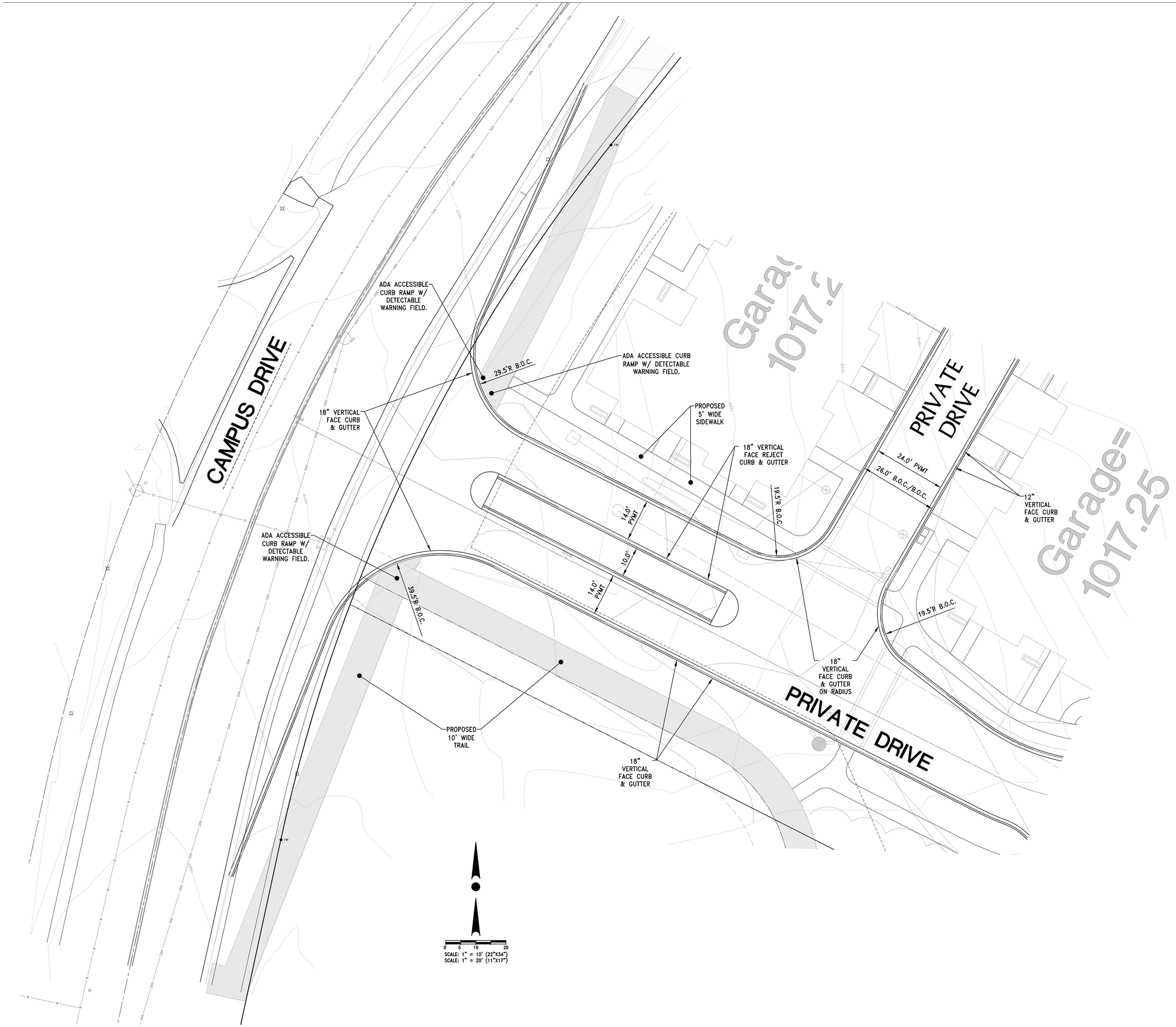
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Sheet Title

INTERSECTION DETAIL

Sheet # **C5.00**

VILLAGE OF HARTLAND STANDARD SPECIFICATIONS AND DETAIL DRAWINGS (HARTLAND STANDARDS)
CURRENT EDITION: MARCH 1, 2017

SECTION 33 05 00 HARTLAND COMMON WORK RESULTS FOR UTILITIES

PART 2 – PRODUCTS
2.03 BACKFILL
A. GRANULAR: LIMESTONE SCREENING NOT ALLOWED.
B. SPOIL: MAXIMUM PARTICLE SIZE 3–INCHES.
2.04 LOCATION AIDS
A. TRACER WIRE:
2. FOR OPEN–CUT: DIRECT–BURIAL–RATED INSULATED #10 AWG SOLID COPPER CONDUCTOR.
4. SPLICES: COPPERHEAD INDUSTRIES DRYCONN® 3–WAY DIRECT BURY LUG CONNECTOR 3WB–01 OR APPROVED EQUAL.
5. COLOR:
a. WATER: BLUE.
b. SANITARY: GREEN.
B. LOCATION BOXES FOR TRACER WIRE ACCESS.
1. BURIED:
a. SNAKEPIT TEST STATION, BY COPPERHEAD INDUSTRIES, OR APPROVED EQUAL.
C. GROUNDING ANODE ROD TO HAVE A MINIMUM OF 1 POUND OF MAGNESIUM AND #10 AWG WIRE.
D. MARKER FLAG:
1. "HYDRAFINDER".
2. 5 FEET LONG.
3. FIBERGLASS, RED AND WHITE.
4. SPRING LOAD ACTION.

PART 3 – EXECUTION
3.04 LOCATION AIDS
A. DETECTOR WIRE:
2. PLACE MAXIMUM 3 INCHES DIRECTLY ABOVE PIPE. (NO NEED TO TAPE TO PIPE)
3. TEST DETECTOR WIRE CONTINUITY PRIOR TO ACCEPTANCE OF PIPE INSTALLATION.
B. INSTALL DETECTOR WIRE AT:
1. WATER MAINS.
a. EVERY HYDRANT. EXTEND DETECTOR WIRE THROUGH A TEST STATION BOX THAT IS TO BE LOCATED ADJACENT TO THE HYDRANT.
b. EVERY CURB STOP. EXTEND DETECTOR WIRE UP CURB STOP BOX AND CONNECT TO CURB STOP LID.
2. SEWERS, LATERALS.
a. EVERY MANHOLE.
b. SANITARY WIRES CAN BE PLACED INTO THE MANHOLE BELOW THE FRAME.
c. EVERY LATERAL. EXTEND DETECTOR WIRE TO TOP OF HARDWOOD MARKER AT END OF LATERAL.
C. GROUNDING ANODE ROD:
1. INSTALL AT EVERY HYDRANT USING WIRE CONNECTOR EXTENDED FROM MAIN.
2. INSTALL AT EVERY CURB STOP BOX USING WIRE CONNECTOR EXTENDED FROM MAIN.
D. DEMONSTRATE CONTINUITY OF DETECTOR WIRES TO ENGINEER. CONNECT OHM METER IN A SERIES LOOP WITH DETECTOR WIRE AND ABOVE–GROUND WIRE. CIRCUIT RESISTANCE SHALL NOT EXCEED 5 OHMS.
E. TEST LOCATING. CONTACT OWNER AT (262) 367–2714 TO LOCATE ALL UTILITIES.
1. AFTER COMPLETION OF CONTINUITY TEST.
2. BEFORE ACCEPTANCE FOR USE.
3.06 INSULATION
A. WHERE STORM SEWER CROSS OVER WATER MAIN OR LATERALS.
3.07 BEDDING AND COVER
A. USE 6 INCHES OF BEDDING MATERIAL.
3.08 TRENCH BACKFILLING AND CONSOLIDATION
A. MATERIAL:
1. FOR NEW DEVELOPMENTS.
a. GRANULAR. UTILIZE SPOIL IF IT MEETS THE GRADATION OF GRANULAR. MAXIMUM PARTICLE SIZE ALLOWED IS 3–INCHES. SCREEN EXISTING MATERIAL, OTHERWISE PROVIDE HAULED IN GRANULAR.
b. AGGREGATE SLURRY. USE WHERE PERMANENT ASPHALT PATCHES ARE BEING USED OR AS DIRECTED BY ENGINEER.
3. OTHER AREAS: SPOIL.
4. AROUND AND OVER UNDERGROUND FACILITIES: FOLLOW RESPECTIVE OWNER'S REQUIREMENTS.
B. CONSOLIDATION: EITHER OF THE FOLLOWING METHODS MAY BE USED FOR NEW DEVELOPMENTS OR VILLAGE PROJECTS.
1. FLOODING. FOLLOWING SWS 2.6.14(A). INSERTIONS SHALL BE MADE IN A GRID PATTERN WITH 3–FOOT MAXIMUM SPACING BOTH LONGITUDINALLY AND LATERALLY.
2. MECHANICAL COMPACTION. FOLLOW SWS 2.6.14(B) EXCEPT CONTRACTOR SHALL FURNISH AND PAY FOR COMPACTION TESTING SERVICES FROM A GEOTECHNICAL TESTING FIRM APPROVED BY THE VILLAGE.
a. IN ADDITION, ALL UTILITY STRUCTURES WITHIN THE VILLAGE RIGHT–OF–WAY OR UNDER OTHER PAVED AREAS SHALL BE FURTHER CONSOLIDATED BY FLOODING. FOLLOW SWS 2.6.12(A). INSERTIONS SHALL BE MADE IN A GRID PATTERN WITH 3–FOOT MAXIMUM SPACING BOTH LONGITUDINALLY AND LATERALLY TO A MINIMUM RADIUS OF 6 FEET FROM THE STRUCTURE.
3. REPAIR ANY TRENCH THAT SETTLES WITHIN ONE YEAR AFTER FINAL COMPLETION.

SECTION 33 11 00 HARTLAND WATER UTILITY DISTRIBUTION PIPING

PART 2 – PRODUCTS
2.02 WATER MAIN PIPE AND APPURTENANCES
A. PIPE, 3–INCH AND LARGER.
2. PVC:
a. FOR 3 THROUGH 12–INCH DIAMETER: AWWA C–900, CLASS 150, AND HAVE A MINIMUM PRESSURE CLASS OF 235 PSI AND A THICKNESS OF DR 18.
B. RESILIENT SEATED GATE VALVES:
h. ALL BOLTS SHALL BE 300 SERIES (18–8) STAINLESS STEEL.
i. AFC 2500 SERIES OR CLOW C2640.
C. VALVE ENCLOSURES:
1. BOXES:
b. MANUFACTURERS: TYLER 6860 OR EAST JORDAN.
d. VALVE BOX ADAPTERS: ADAPTOR, INC.
e. POLYETHYLENE FILM WRAP AROUND ALL VALVE BOXES.
D. HYDRANT ASSEMLBY.
1. FOLLOW AWWA C502 and SWS 8.26.0:
a. BURY DEPTHS: 7'–6" MINIMUM.
d. 5–1/4 INCH MINIMUM MAIN VALVE OPENING, NATIONAL STANDARD 2–1/2 INCH HOSE NOZZLE AND A 5–INCH STORZ NOZZLE–FACTORY INSTALLED. NOZZLES SHALL BE MECHANICALLY ATTACHED.
e. FACTORY PAINTED RED, WITH ALL CAPS PAINTED WHITE.
g. HYDRANTS SHALL BE FACTORY INSTALLED WITH 304 STAINLESS STEEL BOLTS BETWEEN BARREL AND SHOE.
h. UPPER STAND PIPE DIMENSION OF 16 INCHES.
2. AMERICAN FLOW CONTROL INC. (FORMERLY WATEROUS) WB–67 PACER.
4. MARKER FLAG:
a. "HYDRAFINDER".
b. 5 FEET LONG.
c. FIBERGLASS, RED AND WHITE.
d. SPRINGLOAD ACTION.
E. FITTINGS:
1. JOINTS:
a. BURIED: MECHANICAL
2. PRESSURE RATING
a. FULLY BODY: 250 PSI.
b. COMPACT: 350 PSI.
3. MATERIAL:
a.DUCTILE IRON:
1.) CLASS 52 WALL THICKNESS.
4.) COR–BLUE TEE BOLTS.
F. SERVICE LINES, VALVES AND FITTINGS.
1. LINES:
a. 2 INCH AND SMALLER SHALL FOLLOW SWS 8.24.0 AND:
2.) POLYETHYLENE (HDPE) SDR 9 CTS. STAINLESS STEEL STIFFENERS SHALL BE USED.
2. CORPORATION VALVES FOR COPPER OR HDPE:
b. COMPRESSION FITTINGS: MUELLER B–25008 (1, 1 1/2, OR 2 INCH), FORD FB1000–5Q FULL PORT (1 1/4 INCH ONLY).
c. USE COMPRESSION FITTINGS WITH STAINLESS STEEL STIFFENERS FOR HDPE.
3. CURB VALVES FOR COPPER OR HDPE:
b. COMPRESSION FITTINGS: MUELLER B–25155 (1 OR 1 1/2 INCH) MINNEAPOLIS PATTERN, APPROVED EQUAL WITH LID PENTAGONAL BRASS PLUG. A.Y. MCDONALD NOT ALLOWED. OR
4. CURB BOXES:
a. SCREW–ON STYLE.
b. MUELLER H–10300 WITH TRACER WIRE LID OR A.Y. MCDONALD 5610TW.
c. LID PENTAGONAL BRASS PLUG.
5. VALVE STEM EXTENSION TO WITHIN 18 INCHES OF SURFACE ON 1 AND 1–1/4–INCH CURB STOPS.
6. NO SPLICES WILL BE ALLOWED BETWEEN THE MAIN AND THE CURB STOP.
I. RESTRAINED JOINTS FOR PVC PIPE:
1. EBBA IRON SERIES 2000 PVC MEGALUG.
2. IN ADDITION TO MEGALUGS, HARDWOOD OR SOLID CONCRETE BLOCK BUTTRESSES MAY BE USED.

PART 3 – EXECUTION
3.01 WATER MAIN INSTALLATION
D. SET VALVE BOXES TO 1/2 BELOW FINISH GRADE AFTER CURB AND GUTTER PLACEMENT AND BEFORE ASPHALT PLACEMENT.
F. HYDRANTS:
1. LOCATE HYDRANT VALVES BEHIND CURB AS SHOWN ON DETAIL DRAWING WM–01. ALL JOINTS ALONG HYDRANT LEAD SHALL BE RESTRAINED.
b. RESTRAINED JOINTS FOR PVC PIPE:
1.) EBBA IRON SERIES 2000 PVC MEGALUG
3.) POSITION CENTERLINE OF LOWEST HYDRANT OUTLET NOZZLE 20 INCHES (PLUS–OR–MINUS) ABOVE FINISH GRADE.
G. BUTTRESSES: NO POURED BUTTRESSES WILL BE ALLOWED. HARDWOOD OR SOLID CONCRETE BLOCK BUTTRESSES MAY SUPPLEMENT MECHANICAL RESTRAINTS.
H. PRESSURE TEST PIPELINES FOLLOWING SWS 4.15.0. COMBINATION LEAK/PRESSURE TEST AT 150 PSI FOR TWO HOURS IS ALLOWED.
I. DISINFECT PIPELINES FOLLOWING SWS 4.3.12 AND 4.16.0 UTILIZING GRANULAR CHLORINE NOT TABLETS. AFTER SUCCESSFUL PRESSURE TEST, VILLAGE SHALL TAKE TWO SUCCESSIVE SAFE WATER SAMPLES PRIOR TO APPROVAL OF INSTALLED PIPE FIRST AFTER FLUSHING CHLORINE AND SECOND IN 24 HOURS.
J. ALL CHLORINATED, CHEMICALLY TREATED OR CONTAMINATED FLUSHING WATER SHALL BE DISCHARGED TO THE VILLAGE SANITARY SEWER VIA FLEXIBLE HOSE PROVIDED BY CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER PRIOR TO DISCHARGING TO SANITARY SEWER AND SHALL MONITOR/QUANTIFY AND REPORT THE TOTAL FLOWS TO THE OWNER. METER AVAILABLE FROM DPW OPERATIONS SUPERVISOR BY CALLING (414) 630–8167. ALL OTHER FLUSHING WATER MAY BE DISCHARGED TO GRASSED AREAS, PROVIDED THAT THERE IS NO CHANCE FOR NEGATIVE IMPACT TO PRIVATE PROPERTY. WATER WASTED FROM PIPELINE THAT MAY REACH BODIES OF SURFACE WATER MAY NOT CONTAIN ANY SUBSTANCES IN CONCENTRATIONS THAT ADVERSELY AFFECT THE WATER AS DETERMINED BY THE WISCONSIN ADMINISTRATIVE CODE NR 105 AND 106. FOR CHLORINE, NO TOTAL RESIDUAL CHLORINE MAY BE MEASURED IN WATER BEING DISCHARGED TO A SURFACE WATER. ADVISE THE VILLAGE OF PROPOSED DISCHARGE SCHEDULE TO ARRANGE ANY–REQUIRED MEASUREMENTS. CONTRACTOR SHALL REVIEW FLUSHING PLAN WITH VILLAGE AND RECEIVE APPROVAL PRIOR TO CHLORINATING AND FLUSHING ANY WATER MAIN.
K. SERVICES:
5. FOR 2 INCH AND SMALLER FOLLOW SWS PART V AND:
A. PROVIDE CURB VALVE AND BOX AT 1 FOOT INSIDE RIGHT–OF–WAY LINE OR AS DIRECTED BY ENGINEER.
B. PROVIDE 2 BY 6–INCH HARDWOOD MARKER AT CURB BOX LOCATION FROM INVERT OF SERVICE TO 2 FEET ABOVE FINISHED GRADE.
C. PROVIDE TAILPIECE. FOLLOW SWS DRAWING FILE NO. 51 DRAWING.
L. CONNECTIONS TO EXISTING MAINS AND SERVICES:
1. CONTRACTOR SHALL COORDINATE HIS WORK SCHEDULE WITH THE OWNER WHEN CONNECTING INTERSECTING STREETS TO THE NEW WATER MAIN IN ORDER TO MINIMIZE INCONVENIENCE AND DISRUPTION CAUSED BY THE TEMPORARY DISCONTINUANCE OF WATER SERVICE. THE CONTRACTOR SHALL NOTIFY THE VILLAGE AT LEAST 72 HOURS PRIOR TO SHUTTING OFF ANY WATER SERVICE. WATER SERVICE TO RESIDENCES SHALL NOT BE SHUT DOWN FOR A PERIOD LONGER THAN EIGHT (8) HOURS, NOR AFTER 4:00 P.M. OR ON WEEKENDS, WITHOUT APPROVAL OF THE OWNER. RESIDENTIAL WATER SERVICE MAY ONLY BE SHUT DOWN BETWEEN THE HOURS OF 7:30 A.M. TO 4:00 P.M., EXCEPT THAT RESIDENTIAL WATER SERVICES MAY BE SHUT DOWN OUTSIDE OF THESE HOURS WITH THE OWNER'S PERMISSION. WATER SERVICE TO BUSINESSES OR OTHER ENTITIES SHALL NOT BE SHUT DOWN FOR A PERIOD LONGER THAN TWO (2) HOURS UNLESS SATISFACTORY ARRANGEMENTS ARE MADE WITH THE BUSINESS OR OTHER ENTITIES AFFECTED. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO RETURN SERVICE AT THE END OF EACH WORKING DAY, INCLUDING THE USE OF TEMPORARY VALVES OR PLUGS.

SECTION 33 30 00 HARTLAND SANITARY SEWERAGE

PART 2 – PRODUCTS
2.01 GRAVITY SANITARY SEWER
A. PIPE. IF NOT SHOWN ON DRAWINGS, USE ONE TYPE FROM FOLLOWING:
1. POLYVINYL CHLORIDE AND FITTINGS SOLID WALL:
a. 4 THROUGH 15 INCH: TYPE PSM, FOLLOW ASTM D3034, SDR 35.
B. C900 PVC PIPE WITH DUCTILE IRON FITTINGS TO BE USED FOR EXTRA DEPTH SEWER, AS SHOWN ON THE DRAWINGS.
D. STRUCTURES:
1. MANHOLES:
a. FOLLOW SWS 3.5.0. AND SWS 8.39.0. NO STEPS ALLOWED IN TOP FIVE FEET OF STRUCTURE, MEASURED DOWN FROM RIM ELEVATION.
2. FRAME:
a. NEENAH R–1661–B (NON–MODERNIZED)
3. COVER: SELF SEALING, CONCEALED PICK HOLE, NO VENTS. FOLLOW SWS DRAWING FILE NO. 14B, APPROXIMATE WEIGHT 108 POUNDS.
4. PIPE TO MANHOLE CONNECTION: FOLLOW SWS 3.5.7.
5. FRAME AND CHIMNEY SEALANTS: FOLLOW SWS 8.42.0. BETWEEN GRADE RINGS AND CASTING. BUTYL RUBBER ROPE JOINT SEALANT (MASTIC) AND BACK PLASTER GROUT ON THE EXTERIOR OF THE STRUCTURE. NO BACK PLASTER INSIDE STRUCTURE. NO CHIMNEY SEALS.
6. GROUT: IPATOP PENNGROUT, NON–SHRINK CEMENTITIOUS GROUT BY IPA SYSTEMS.
9. EXTERNAL JOINT WRAP IF GROUND WATER IS ABOVE BOTTOM OF MANHOLE:
a. CADDILLOC, INC.
b. ESKY – WRAP.
c. MAC WRAP.

PART 3 – EXECUTION
3.01 GRAVITY SANITARY SEWER INSTALLATION
A. BEFORE STARTING, BULKHEAD AND/OR PLUG THE CONNECTION TO EXISTING SEWER. LEAVE IN PLACE UNTIL NEW SEWER HAS BEEN CLEANED AND ACCEPTED.
C. SET MANHOLE FRAMES TO 1/4 TO 1/2–INCH BELOW FINISH GRADE AFTER PLACEMENT OF CURB AND GUTTER AND BEFORE ASPHALT PLACEMENT. PROVIDE ASPHALT RAMPING IF ONLY BINDER IS BEING PAVED. SET GRADE RINGS AND CASTING FLANGES ONTO A BUTYL RUBBER ROPE JOINT SEALANT (MASTIC).
1. CONTRACTOR SHALL INSTALL CONCRETE COLLAR AT THEIR COST AROUND MANHOLE IF 1/4 TO 1/2– INCH TOLERANCE CANNOT BE ACHIEVED.
D. CHIMNEY:
2. NO STEPS ALLOWED.
3. USE SINGLE MONOLITHIC PRECAST CONCRETE RING AND TWO 2–INCH PRECAST CONCRETE ADJUSTING RINGS FOR MANHOLE CHIMNEY.
E. LATERALS. FOLLOW SWS PART V AND:
2. PROVIDE 2 BY 6–INCH HARDWOOD MARKER AT END OF LATERAL FROM INVERT TO LATERAL TO 2 FEET ABOVE FINISH GRADE.
G. AIR TEST: FOLLOW SWS 3.7.3.
H. GO–NO–GO TEST: FOLLOW SWS 3.2.6(i)4.
I. MANHOLE VACUUM TEST:
a. FOLLOW SWS 3.7.6.
b. TEST AFTER BACKFILLING.
J. USE EXTERNAL JOINT WRAP ON MANHOLE JOINTS BELOW THE GROUND WATER LEVEL.
K. TELEVISE MAINS AND RECORD VIDEO. USE SELF–PROPELLED CRAWLER CAMERA. DO NOT USE JETTER–PROPELLED CAMERA. FOLLOW SWS 7.1.2. PERFORM AFTER:
1. MANHOLE BENCHES INSTALLED.
L. CONVEY COPY OF VIDEO RECORD TO OWNER. FURNISH DVD.

SECTION 33 40 00 HARTLAND STORM DRAINAGE

PART 2 – PRODUCTS
2.01 STORM SEWER
B. STRUCTURES:
1. MANHOLES: NO STEPS ALLOWED IN TOP FIVE FEET OF STRUCTURE, MEASURED DOWN FROM RIM ELEVATION.
2. CATCH BASIN FRAME AND COVER: NEENAH R–3067–L FOR CURB SECTION AND NEENAH R–3290–C FOR DRIVEWAY SECTION.
3. CATCH BASIN: FOLLOW SWS 3.6.0 FOR PRECAST.
4. MANHOLE FRAME AND COVER: NEENAH R–1661 OPEN GRATE, APPROXIMATE WEIGHT 500 POUNDS.
6. INLET AND CATCH BASIN GROUT: IPATOP PENNGROUT, NON–SHRINK CEMENTITIOUS GROUT BY IPA SYSTEMS. BACKPLASTER ALLOWED ON EXTERIOR OF STRUCTURE ONLY.
7. BUTYL RUBBER (MASTIC) SHALL BE USED BETWEEN SECTIONS, ADJUSTING RINGS, AND FRAME. BACKPLASTER GROUT ON EXTERIOR OF STRUCTURE ONLY.
D. PIPE GRATES: FOLLOW SWS 8.16.0. 15–INCH ENDWALLS AND LARGER. WAUSAU CONCRETE PLATE A20 OR APPROVED EQUAL.

PART 3 – EXECUTION
3.01 STORM SEWER INSTALLATION
B. SET MANHOLE FRAMES TO 1/4 TO 1/2–INCH BELOW FINISH GRADE AFTER PLACEMENT OF CURB AND GUTTER AND BEFORE ASPHALT PLACEMENT. PROVIDE ASPHALT RAMPING IF ONLY BINDER IS BEING PAVED. SET CASTING FLANGES ONTO A CONTINUOUS LAYER OF MASTIC ROPE.
1. CONTRACTOR SHALL INSTALL CONCRETE COLLAR AT THEIR COST AROUND MANHOLE IF 1/4 TO 1/2– INCH TOLERANCE CANNOT BE ACHIEVED.
C. SET INLET FRAMES TO FINISH GRADE, UNLESS INTERIM INLETS ARE CALLED FOR ON THE DRAWINGS. SET CASTING FLANGES ONTO A CONTINUOUS LAYER OF MASTIC ROPE.

SECTION 34 71 00 HARTLAND ROADWAY CONSTRUCTION

PART 1 – GENERAL
1.01 SUBMITTALS
A. ACTION:
1. FOLLOW 01 33 00 FOR:
a. PRODUCT DATA.
b. SIEVE ANALYSES FROM STATE–CERTIFIED LABORATORY.
c. MIX DESIGN. SUBMIT AT LEAST 7 DAYS BEFORE PAVING:
1) ASPHALTIC CONCRETE PAVEMENT. FOLLOW STATE SPECIFICATION 460.2.7.
2) PORTLAND CEMENT CONCRETE CURB AND GUTTER, DRIVEWAY, SIDEWALK.
3) HIGH–EARLY–STRENGTH CONCRETE. FOLLOW STATE SPECIFICATION 415.2.1.
d. WISCONSIN DOT–VERIFIED HOT MIX ASPHALT (HMA) PAVEMENT MIX DESIGN FOR EACH PAVEMENT CLASSIFICATION SPECIFIED. SUBMIT AT LEAST 7 DAYS BEFORE PAVING.
B. INFORMATIONAL:
1. BASE COMPACTION TEST REPORTS: FOLLOW 01 43 26.
2. SUBBASE COMPACTION TEST REPORTS. FOLLOW 01 43 26.
3. PAVING MIX DELIVERY TICKETS.
a. ASPHALTIC MATERIALS:
1) FURNISH TICKET BEFORE PLACING MATERIAL.
2) DISPLAY ON TICKET:
a) PROJECT.
b) DATE.
c) TIME.
d) TICKET NUMBER.
e) TYPE OF MIX.
f) GROSS WEIGHT.
g) TARE WEIGHT.
h) NET WEIGHT.
i) JOB TOTAL.
b. CONCRETE:
1) FURNISH TICKETS AFTER DELIVERY.
2) DISPLAY ON TICKET:
a) PROJECT.
b) DATE.
c) TIME.
d) TICKET NUMBER.
e) CLASS OF CONCRETE.
f) GRADE OF CONCRETE.
g) CEMENT WEIGHT.
h) FLY ASH TYPE AND WEIGHT.
i) FINE AGGREGATE WEIGHT.
j) COARSE AGGREGATE WEIGHT.
k) GALLONS OF WATER.
l) TIME WATER WAS ADDED.
m) ADDITIVES.
4. BASE COURSE DELIVERY TICKETS THAT DISPLAY:
a. PROJECT.
b. DATE.
c. TICKET NUMBER.
d. TYPE OF MATERIAL.
e. GROSS WEIGHT.
f. TARE WEIGHT.
g. NET WEIGHT.
h. JOB TOTAL.
5. WRITTEN CONCRETE CYLINDER COMPRESSION TEST RESULTS. SUBMIT TO ENGINEER.
6. PROVIDE QUALITY MANAGEMENT PROGRAM FOLLOWING STATE SPECIFICATIONS 460.2.8.1. GENERAL AND 460.2.8.2. CONTRACTOR TESTING CONTROL PLAN INCLUDING:
a. DO NOT USE 460.2.8.3. DEPARTMENT TESTING.
1.07 QUALITY MANAGEMENT PROGRAM
A. AS A CONDITION OF ACCEPTANCE, ARRANGE, CONDUCT, AND PAY FOR TESTS NECESSARY TO DEMONSTRATE SATISFACTORY COMPLIANCE WITH CONTRACT DOCUMENTS. MAKE ADJUSTMENTS AT THE PLANT NECESSARY TO MEET REQUIREMENTS OF SPECIFICATIONS INCLUDING THE INSTRUCTIONS.
B. LAB TESTING:
1. TEST MATERIAL FROM THE PLANT AT LEAST ONCE A DAY.
2. MEET THE FOLLOWING PARAMETERS:
a. AIR VOIDS (VA): FOLLOW STATE SPECIFICATIONS 460.2.8.3.1.6 AND FOLLOW STATE SPECIFICATION–ADDITIONAL SPECIAL PROVISION 460.2.1 ISSUED UNDER ASP–6.
b. VOIDS IN THE MINERAL AGGREGATE (VMA): FOLLOW STATE SPECIFICATIONS TABLE 460–1.
c. GRADATIONS: JOB MIX FORMULA (JMF): FOLLOW PARAGRAPH 1 OF STATE SPECIFICATION–ADDITIONAL SPECIAL PROVISION 460.2.8.2.1.5 ISSUED UNDER ASP–6.
C. DENSITY TESTING:
1. TAKE A MINIMUM ONE TEST PER LOCATION AND ONE TEST PER 250 TONS.
a. USE NUCLEAR METHOD.
b. TARGETS SPECIFIED HEREINAFTER.
2. LOCATIONS WILL BE AT ENGINEER'S REQUEST.
D. RESULTS AND REPORTS:
1. MAKE FIELD ADJUSTMENTS TO KEEP MATERIAL WITHIN SPECIFIED TOLERANCES. IF TEST RESULTS FALL OUT OF TOLERANCE, INCREASE TESTING FREQUENCY UNTIL MATERIAL IS WITHIN SPECIFICATION.
2. SUBMIT TEST REPORTS WITHIN 48 HOURS TO ENGINEER.

PART 2 – PRODUCTS
2.01 EMBANKMENTS OR SUBGRADE FILL
A. FOLLOW STATE SPECIFICATIONS 207. DO NOT USE LOGS, STUMPS, BRUSH, PERISHABLE MATERIAL, FROZEN MATERIALS OR HUMUS–BEARING MATERIALS. NO STONES LARGER THAN 3–INCHES OR LUMPS ALLOWED WITHIN ENTIRE SUBGRADE OF ROADWAY, APPROACHES, CURB AND GUTTER, SIDEWALK OR PATHWAYS.
2.02 EXCAVATION OF SUBGRADE CUT.
A. FOLLOW STATE SPECIFICATIONS 205. NO ORGANIC MATERIAL OR STONES LARGER THAN 3–INCHES ALLOWED WITHIN UPPER 12–INCHES OF SUBGRADE OF ROADWAY, APPROACHES, CURB AND GUTTER, OR SIDEWALK OR PATHWAYS. SCARIFYING IS REQUIRED.
2.03 EXCAVATION BELOW SUBGRADE (EBS) BACKFILL
A. BREAKER RUN: STATE SPECIFICATION 311, MAXIMUM PARTICLE SIZE 3 INCHES.
B. GEOTEXTILE SUBGRADE STABILIZATION MATERIAL: FOLLOW STATE SPECIFICATION 645, TYPE SAS.
2.04 BASE COURSE
A. USE CRUSHED LIMESTONE TRAFFIC BOND. SEE HARTLAND DETAILS DRAWINGS FOR THICKNESS AND GRADATION.
2.05 ASPHALTIC CONCRETE PAVEMENT (HMA)
A. BINDER COURSE (LOWER AND INTERMEDIATE LAYERS): FOLLOW STATE SPECIFICATION 460.2 AND:
1. TYPE: SEE HARTLAND DETAIL DRAWINGS.
2. BINDER GRADATION: SEE HARTLAND DETAIL DRAWINGS.
3. MAXIMUM RECYCLED CONTENT: FOLLOW STATE SPECIFICATIONS 460.2.5.
B. SURFACE COURSE (UPPER LAYER): FOLLOW STATE SPECIFICATION 460.2 AND:
1. TYPE: SEE HARTLAND DETAIL DRAWINGS.
2. SURFACE GRADATION: SEE HARTLAND DETAIL DRAWINGS.
3. MAXIMUM RECYCLED MATERIAL CONTENT: FOLLOW STATE SPECIFICATIONS 460.2.5.
C. TACK COAT: FOLLOW STATE SPECIFICATION 455.2.5 ASPHALTIC MATERIAL CSS–1H.
2.06 INCIDENTAL CONSTRUCTION
A. CONCRETE CURB AND GUTTER:
1. FOLLOW STATE SPECIFICATIONS 601. MAXIMUM PARTICLE SIZE 3–INCHES, WITHIN SUBGRADE. FOLLOW 2.04 OF THIS SECTION FOR BASE COURSE.
2. DO NOT ADD CALCIUM CHLORIDE.
B. CONCRETE SIDEWALKS AND RAMPS:
1. FOLLOW STATE SPECIFICATIONS 602.2. MAXIMUM PARTICLE SIZE 3–INCHES, WITHIN SUBGRADE. FOLLOW 2.04 OF THIS SECTION FOR BASE COURSE.
2. DO NOT ADD CALCIUM CHLORIDE.
C. CURB RAMPS.
1. DETECTABLE WARNING FIELD COLOR: YELLOW.
2. FOLLOW STATE SPECIFICATIONS 602.2. FURNISH METAL DETECTABLE WARNING FIELD FROM THE DOT APPROVED PRODUCTS LIST FOR THE COLOR DEFINED ABOVE.
3. MAXIMUM PARTICLE SIZE 3–INCHES, WITHIN SUBGRADE. FOLLOW 2.04 OF THIS SECTION FOR BASE COURSE.
E. PAVEMENT MARKING: FOLLOW STATE SPECIFICATIONS 646:
1. EPOXY.
F. DRAINAGE FACILITIES:
1. CULVERT PIPE.
b. RCP IN VALLAGE RIGHT–OF–WAY
2. BEDDING: 3/8–INCH CLEAR STONE CHIPS.

PART 3 – EXECUTION
3.01 EARTHWORK
B. ROADWAY AND DRAINAGE EXCAVATION.
1. NO ORGANIC MATERIAL OR STONES LARGER THAN 3–INCHES ALLOWED WITHIN UPPER 12–INCHES OF SUBGRADE IN A CUT SECTION. NO ORGANIC MATERIAL OR STONES LARGER THAN 3–INCHES ALLOWED WITHIN ENTIRE SUBGRADE LAYER IN A FILL SECTION.
D. SUBGRADE PROOF ROLL: ALLOW ENGINEER TO INSPECT PREPARED SUBGRADE AND TO WITNESS PROOF ROLL TEST BY A FULLY LOADED QUAD AXLE DUMP TRUCK. RECONSTRUCT WHERE DEFLECTION IS GREATER THAN 1/2 INCH. ADDITIONAL PROOF ROLL TESTS WILL BE PERFORMED UNTIL ENTIRE SUBGRADE PASSES.
3.02 BASE COURSE
A. CRUSHED AGGREGATE BASE COURSE:
1. COMPACTION: STANDARD COMPACTION.
b. ALLOW ENGINEER TO INSPECT PREPARED BASE COURSE AND TO WITNESS PROOF ROLL TEST BY A FULLY LOADED QUAD AXLE DUMP TRUCK. RECONSTRUCT WHERE DEFLECTION IS GREATER THAN 1/2 INCH. ADDITIONAL PROOF ROLL TESTS WILL BE PERFORMED UNTIL ENTIRE BASE COURSE PASSES.
2. ALLOWABLE DEVIATION FROM DESIGN GRADE: 1/2 INCH.
3.05 INCIDENTAL CONSTRUCTION
A. CONCRETE CURB AND GUTTER:
1. JOINTS.
a. CONSTRUCT EXPANSION JOINTS AT:
1) 5 FEET FROM INLETS OR CATCH BASINS.
2) END OF CURVES.
3) 100 FEET MAXIMUM INTERVALS.
4) AT ONE END OF ALL CURB AND GUTTER REMOVED AND REPLACED.
5) SINGLE LAYER 1/2–INCH THICK EXPANSIVE MATERIAL.
b. CONSTRUCT CONTRACTION JOINTS AT 10 FEET SPACING.
1) MINIMUM SPACING: 6 FEET.
2) MAXIMUM SPACING: 12 FEET.
3) MATCH ABUTTING CONCRETE JOINTS.
4) DEPTH: MINIMUM 2 INCHES.
2. CURING:
a. APPLY IMPERVIOUS COATING WITHIN ONE HOUR OF PLACEMENT. COAT ALL SIDES OF CURB
B. SIDEWALKS
2. CURB RAMPS: FOLLOW STATE SPECIFICATIONS 602.3.
3. CURING:
a. FOLLOW STATE SPECIFICATIONS 415.3.12.
b. APPLY IMPERVIOUS COATING WITHIN ONE HOUR OF PLACEMENT.
c. COAT ALL SIDES OF SIDEWALK INCLUDING EXPOSED SURFACE AFTER FORMS REMOVED.
d. APPLY TWO COATS IN PERPENDICULAR DIRECTIONS.
C. CONCRETE DRIVE APPROACHES:
1. JOINTS.
a. EXPANSION JOINTS ABUTTING CURB OR WALK: USE 1/2–INCH EXPANSION JOINT FILLER.
2. CURING.
d. APPLY TWO COATS IN PERPENDICULAR DIRECTIONS.
F. DRAINAGE FACILITIES:
3. BACKFILL WITH:
a. EXCAVATED MATERIAL–WHEN GRANULAR GRADATION IS MET. MAXIMUM PARTICLE SIZE 3–INCHES.
b. GRANULAR BACKFILL.
4. CONSOLIDATE BACKFILL BY: FLOODING.

NOT FOR CONSTRUCTION - ISSUED FOR PERMIT

RINKA+
2020
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△ Revisions
Date Revised 10/13/2020

ISSUED FOR PERMIT

CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
HARTLAND, WI 53029

Date Issued: 09/10/2020

RINKA project #: 191010

Sheet Title

CONSTRUCTION SPECIFICATIONS

Sheet # **C6.00**

COMPLIANT DOCUMENTATION:

THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.

- STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH EDITION (SSSWCW)
- THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
- WDNR STORMWATER RUNOFF TECHNICAL STANDARDS.
- WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION.
- VILLAGE OF HARTLAND DEVELOPMENT STANDARDS, LATEST EDITION.

CONTRACTOR RESPONSIBILITY:

- EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD SURVEY. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.

- THE LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR(S) TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL REQUIRED PERMITS, UNLESS OTHERWISE SPECIFIED.

- THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AS CONSTRUCTION ACTIVITIES ARE COMPLETED TO PROVIDE CONSTRUCTION OVERSIGHT AND INSPECTION IN ACCORDANCE WITH THE COSTRUCTION INSPECTION PLAN.

- THE OWNER WILL PROVIDE ALL SURVEYING AND CONSTRUCTION STAKING FOR THIS CONTRACT. THE CONTRACTOR SHALL EXERCISE CARE AND DILIGENCE IN PROTECTING THE SAME. ANY EXPENSE INCURRED FOR ADDITIONAL RESTAKING CAUSED BY CONTRACTOR'S NEGLECT MAY BE CHARGED TO THE CONTRACTOR AND DEDUCTED FROM THE SUMS DUE HIM UNDER THIS CONTRACT.

- ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

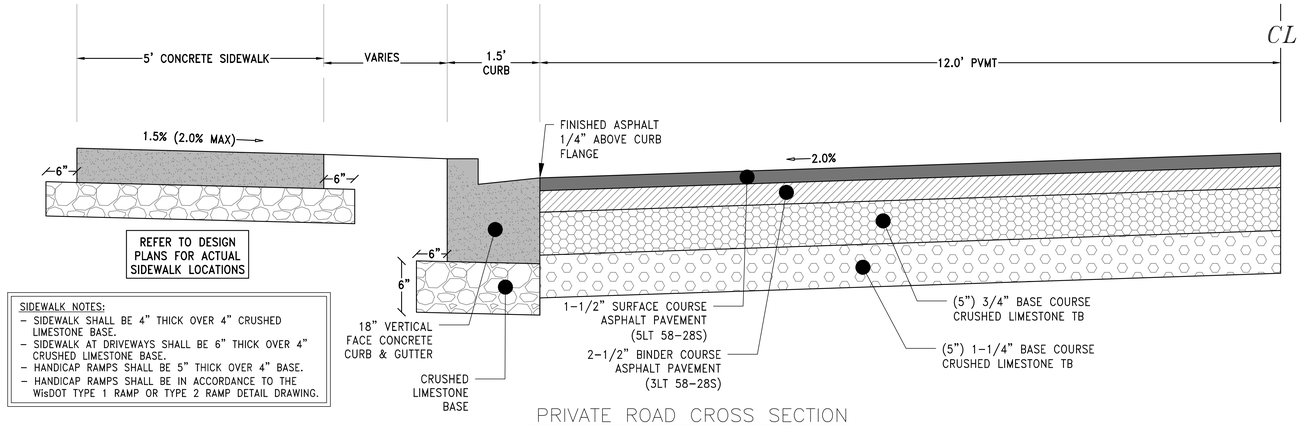
- CONTRACTOR SHALL BE PREPARED FOR DEWATERING CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE FOR DEWATERING AND REMOVAL OF ALL SEDIMENT PER CITY, COUNTY AND WDNR REQUIREMENTS PER TECHNICAL STANDARD 1061.

TRAFFIC CONTROL:

- PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE PROJECT SHALL BE LIMITED TO THE GRAVEL ENTRANCE TO THE PROPERTY.

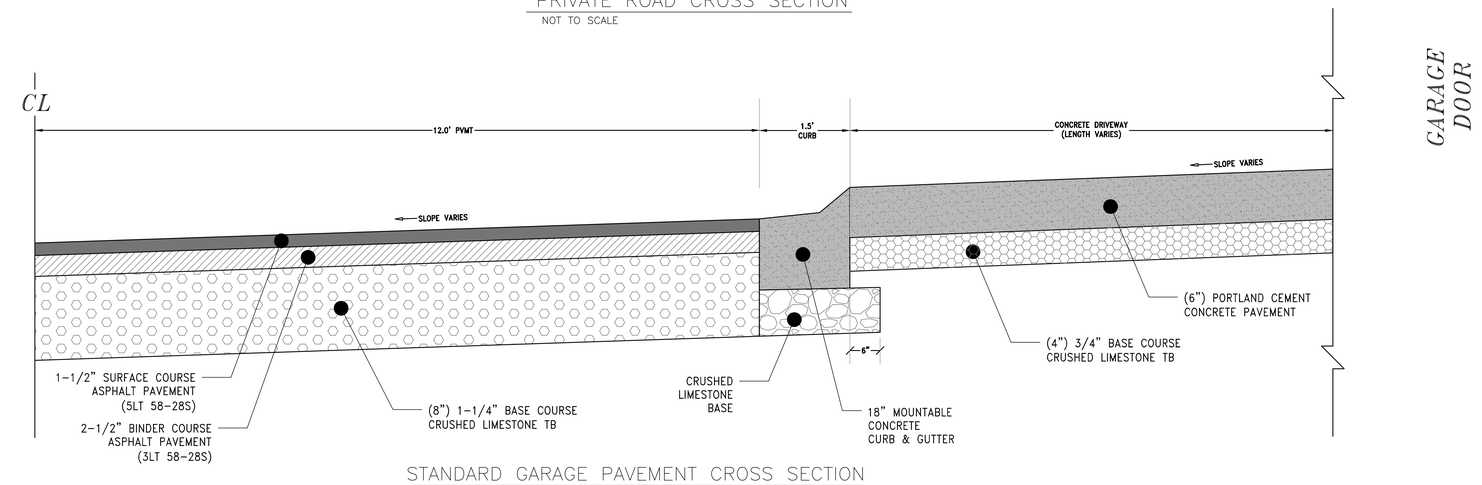
CONSTRUCTION NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, STATE OF WISCONSIN, LATEST EDITION, UNLESS OTHERWISE CALLED FOR ON THE PLANS, SPECIFICATIONS OR SPECIAL PROVISIONS.
2. ALL EROSION CONTROL MEASURES SPECIFIED ON THIS PLAN SHALL MEET THE DESIGN CRITERIA, STANDARDS AND SPECIFICATIONS AS SET FORTH IN THE DEPARTMENT OF NATURAL RESOURCES WISCONSIN BEST MANAGEMENT PRACTICE HANDBOOK AND TECHNICAL STANDARDS.
3. ALL EROSION CONTROL DEVICES (I.E., SILT FENCE, SILT SOCK, GRAVEL ENTRANCE, SILTATION BASIN, ETC.), SHALL BE INSTALLED PRIOR TO COMMENCING ANY GRADING OR UTILITY CONSTRUCTION. GRADING ASSOCIATED WITH INSTALLATION OF EROSION OR SEDIMENTARY PRACTICES MAY OCCUR CONCURRENTLY WITH INSTALLATION OF PRACTICES.
4. ALL ACTIVITIES ON THE SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME. REFER TO THE CONSTRUCTION SEQUENCING PLAN FOR ADDITIONAL INFORMATION.
5. THE OWNER IS RESPONSIBLE FOR OBTAINING A GRADING AND/OR EROSION CONTROL PERMIT (OR ANY OTHER APPLICABLE PERMITS) PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE, ALL TOWN UTILITY DEPARTMENTS, AND GOVERNMENT UNITS WHOSE PROPERTY MAY BE AFFECTED BY THE CONTRACTOR'S OPERATIONS AT LEAST THREE (3) DAYS BEFORE BREAKING GROUND. DIGGERS HOTLINE NUMBER IS 1-800-242-8511.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT AND PUBLIC ROADWAYS DURING CONSTRUCTION PER THE REQUIREMENTS SET FORTH BY THE LOCAL AND COUNTY AGENCIES. STREETS SHALL BE KEPT FREE OF SILT OR DIRT TRACKED FROM AREAS UNDER CONSTRUCTION BY SWEEPING OR OTHER APPROPRIATE MEASURES. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING OR OTHER APPROPRIATE METHODS.
8. INLETS SHALL BE PROTECTED WITH AN EROSION BARRIER MEETING WDNR TECHNICAL STANDARD 1060 UNTIL THE AREA HAS BEEN STABILIZED. FREQUENT INSPECTION AND TIMELY MAINTENANCE IS REQUIRED.
9. UPON COMPLETION OF THE WORK AS SPECIFIED, RESPREAD A MINIMUM OF FOUR (4") INCHES OF SALVAGED TOPSOIL OVER ALL DISTURBED AREAS AND PROVIDE SEED, FERTILIZER AND MULCH PER THE STANDARD SPECIFICATIONS.
10. ALL DISTURBED AREAS SHALL BE REVEGATATED WITHIN SEVEN DAYS AFTER BEING DISTURBED USING THE SEED MIX SPECIFIED ON THE PLANS.
11. ALL EROSION CONTROL DEVICES SHALL BE ROUTINELY INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND REPAIR BMP'S AS NEEDED.
12. REFER TO EROSION CONTROL PLAN FOR SITE EROSION CONTROL ELEMENTS, REQUIREMENTS.



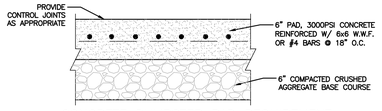
PRIVATE ROAD CROSS SECTION

NOT TO SCALE



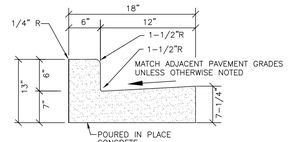
STANDARD GARAGE PAVEMENT CROSS SECTION

NOT TO SCALE



CONCRETE DUMPSTER PAD REQUIREMENT

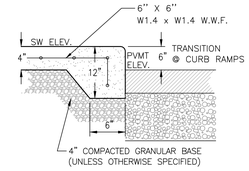
NO SCALE



18" CONCRETE CURB & GUTTER

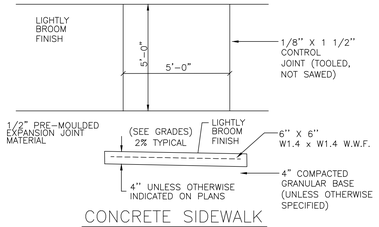
NO SCALE

NOTE: ALL PROPOSED CURB & GUTTER SHALL BE 18" CONCRETE CATCH CURB & GUTTER UNLESS OTHERWISE NOTED.



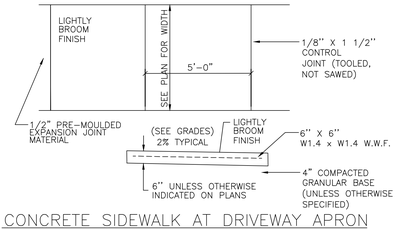
INTEGRAL SIDEWALK & BARRIER CURB

(WHERE SIDEWALK ADJOINS DRIVEWAYS/PARKING AREAS) NO SCALE



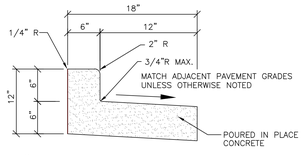
CONCRETE SIDEWALK

NO SCALE



CONCRETE SIDEWALK AT DRIVEWAY APRON

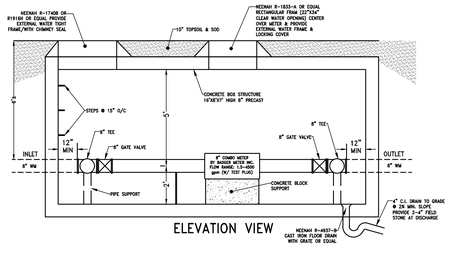
NO SCALE



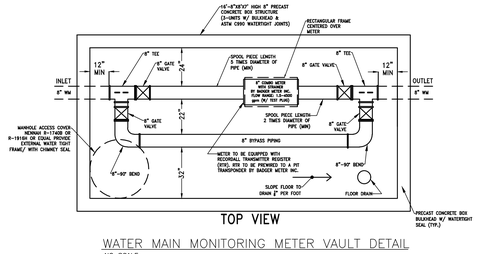
18" REJECT CURB & GUTTER DETAIL

NO SCALE

NOTE: SEE PROPOSED SITE PLAN FOR LIMITS OF PROPOSED REJECT CURB & GUTTER.



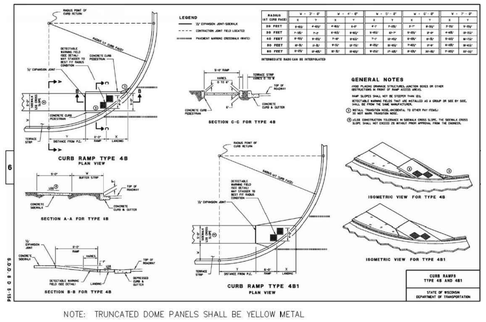
ELEVATION VIEW



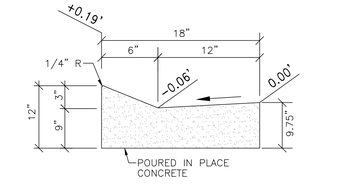
TOP VIEW

WATER MAIN MONITORING METER VAULT DETAIL

NO SCALE

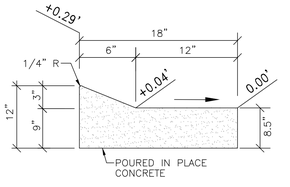


NOTE: TRUNCATED DOME PANELS SHALL BE YELLOW METAL



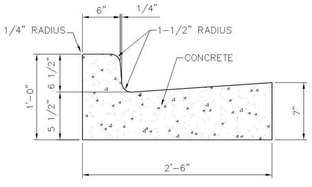
18" MOUNTABLE CURB & GUTTER

NO SCALE



18" MOUNTABLE CURB & GUTTER (REJECT)

NO SCALE



30" VERTICAL FACE CURB & GUTTER

02770C&G2 1 NO SCALE

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△ Revisions
Date Revised 10/13/2020

ISSUED FOR PERMIT

CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
HARTLAND, WI 53029

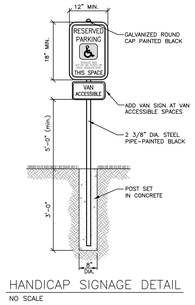
Date Issued: 09/10/2020

RINKA project #: 191010
Sheet Title

CONSTRUCTION DETAILS

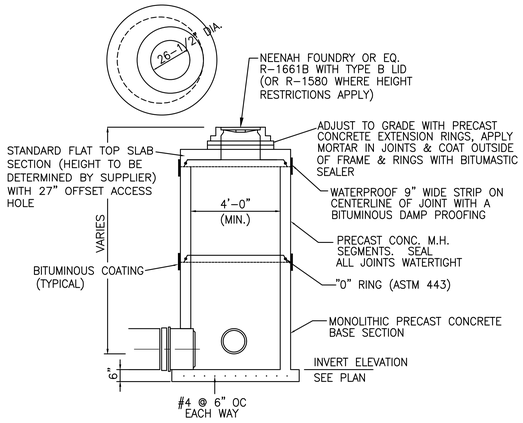
Sheet # **C6.01**

NOT FOR CONSTRUCTION - ISSUED FOR PERMIT



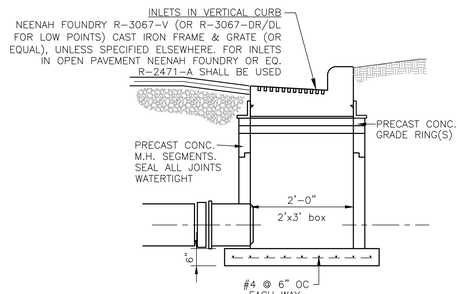
HANDICAP SIGNAGE DETAIL

NO SCALE



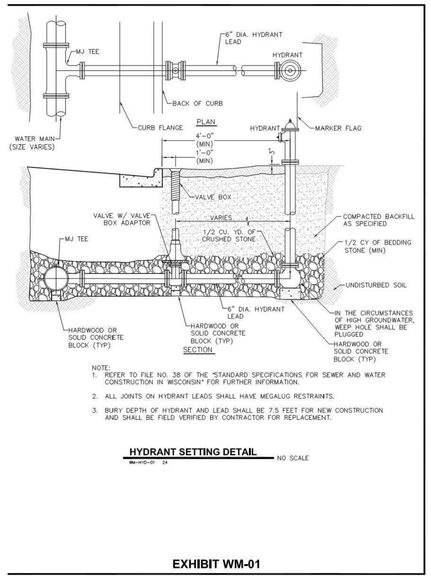
STORM MH DETAIL

NO SCALE



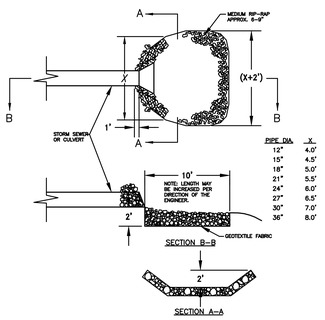
STORM SEWER INLET

NO SCALE

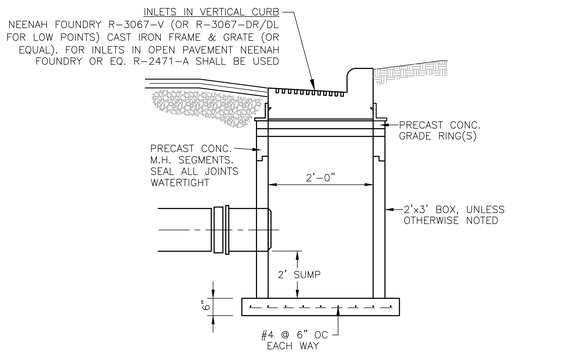


HYDRANT SETTING DETAIL NO SCALE

EXHIBIT WM-01



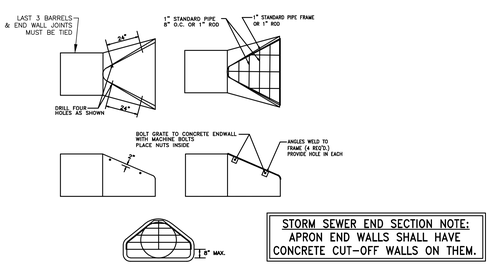
RIP-RAP DETAIL



STORM SEWER CATCH BASIN

NO SCALE

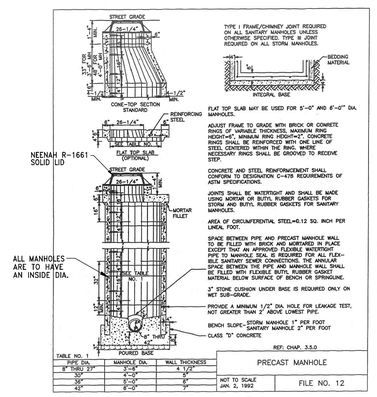
NOTE:
- PROVIDE 6" STONE UNDER BASE FOR CATCH BASINS WITHIN R.O.W., PER STATE SPECIFICATIONS.



STORM SEWER END SECTION NOTE:
APRON END WALLS SHALL HAVE CONCRETE CUT-OFF WALLS ON THEM.

PIPE GRATE DETAIL

NO SCALE



PRECAST MANHOLE

NOT TO SCALE JAN. 2, 1992 | FILE NO. 12

SANITARY MANHOLE DETAIL

NO SCALE

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2020
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△ Revisions
Date Revised 10/13/2020

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CATALYST HARTLAND APARTMENTS

CAMPUS DRIVE
HARTLAND, WI 53029

Date Issued: 09/10/2020

RINKA project #: 191010

Sheet Title

CONSTRUCTION DETAILS

Sheet #
C6.02