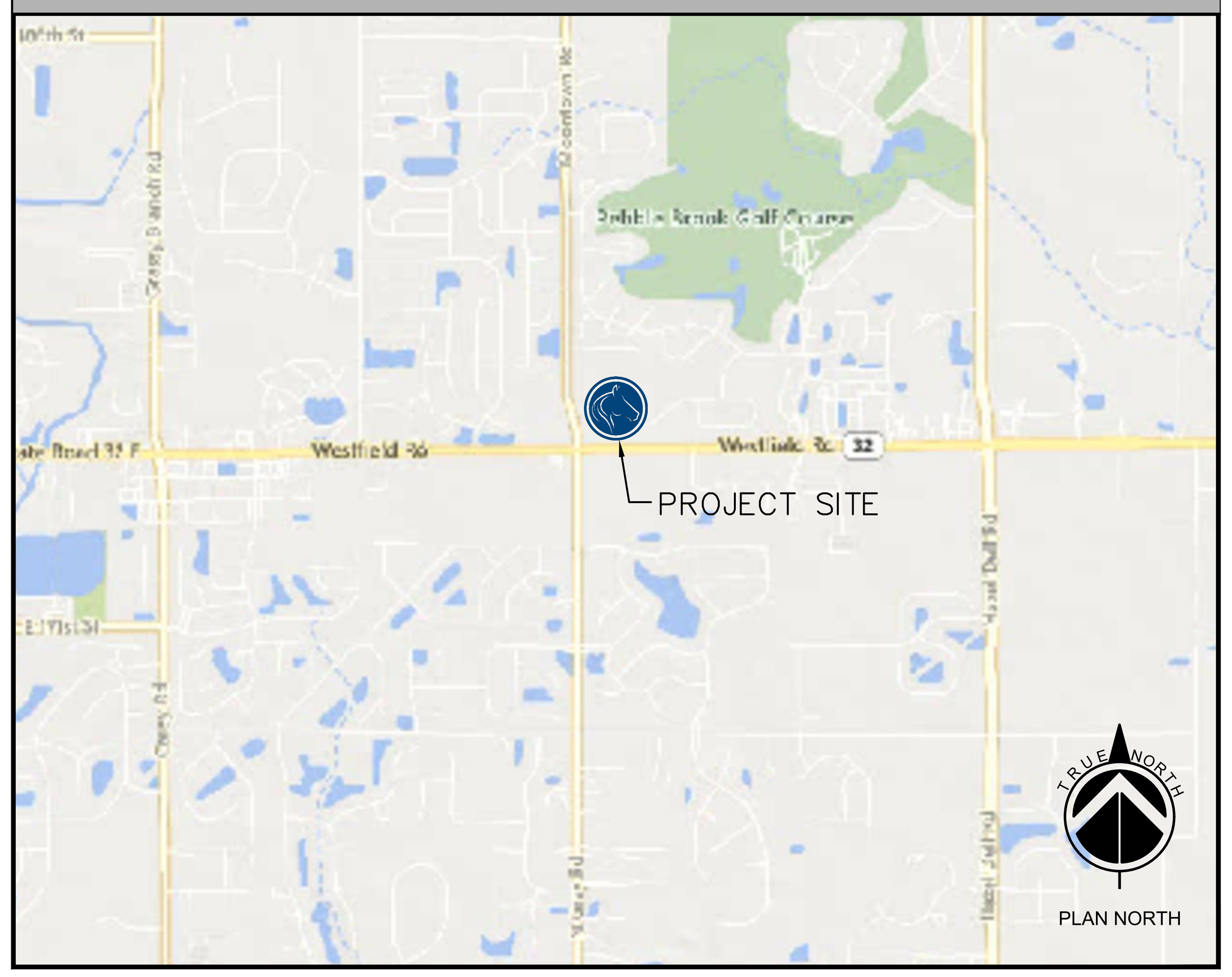
THE GODDARD SCHOOL®
FOR EARLY CHILDHOOD DEVELOPMENT

GODDARD SCHOOL – NOBLESVILLE
4903 CASTAMERE DRIVE
NOBLESVILLE, IN 46062
13,200 SQ. FT.

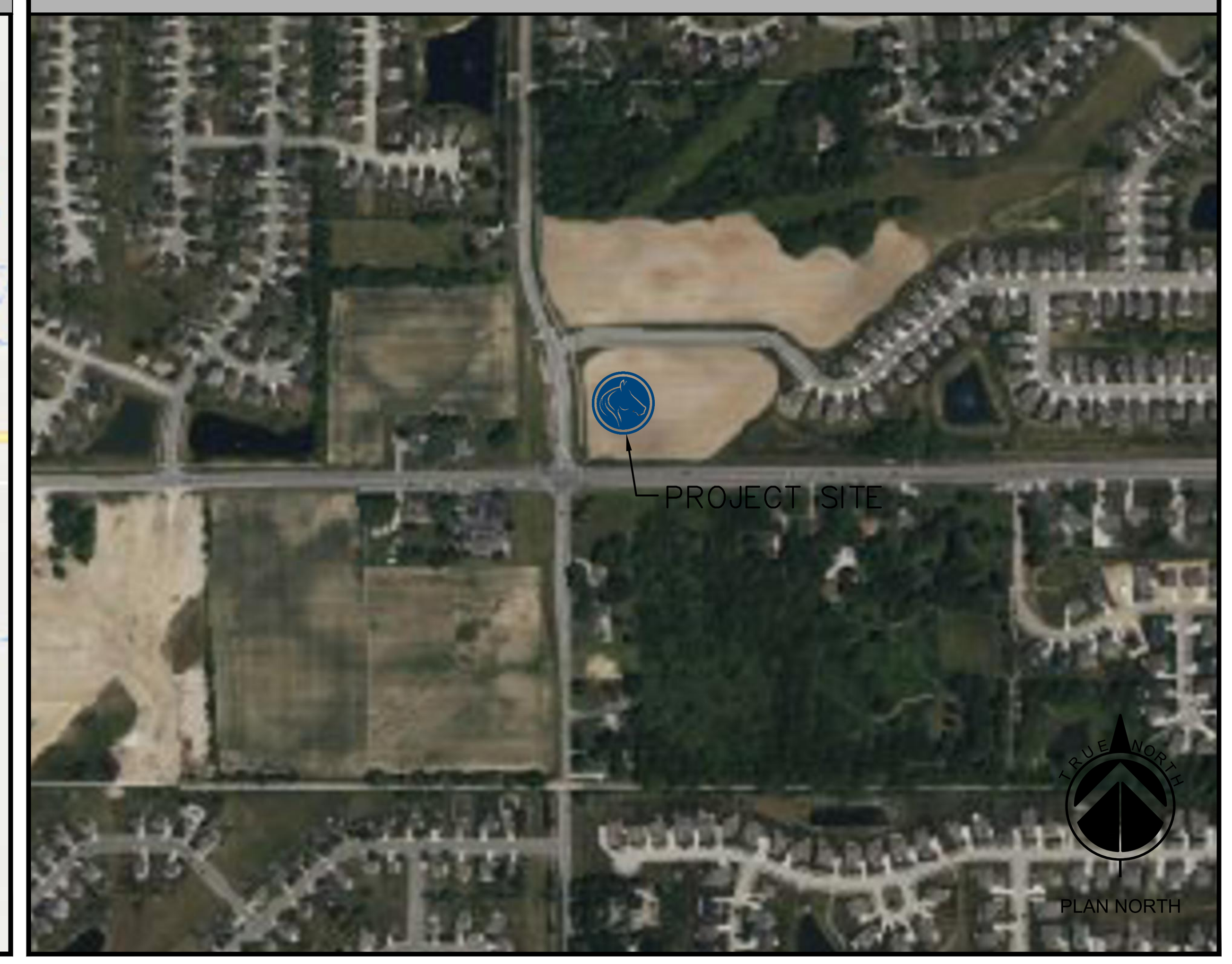
DRAWING INDEX:

	SHEET NUMBER & NAME	ISSUE TO GSI	PERMIT ISSUE 12/18	REV. #1	REV. #2	CONSTR. ISSUE	REV. #3
T1.1	CIVIL TITLE SHEET		●				
C1.1	EXISTING TOPOGRAPHY		●				
C1.2	DEMOLITION PLAN		●				
C2.1	SITE PLAN		●				
C2.2	SITE DIMENSION PLAN		●				
C2.3	DEVELOPMENT PLAN		●				
C2.5	SITE DETAILS		●				
C2.6	SITE DETAILS		●				
C3.1	GRADING PLAN		●				
C3.2	EMERGENCY FLOOD ROUTING PLAN		●				
C4.1	UTILITY PLAN		●				
C4.2	UTILITY PLAN		●				
C4.3	UTILITY PLAN		●				
C4.4	UTILITY PLAN		●				
C4.5	UTILITY DETAILS		●				
C4.6	UTILITY DETAILS		●				
C4.7	UTILITY DETAILS		●				
C4.8	UTILITY DETAILS		●				
C5.1	EROSION CONTROL PLAN		●				
C5.5	EROSION CONTROL DETAILS		●				
C5.9	STORM WATER POLLUTION PROTECTION PLAN		●				
L100	LANDSCAPE PLANTING PLAN		●				
L101	LANDSCAPE PLANTING DETAILS		●				
1-29	NOBLESVILLE, INDIANA CITY STANDARDS		●				

LOCATION MAP:



VICINITY MAP:



UTILITY CONTACTS

UTILITY CONTACTS			
UTILITY	COMPANY	CONTACT	PHONE
SANITARY SEWER	CITY OF NOBLESVILLE WASTEWATER DEPARTMENT	JONATHAN MIRGEAUX	(317) 776-6353
STORM DRAINAGE	CITY OF NOBLESVILLE ENGINEERING DEPARTMENT	ALISON KRUPSKI	(317) 776-6330
WATER SERVICE	CITIZENS ENERGY GROUP	MADISON STANSBERY	--
GAS SERVICE	VECTREN ENERGY	CATHY MIESSEN	(317) 776-5537
ELECTRIC SERVICE	DUKE ENERGY	MARC DILLER	(317) 776-5365
TELEPHONE	AT&T	BRIAN PETERS	(317) 252-4267
COMMUNICATION	MCLEOD-USA	TBD	--

DEVELOPMENT STANDARDS

SITE DETAILS	
ZONING DISTRICT	PB
LOT SIZE	2.44 ACRES
BUILDING SIZE	13,200 SQ FT
PERVIOUS SURFACE AREA	47,480 SQ FT
IMPERVIOUS SURFACE AREA	58,806 SQ FT
PARKING SPACES (including future)	66 SPACES
FRONT SETBACK	60 FEET
SIDE SETBACK	N/A
REAR SETBACK	15 FEET
FRONT MAX SETBACK (SR 32)	120 FEET

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN–SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

GODDARD PLAN REVIEW:

SIGNATURE: GSI PROJECT MANAGER DATE:

GSI REVIEW IS ONLY FOR **GENERAL CONFORMANCE** WITH GSI PROTOTYPE DRAWING AND SPECIFICATIONS. OWNER, DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT THE BUILDING MEETS ALL STATE AND LOCAL ORDINANCES, REGULATIONS, CODES, AND CHILD CARE LICENSING REQUIREMENTS IN EFFECT AT THE TIME OF CONSTRUCTION. ANY DEVIATION FROM THE GSI PROTOTYPE DRAWING AND SPECIFICATIONS MUST BE APPROVED BY THE GSI PM.

PLAN COMMISSION STATEMENT

AFTER HAVING GIVEN PUBLIC NOTICE OF THE TIME, PLACE, AND THE NATURE OF HEARING ON AN APPLICATION PENDING BEFORE THE NOBLESVILLE PLAN COMMISSION AND UNDER THE AUTHORITY PROVIDED BY THE STATE STATUE AND ALL ACTS AMENDATORY FORTH IN THE UNIFIED DEVELOPMENT ORDINANCE FOR THE CITY OF NOBLESVILLE, THIS PLAT WAS GRANTED APPROVAL BY A MAJORITY OF THE MEMBERS OF THE NOBLESVILLE PLAN COMMISSION AT THE MEETING HELD ON ____ DAY OF ______________, 2025.

PLAN COMMISSION

______________________ ______________________

PRESIDENT – MALINDA WILCOX SECRETARY – STEVEN R. HUNTLEY

LEGAL DESCRIPTION

A PART OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 19 NORTH, RANGE 3 EAST, NOBLESVILLE TOWNSHIP, HAMILTON COUNTY, INDIANA, AND A PART OF THE TRACT OF LAND GRANTED TO THELMA CURTS RECORDED AS INSTRUMENT NUMBER 892711 IN THE OFFICE OF THE RECORDER OF HAMILTON COUNTY, INDIANA, AS SHOWN ON THE ORIGINAL SURVEY, DATE DECEMBER 8, 2023 BY DONALD R. MOSSON, P.S. #9600013, WITH CENTRAL STATES CONSULTING, LLC, PROJECT NUMBER 23–077, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 33, TOWNSHIP 19 NORTH, RANGE 4 EAST; THENCE NORTH 89 DEGREES 33 MINUTES 30 SECONDS EAST (BASIS OF BEARINGS: INDIANA STATE PLANE, EAST ZONE, NAD 83) 255.07 FEET; THENCE NORTH 00 DEGREES 26 MINUTES 30 SECONDS WEST 47.86 FEET TOT HE POINT OF BEGINNING OF THIS DESCRIPTION ON THE NORTHERN RIGHT–OF–WAY OF STATE ROAD 32 (A.K.A. WESTFIELD ROAD) (RECORDED IN DEED BOOK 142, PAGE 347 IN SAID RECORDER'S OFFICE) AND AN EASTERN CORNER OF THE TRACT OF LAND GRANTED BY THE STATE OF INDIANA ("STATE TRACT") (RECORDED AS INSTRUMENT NUMBER 200300118061 IN THE RECORDER'S OFFICE) (THE FOLLOWING THREE (3) COURSES ARE ALONG SAID STATE TRACT); (ONE) THENCE NORTH 75 DEGREES 35 MINUTES 46 SECONDS WEST 61.09 FEET; (TWO) THENCE NORTH 00 DEGREES 39 MINUTES 20 SECONDS WEST 176.75 FEET TO THE POINT OF CURVATURE OF A NON–TANGENT CURVE CONCAVE TOT HE WEST, THE RADIUS THEREOF LYING SOUTH 89 DEGREES 35 MINUTES 30 SECONDS WEST 669.29 FEET FROM SAID POINT; (THREE) THENCE NORTHERLY 151.42 FEET ALONG SAID CURVE TO A POINT LAYING NORTH 76 DEGREES 37 MINUTES 43 SECONDS EAST 669.29 FEET FROM SAID RADIUS POINT, SAID POINT BEING A WESTERN CORNER OF THE SOUTHER RIGHT–OF–WAY OF CASTAMERE DRIVE AS DEDICATED PER CRANBROOK – SECTION 1 (RECORDED IN PLAT CABINET 5, SLIDE 842, AS INSTRUMENT NUMBER 2018023787 IN SAID RECORDER'S OFFICE) (THE FOLLOWING THREE (3) COURSES AREA ALONG SAID SOUTHERN RIGHT–OF–WAY LINE); (ONE) THENCE NORTH 17 DEGREES 43 MINUTES 13 SECONDS EAST 28.46 FEET (28.85 FEET – PLAT); (TWO) THENCE NORTH 73 DEGREES 44 MINUTES 18 SECONDS EAST 112.07 FEET; (THREE) THENCE SOUTH 89 DEGREES 41 MINUTES 36 SECONDS EAST 170.95 FEET; THENCE SOUTH 00 DEGREES 18 MINUTES 24 SECONDS WEST 397.60 FEET TO THE NORTHERN RIGHT–OF–WAY LINE OF SAID STATE ROAD 32; THENCE SOUTH 89 DEGREES 27 MINUTES 47 SECONDS WEST 205.76 FEET ALONG SAID RIGHT–OF–WAY LINE TO THE POINT OF BEGINNING, CONTAINING 106,294.4 SQUARE FEET (2.440 ACRES0, MORE OR LESS.

PROJECT CONTACTS:

OWNERS:
THE GODDARD SCHOOL OF CARMEL WEST
10445 COMMERCE DRIVE
CARMEL, INDIANA 46032
317.415.0408
Mitch.Manders@goddardschools.com
MITCH MANDERS

ARCHITECT:
JARMEL KIZEL ARCHITECTS AND ENGINEERS, INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
973.994.9669
cschweiker@jkarch.com
CHERYL SCHWEIKER

CIVIL ENGINEER:
VERIDUS GROUP, INC.
6280 SHADELAND AVENUE
INDIANAPOLIS, INDIANA 46220
317.512.6109
kcanter@theveridusgroup.com
KELLY CANTER

FRANCHISOR
GODDARD SYSTEMS INC.
1016 W. 9TH AVE
KING OF PRUSSIA, PA 19406
PH: 610.265.8510
PROJECT MANAGER: MICHAEL GLASER
mglaser@goddardsystems.com

PROJECT SCOPE OF WORK:

PROJECT DESCRIPTION AND SCOPE OF WORK.
THIS IS A 2.44 ACRES SITE WITH A 13,200 SF BUILDING, PARKING LOT, PLAY AREAS, AND ASSOCIATED UTILITY CONNECTIONS.

THE EXTERIOR SIGNAGE IS PER GODDARD DESIGN STANDARDS AS COORDINATED BY GODDARD UNDER A SEPARATE PERMIT SUBMITTAL. THE INTERIOR LAYOUT IS DESIGNED PER THE CURRENT GODDARD PROTOTYPE DESIGN STANDARDS.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
KELLY ANN CANTER
REGISTERED
No. PE[illegible]900367
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

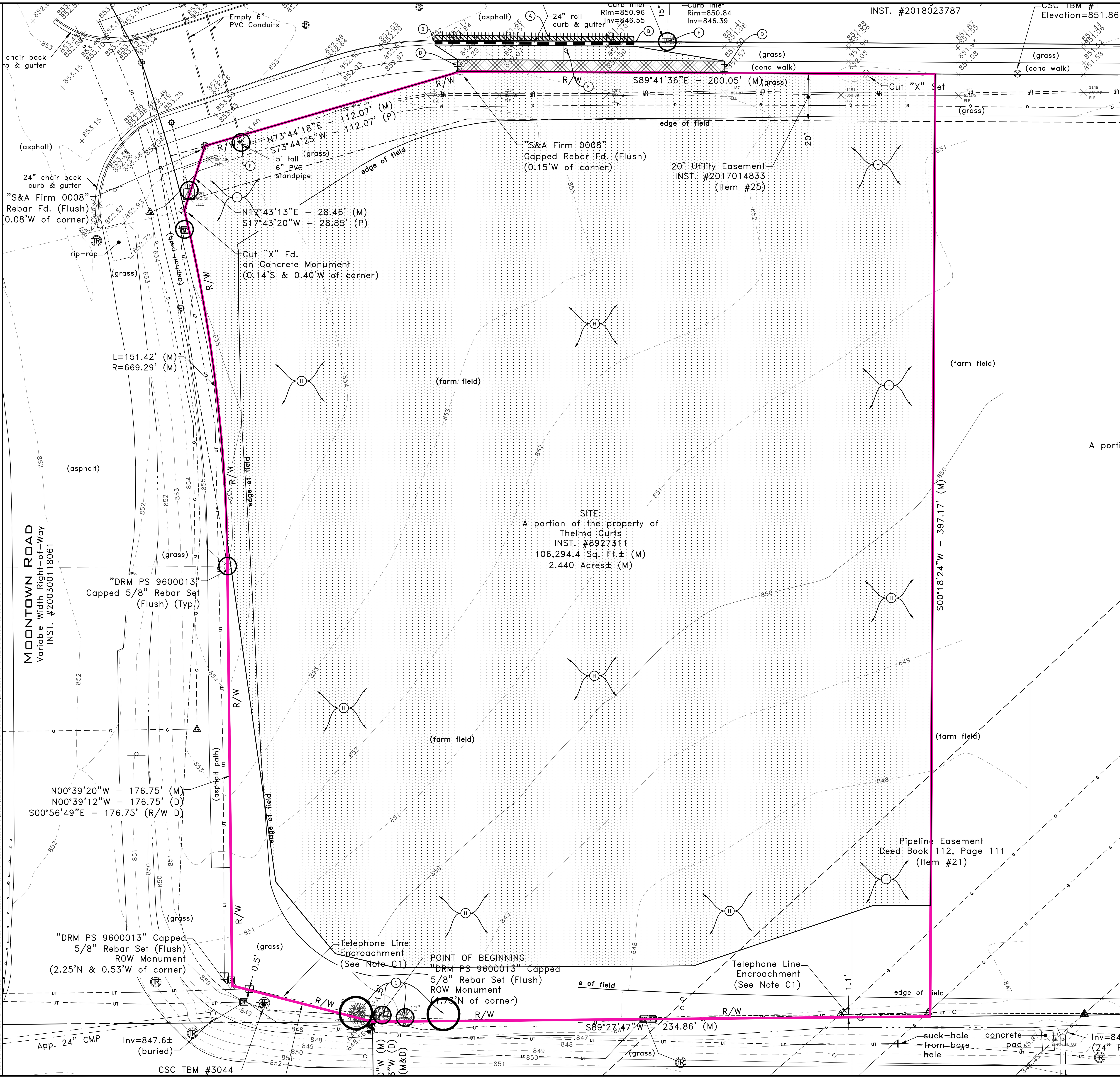
NUMB	DATE	DESCRIPTION

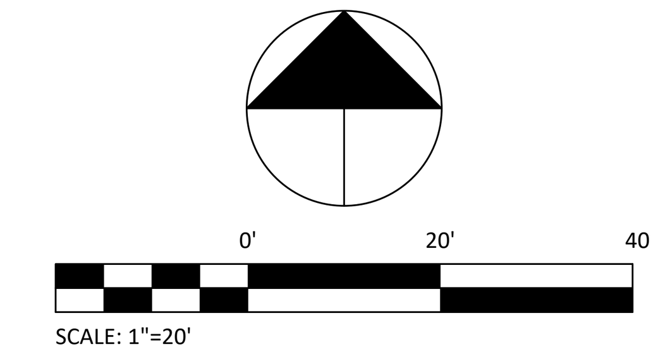
PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
CIVIL TITLE SHEET

SHEET NUMBER
T1.1

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 3:44 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\T1.1 TITLE SHEET.DWG





KEYNOTES

A. SAWCUT ASPHALT ROAD
B. SAWCUT AND REMOVE CURB AND GUTTER TO NEAREST JOINT LINE
C. PROTECT LANDSCAPING
D. SAWCUT AND REMOVE CONCRETE SIDEWALK TO NEAREST JOINT
E. REMOVE AND RESET TRAFFIC SIGN
F. PROTECT INLET AND PIPE
G. NOT USED
H. REMOVE VEGETATION

DEMOLITION LEGEND

- CONCRETE CURB & GUTTER
- SAWCUT PAVEMENT
- REMOVE UTILITY
- REMOVE ASPHALT
- REMOVE CONCRETE
- REMOVE VEGETATION AS NECESSARY FOR CONSTRUCTION
- OBJECT TO BE PROTECTED

EXISTING LEGEND

LEGEND:

DESCRIPTION:
SIGN / TWO POST SIGN
WATER VALVE/FIRE HYD/METER
TELE/FIBER OPTIC/GAS MARKER
GAS METER / VALVE
CLEAN-OUT
ELEC. METER BOX/TRANSFORMER
ELEC. / TELEPHONE PEDESTAL
GUARD POST/POST with LIGHT
AIR CONDITIONER / GENERATOR
MAGNAIL SET/FOUND
REBAR SET/FOUND
SQUARE / ROUND / CURB INLET
TRAFFIC/COMBO/ POWER POLE
LIGHT POLE - SQUARE / ROUND
CONIFEROUS TREE & SIZE
DECIDUOUS TREE & SIZE
DRAINAGE /SANITARY MANHOLE
COMBINATION/MISC. LID MANHOLE
BEEHIVE ROUND/SQUARE INLET
GUY WIRE / GROUND LIGHT
UNDG. WATER LINE
UNDG. GAS LINE
UNDG. TELEPHONE LINE
UNDG. ELECTRIC LINE
OVERHEAD ELE. & TEL
OVERHEAD ELE TEL & CAB
OVERHEAD ELECTRIC
VCP vitrified clay pipe
RCP reinforced concrete pipe
PVC polyethylene coated pipe
HDPE high-density polyethylene pipe
DI ductile iron pipe

BOUNDARY

Indiana 811 Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. THE DEMOLITION PLAN IS BASED ON INFORMATION PROVIDED ON THE TOPOGRAPHIC SURVEY. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND COMPARING THE DOCUMENTS TO THE FIELD CONDITIONS. IF DISCREPANCIES OCCUR, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.
2. THE CONTRACTOR SHALL REMOVE AND DISPOSE ALL EXISTING STRUCTURES, STONE, CONCRETE AND PAVEMENT OFF SITE UNLESS NOTED TO REMAIN ON THE CONTRACT DRAWINGS.
3. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION. IF A MONUMENT IS MOVED OR DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SURVEYOR OF RECORD.
4. THIS SECTION REQUIRES THE REMOVAL AND DISPOSAL, OFF SITE, OF THE FOLLOWING:
   a. SPECIFIED OBJECTS
   b. VEGETATION WITHIN THE WORK AREA.
5. CONTRACTOR SHALL SUBMIT THE FOLLOWING IN ACCORDANCE WITH CONDITIONS OF THE CONTRACT AND APPROPRIATE SPECIFICATION SECTIONS:
   a. A DETAILED SEQUENCE AND SCHEDULE OF DEMOLITION AND REMOVAL WORK TO BE COMPLETED.
6. JOB CONDITIONS
   a. SALVAGED MATERIALS: ITEMS OF SALVAGEABLE VALUE TO CONTRACTOR MAY BE REMOVED FROM SITE AS WORK PROGRESSES. TRANSPORT SALVAGED ITEMS FROM THE SITE AS THEY ARE REMOVED.
   b. STORAGE OR SALE OF REMOVED ITEMS WILL NOT BE PERMITTED ON SITE.
   c. EXPLOSIVES: USE OF ANY TYPE OF EXPLOSIVES WILL NOT BE PERMITTED.
   d. TRAFFIC: CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
   e. DO NOT CLOSE OR OBSTRUCT ROADS, STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRE BY GOVERNING AUTHORITIES.
   f. PROTECTIONS: ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION, CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS.
   g. DAMAGES: PROMPTLY REPAIR ANY DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION OPERATIONS.
   h. UTILITY SERVICES: MAINTAIN EXISTING UTILITIES TO STAY IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DISCONNECT, CAP AND REMOVE UTILITY SERVICES PER LOCAL REQUIREMENTS. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTIONS HAVE BEEN COMPLETED TO THE SATISFACTION OF LOCAL UTILITIES. (AS REQUIRED)
7. DEMOLITION
   a. BELOW-GRADE CONSTRUCTION: DEMOLISH FOUNDATION WALLS AND BELOW-GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS TO A DEPTH OF NOT LESS THAN 48 INCHES BELOW LOWEST FOUNDATION LEVEL.
   b. FILLING VOIDS: COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION. BACK FILL TO BE COMPACTED TO 90% STANDARD PROCTOR OR 98% ON NEW STRUCTURES.
8. DISPOSAL OF DEMOLISHED MATERIALS
   a. GENERAL: REMOVE WEEKLY FROM SITE ACCUMULATED DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS.
   b. REMOVAL: TRANSPORT MATERIALS REMOVED FROM DEMOLITION OPERATIONS AND LEGALLY DISPOSE OF OFF-SITE.
9. TEMPORARY TRAFFIC CONTROL DURING DEMOLITION AND CONSTRUCTION SHALL CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88), MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL

KELLY ANN CARTER — REGISTERED PROFESSIONAL ENGINEER — APPROVAL PENDING, NOT FOR CONSTRUCTION

12/18/2024

DATE	12/18/2024
PROJECT NO.	2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE

THE GODDARD SCHOOL FOR EARLY CHILDHOOD DEVELOPMENT

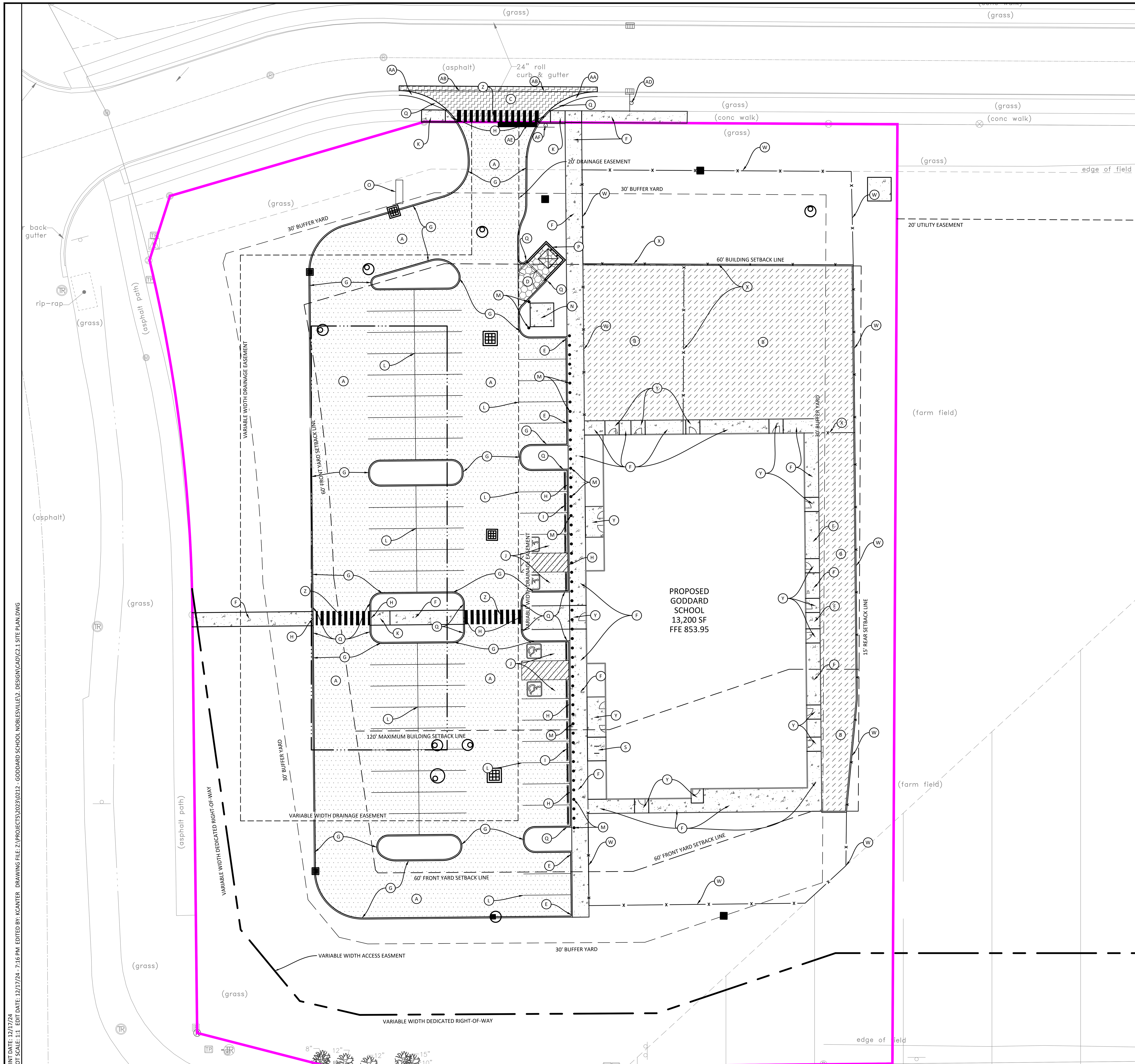
DETAILED DEVELOPMENT PLAN

4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE: DEMOLITION PLAN

SHEET NUMBER: C1.2

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 1:40 PM EDITED BY: ATALERO DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C1.2 DEMOLITION PLAN.DWG



SCALE: 1"=20'

KEYNOTES

A. LIGHT DUTY ASPHALT
B. SYNTHETIC TURF
C. RIGHT OF WAY ASPHALT
D. HEAVY DUTY CONCRETE
E. COMBINED CURB AND WALK, SEE GRADING PLAN
F. CONCRETE SIDEWALK
G. 6" CONCRETE CURB
H. FLUSH CURB
I. PRECAST CONCRETE WHEEL STOP
J. ACCESSIBLE PARKING WITH WHEEL STOP
K. ONE WAY DIRECTIONAL PERPENDICULAR CURB RAMP WITH BUFFER, MODIFIED
L. PARKING STRIPING
M. PROTECTIVE POST (BOLLARD)
N. 10'X10' TRANSFORMER PAD FOR UTILITY. SEE ELECTRICAL PLANS.
O. PERMANENT MONUMENT SIGN
P. DUMPSTER ENCLOSURE, SEE ARCHITECTURAL PLANS
Q. CONCRETE CURB TAPER, SEE GRADING PLAN
S. BIKE RACK
T. DOUBLE SWINGING GATES
U. SINGLE SWINGING GATE WITH PANIC DEVICE, KEYED ENTRANCE, AND ALARM
V. SINGLE SWINGING GATE WITH PANIC BAR, NO ALARM
W. 6' TALL AMERISTAR STEEL FENCE
X. 4' TALL AMERISTAR STEEL FENCE
Y. CONCRETE STOOP. SEE ARCHITECTURAL PLANS.
Z. CROSSWALK STRIPING
AA. TYPE 1 CONCRETE ROLL CURB
AB. CURB REVEAL THROUGH DRIVE APPROACH
AC. CURB TRANSITION
AD. RELOCATED SIGN
AE. STOP BAR
AF. STOP SIGN

SITE LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- SYNTHETIC TURF
- RIGHT-OF-WAY PAVEMENT
- CONCRETE
- HEAVY DUTY CONCRETE
- ADA ACCESSIBLE PARKING SPACE
- PROPOSED EASEMENT
- PROPOSED SETBACK
- PARCEL LINE
- UNDERGROUND DETENTION LIMITS

SITE DATA

SITE ZONING:	PB
PROJECT AREA:	2.44 ACRES
BUILDING AREA:	13,20 SF
STANDARD PARKING:	62
HANDICAP PARKING PROVIDED (includes 2 van accessible space)	4
TOTAL PROPOSED PARKING PROVIDED	66
REQUIRED PARKING: 1 SPACE PER 200 SF	66

REQUESTED WAIVERS

- TRASH RECEPTACLE IN FRONT YARDS
- FENCING IN NORTH BUFFER YARD
- MONUMENT SIGN IN NORTH BUFFER YARD
- MONUMENT SIGN CLOSER THAN 10' FROM RIGHT-OF-WAY
- FENCING IN EAST BUFFER YARD
- FOUNDATION PLANTINGS OUTSIDE OF FENCING, MORE THAN 10' FROM BUILDING FOUNDATION

Indiana 811. Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. ANY DISCREPANCY IN THE PLANS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER FOR REVIEW.
2. ALL WORK TO CONFORM TO STATE AND LOCAL REGULATIONS AS APPROPRIATE.
3. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT (EOP) OR FACE OF CURB, UNLESS NOTED OTHERWISE.
4. ALL DIMENSIONS ARE TO FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
5. ALL DIMENSIONS ARE PARALLEL WITH OR PERPENDICULAR TO BASE LINES, PROPERTY LINES OR BUILDING LINES UNLESS NOTED OTHERWISE.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO START CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
7. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF ALL UTILITIES AND ELEVATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY IS DISCOVERED. ANY DAMAGE TO EXISTING FACILITIES WILL BE CORRECT AND PAID BY THE CONTRACTOR.
8. CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS FROM NEW AREAS TO EXISTING FEATURES AS NECESSARY.
9. ALL EXCAVATED AREAS SHALL BE SEEDED AFTER FINISH GRADING OR IF LEFT UNDISTURBED FOR MORE THAN 7 DAYS UNLESS OTHERWISE NOTED. ALL NEW SEEDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOP SOIL.
10. ALL UTILITY TRENCHES UNDER AND WITHIN 5 FEET OF PAVEMENT SHALL BE COMPLETELY BACKFILLED WITH GRANULAR MATERIAL.
11. ALL SIDEWALKS SHALL COMPLY WITH PROWAG ADA STANDARDS, WITH A MAXIMUM CROSS SLOPE OF ¼ FT. & MAXIMUM LINEAR SLOPE OF 1:20.
12. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION. IF A CORNER MONUMENT IS MOVED OR DAMAGED, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OR SURVEYOR OF RECORD.
13. CONCRETE JOINTS TO BE PROVIDED IN ACCORDANCE WITH ACI GUIDELINES.
14. HORIZONTAL LAYOUT PLAN FOR CONSTRUCTION STAKING TO BE PROVIDED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
15. CONTRACTOR SHALL BE FAMILIAR WITH CITY OF NOLBESVILLE CONSTRUCTION STANDARDS, LATEST EDITION.
16. CONTRACT SHALL BE FAMILIAR WITH GODDARD STANDARDS AND SPECIFICATIONS.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
WV	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
GV	GAS METER / VALVE
C.O.	CLEAN-OUT
E	ELEC. METER BOX/TRANSFORMER
EP TP	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
AC GEN	AIR CONDITIONER / GENERATOR
M	MAGNAIL SET/FOUND
R	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
TR	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE - SQUARE / ROUND
12" 36"	CONIFEROUS TREE & SIZE DECIDUOUS TREE & SIZE
D S	DRAINAGE /SANITARY MANHOLE
C L	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
WTR	UNDG. WATER LINE
G	UNDG. GAS LINE
UT	UNDG. TELEPHONE LINE
UE	UNDG. ELECTRIC LINE
OET	OVERHEAD ELE. & TEL
OETC	OVERHEAD ELE TEL & CAB
OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE Kelly Canter

SEAL KELLY ANN CANTER REGISTERED No. PE1900367 STATE OF INDIANA PROFESSIONAL ENGINEER
APPROVAL PENDING NOT FOR CONSTRUCTION
12/18/2024

DATE	12/18/2024
PROJECT NO.	2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT

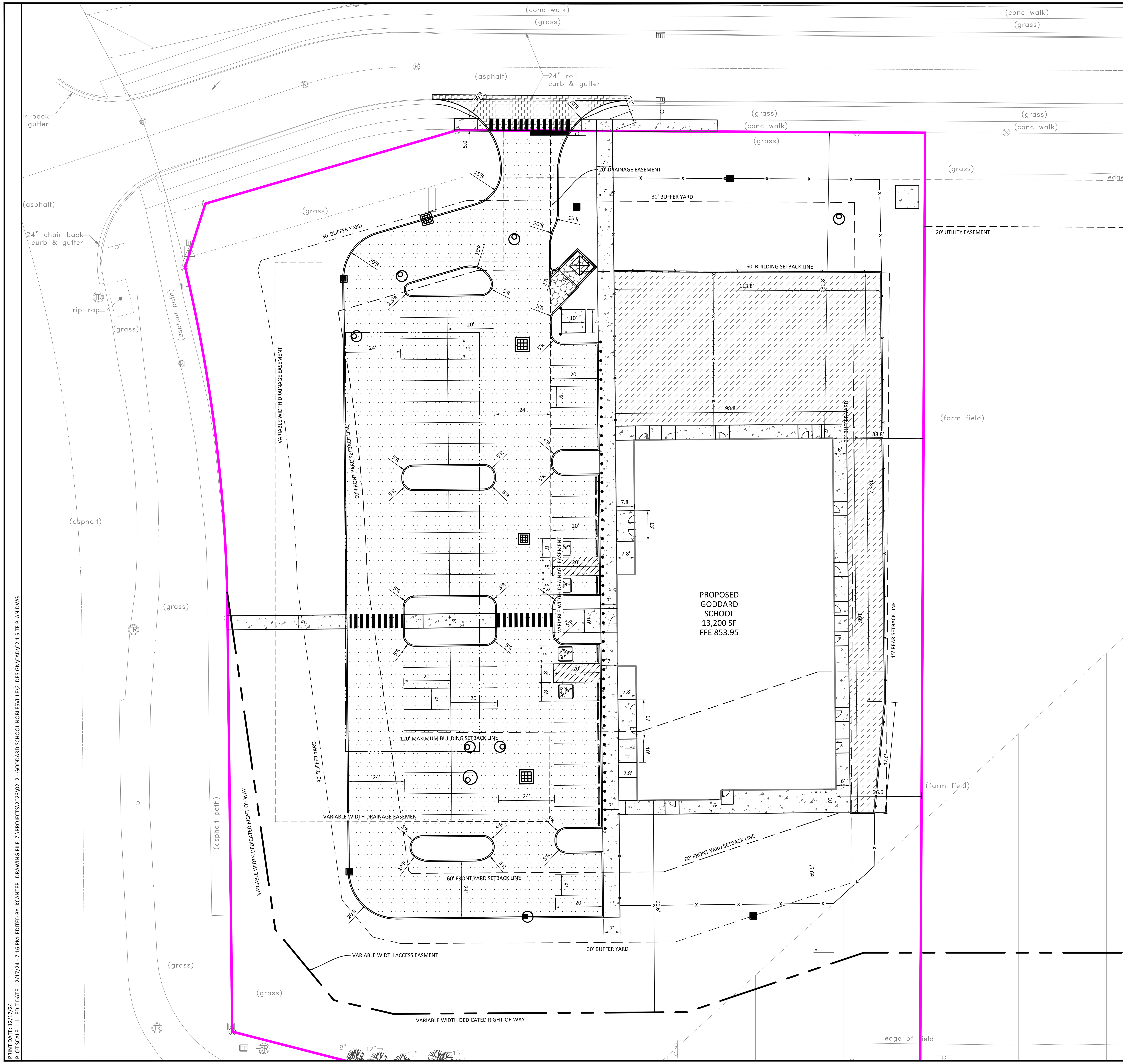
DETAILED DEVELOPMENT PLAN

4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE
SITE PLAN

SHEET NUMBER
C2.1

PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:16 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C2.1 SITE PLAN.DWG



BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

KEYNOTES

A. LIGHT DUTY ASPHALT
B. SYNTHETIC TURF
C. RIGHT OF WAY ASPHALT
D. HEAVY DUTY CONCRETE
E. COMBINED CURB AND WALK, SEE GRADING PLAN
F. CONCRETE SIDEWALK
G. 6" CONCRETE CURB
H. FLUSH CURB
I. PRECAST CONCRETE WHEEL STOP
J. ACCESSIBLE PARKING WITH WHEEL STOP
K. ONE WAY DIRECTIONAL PERPENDICULAR CURB RAMP WITH BUFFER, MODIFIED
L. PARKING STRIPING
M. PROTECTIVE POST (BOLLARD)
N. 10'X10' TRANSFORMER PAD FOR UTILITY. SEE ELECTRICAL PLANS.
O. PERMANENT MONUMENT SIGN
P. DUMPSTER ENCLOSURE, SEE ARCHITECTURAL PLANS
Q. CONCRETE CURB TAPER, SEE GRADING PLAN
S. BIKE RACK
T. DOUBLE SWINGING GATES
U. SINGLE SWINGING GATE WITH PANIC DEVICE, KEYED ENTRANCE, AND ALARM
V. SINGLE SWINGING GATE WITH PANIC BAR, NO ALARM
W. 6' TALL AMERISTAR STEEL FENCE
X. 4' TALL AMERISTAR STEEL FENCE
Y. CONCRETE STOOP. SEE ARCHITECTURAL PLANS.
Z. CROSSWALK STRIPING
AA. TYPE 1 CONCRETE ROLL CURB
AB. CURB REVEAL THROUGH DRIVE APPROACH
AC. CURB TRANSITION
AD. RELOCATED SIGN
AE. STOP BAR
AF. STOP SIGN

GENERAL NOTES

1. ANY DISCREPANCY IN THE PLANS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER FOR REVIEW.
2. ALL WORK TO CONFORM TO STATE AND LOCAL REGULATIONS AS APPROPRIATE.
3. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT (EOP) OR FACE OF CURB, UNLESS NOTED OTHERWISE.
4. ALL DIMENSIONS ARE TO FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
5. ALL DIMENSIONS ARE PARALLEL WITH OR PERPENDICULAR TO BASE LINES, PROPERTY LINES OR BUILDING LINES UNLESS NOTED OTHERWISE.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO START CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
7. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF ALL UTILITIES AND ELEVATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY IS DISCOVERED. ANY DAMAGE TO EXISTING FACILITIES WILL BE CORRECT AND PAID BY THE CONTRACTOR.
8. CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS FROM NEW AREAS TO EXISTING FEATURES AS NECESSARY.
9. ALL EXCAVATED AREAS SHALL BE SEEDED AFTER FINISH GRADING OR IF LEFT UNDISTURBED FOR MORE THAN 7 DAYS UNLESS OTHERWISE NOTED. ALL NEW SEEDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOP SOIL.
10. ALL UTILITY TRENCHES UNDER AND WITHIN 5 FEET OF PAVEMENT SHALL BE COMPLETELY BACKFILLED WITH GRANULAR MATERIAL.
11. ALL SIDEWALKS SHALL COMPLY WITH PROWAG ADA STANDARDS, WITH A MAXIMUM CROSS SLOPE OF ¼ FT. & MAXIMUM LINEAR SLOPE OF 1:20.
12. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION. IF A CORNER MONUMENT IS MOVED OR DAMAGED, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OR SURVEYOR OF RECORD.
13. CONCRETE JOINTS TO BE PROVIDED IN ACCORDANCE WITH ACI GUIDELINES.
14. HORIZONTAL LAYOUT PLAN FOR CONSTRUCTION STAKING TO BE PROVIDED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
15. CONTRACTOR SHALL BE FAMILIAR WITH CITY OF NOLBESVILLE CONSTRUCTION STANDARDS, LATEST EDITION.
16. CONTRACT SHALL BE FAMILIAR WITH GODDARD STANDARDS AND SPECIFICATIONS.

SITE LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- SYNTHETIC TURF
- RIGHT-OF-WAY PAVEMENT
- CONCRETE
- HEAVY DUTY CONCRETE
- ADA ACCESSIBLE PARKING SPACE
- PROPOSED EASEMENT
- PROPOSED SETBACK
- PARCEL LINE
- UNDERGROUND DETENTION LIMITS

EXISTING LEGEND

LEGEND:

DESCRIPTION:
SIGN / TWO POST SIGN
WATER VALVE/FIRE HYD/METER
TELE/FIBER OPTIC/GAS MARKER
GAS METER / VALVE
CLEAN-OUT
ELEC. METER BOX/TRANSFORMER
ELEC. / TELEPHONE PEDESTAL
GUARD POST/POST with LIGHT
AIR CONDITIONER / GENERATOR
MAGNAIL SET/FOUND
REBAR SET/FOUND
SQUARE / ROUND / CURB INLET
TRAFFIC/COMBO/ POWER POLE
LIGHT POLE - SQUARE / ROUND
CONIFEROUS TREE & SIZE (12") / DECIDUOUS TREE & SIZE (36")
DRAINAGE /SANITARY MANHOLE
COMBINATION/MISC. LID MANHOLE
BEEHIVE ROUND/SQUARE INLET
GUY WIRE / GROUND LIGHT
WTR — UNDG. WATER LINE
G — UNDG. GAS LINE
UT — UNDG. TELEPHONE LINE
UE — UNDG. ELECTRIC LINE
OET — OVERHEAD ELE. & TEL
OETC — OVERHEAD ELE TEL & CAB
OE — OVERHEAD ELECTRIC
VCP — vitrified clay pipe
RCP — reinforced concrete pipe
PVC — polyethylene coated pipe
HDPE — high-density polyethylene pipe
DI — ductile iron pipe

SITE DATA

SITE ZONING:	PB
PROJECT AREA:	2.44 ACRES
BUILDING AREA:	13,20 SF
STANDARD PARKING:	62
HANDICAP PARKING PROVIDED (includes 2 van accessible space)	4
TOTAL PROPOSED PARKING PROVIDED	66
REQUIRED PARKING: 1 SPACE PER 200 SF	66

REQUESTED WAIVERS

- TRASH RECEPTACLE IN FRONT YARDS
- FENCING IN NORTH BUFFER YARD
- MONUMENT SIGN IN NORTH BUFFER YARD
- MONUMENT SIGN CLOSER THAN 10' FROM RIGHT-OF-WAY
- FENCING IN EAST BUFFER YARD
- FOUNDATION PLANTINGS OUTSIDE OF FENCING, MORE THAN 10' FROM BUILDING FOUNDATION

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

Indiana 811
Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE Kelly Canter

SEAL
KELLY ANN CANTER
REGISTERED
No. PE11900367
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE

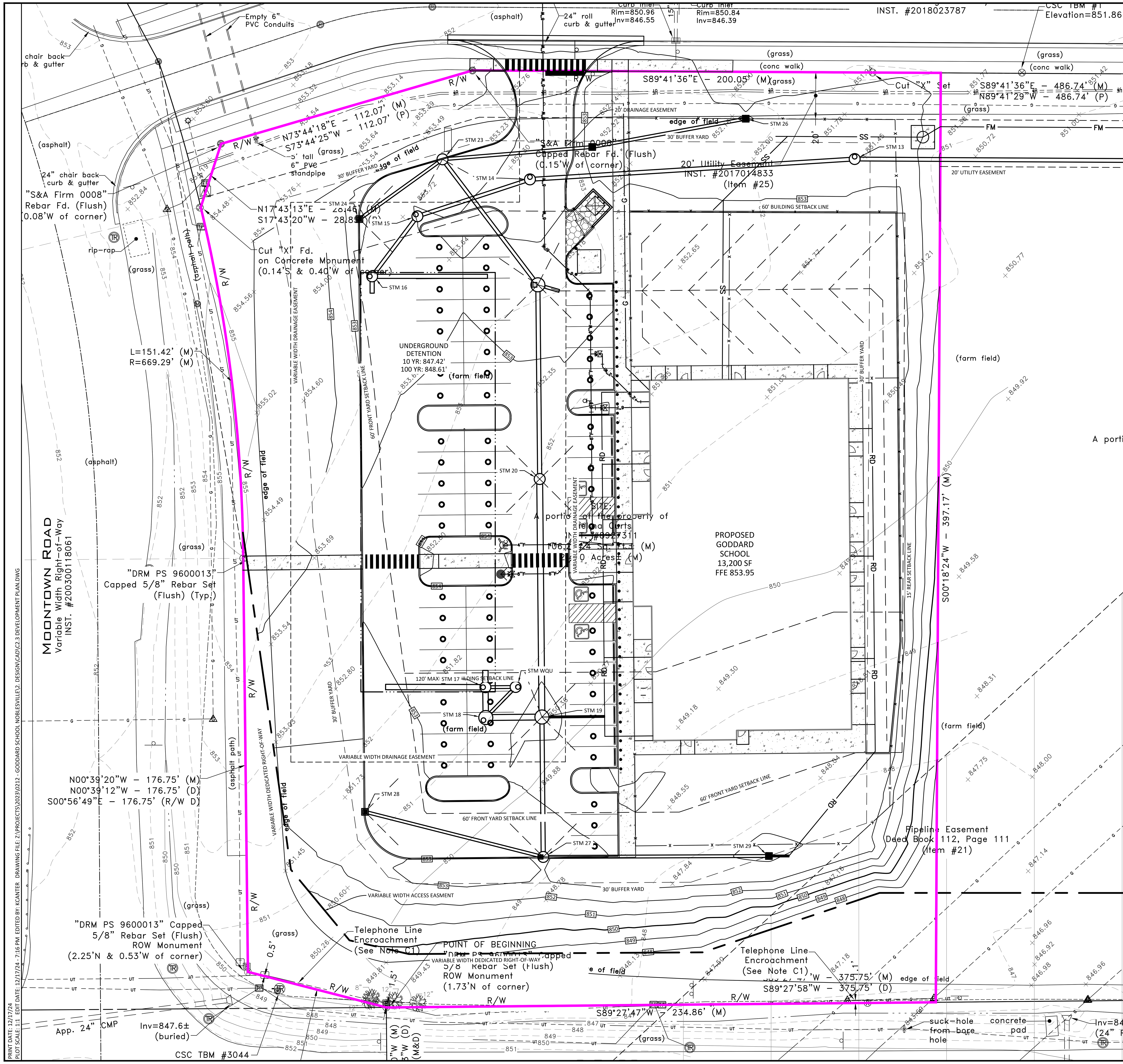
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT

DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE
SITE DIMENSION PLAN

SHEET NUMBER
C2.2

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:16 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C2.1 SITE PLAN.DWG



BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

SCALE: 1"=30'

SITE DATA

SITE ZONING:	PB
PROJECT AREA:	2.44 ACRES
BUILDING AREA:	13,20 SF
STANDARD PARKING:	62
HANDICAP PARKING PROVIDED (includes 2 van accessible space)	4
TOTAL PROPOSED PARKING PROVIDED	66
REQUIRED PARKING: 1 SPACE PER 200 SF	66

REQUESTED WAIVERS

- TRASH RECEPTACLE IN FRONT YARDS
- FENCING IN NORTH BUFFER YARD
- MONUMENT SIGN IN NORTH BUFFER YARD
- BUILDING IN EAST BUFFER YARD
- FENCING IN EAST BUFFER YARD
- FOUNDATION PLANTINGS OUTSIDE OF FENCING, MORE THAN 10' FROM BUILDING FOUNDATION

EXISTING LEGEND

LEGEND:

DESCRIPTION
SIGN / TWO POST SIGN
WATER VALVE/FIRE HYD/METER
TELE/FIBER OPTIC/GAS MARKER
GAS METER / VALVE
CLEAN-OUT
ELEC. METER BOX/TRANSFORMER
ELEC. / TELEPHONE PEDESTAL
GUARD POST/POST with LIGHT
AIR CONDITIONER / GENERATOR
MAGNAIL SET/FOUND
REBAR SET/FOUND
SQUARE / ROUND / CURB INLET
TRAFFIC/COMBO/ POWER POLE
LIGHT POLE - SQUARE / ROUND
CONIFEROUS TREE & SIZE
DECIDUOUS TREE & SIZE
DRAINAGE /SANITARY MANHOLE
COMBINATION/MISC. LID MANHOLE
BEEHIVE ROUND/SQUARE INLET
GUY WIRE / GROUND LIGHT
UNDG. WATER LINE
UNDG. GAS LINE
UNDG. TELEPHONE LINE
UNDG. ELECTRIC LINE
OVERHEAD ELE. & TEL
OVERHEAD ELE TEL & CAB
OVERHEAD ELECTRIC
VCP vitrified clay pipe
RCP reinforced concrete pipe
PVC polyethylene coated pipe
HDPE high-density polyethylene pipe
DI ductile iron pipe

Indiana 811
Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88) MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
KELLY ANN CANTER REGISTERED No. PE1900367 STATE OF INDIANA PROFESSIONAL ENGINEER
APPROVAL PENDING NOT FOR CONSTRUCTION

12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

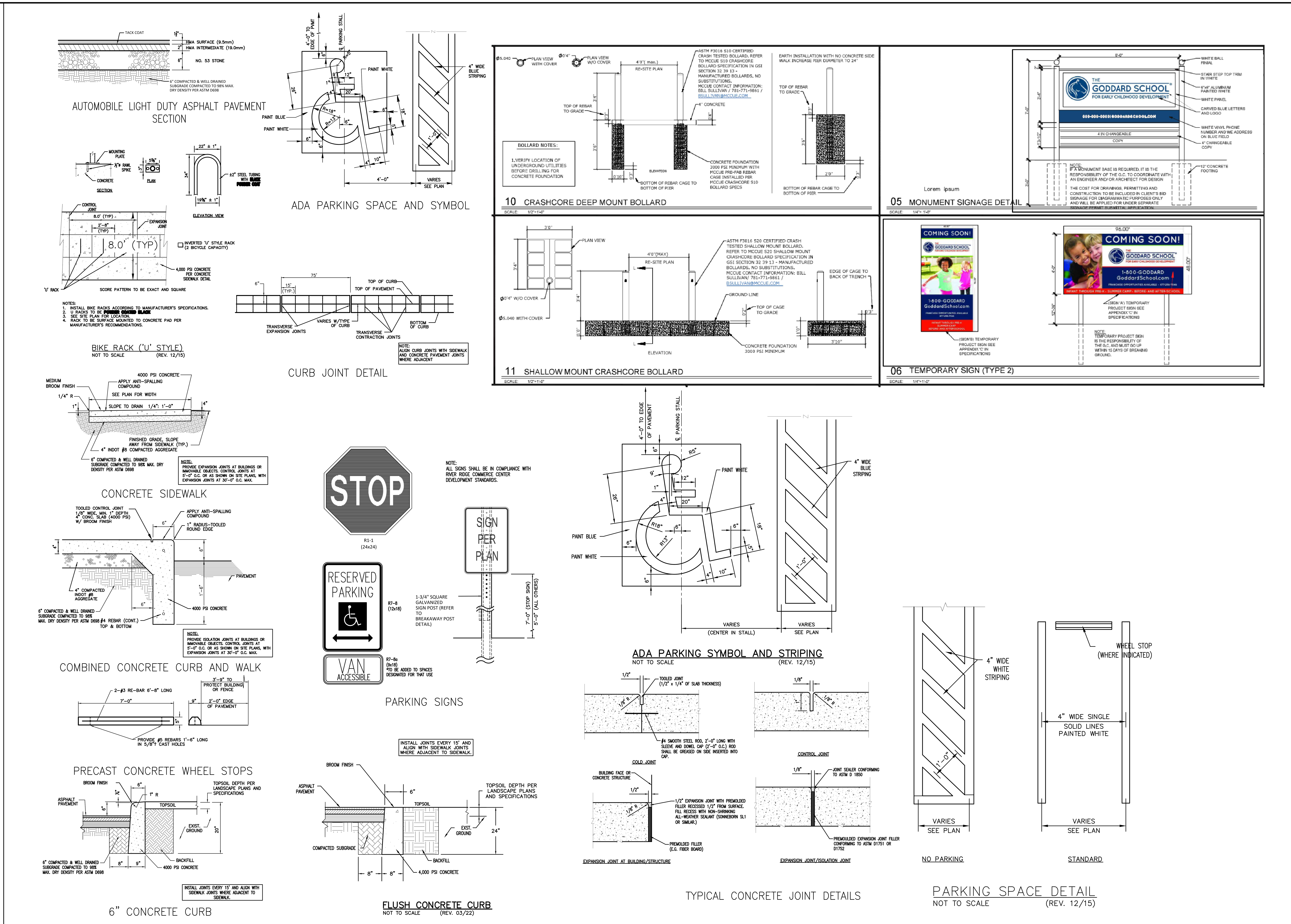
PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
DEVELOPMENT PLAN

SHEET NUMBER
C2.3

PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:16 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C2.3 DEVELOPMENT PLAN.DWG



AUTOMOBILE LIGHT DUTY ASPHALT PAVEMENT SECTION
TACK COAT
HMA SURFACE (9.5mm)
HMA INTERMEDIATE (19.0mm)
NO. 53 STONE
6" COMPACTED & WELL DRAINED SUBGRADE COMPACTED TO 98% MAX. DRY DENSITY PER ASTM D698
ADA PARKING SPACE AND SYMBOL
PAINT WHITE
PAINT BLUE
4" WIDE BLUE STRIPING
VARIES SEE PLAN
BIKE RACK ('U' STYLE)
NOT TO SCALE
(REV. 12/15)
INVERTED 'U' STYLE RACK (2 BICYCLE CAPACITY)
4,000 PSI CONCRETE PER CONCRETE SIDEWALK DETAIL
SCORE PATTERN TO BE EXACT AND SQUARE
NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. U RACKS TO BE POWDER COATED BLACK
3. SEE SITE PLAN FOR LOCATION.
4. RACK TO BE SURFACE MOUNTED TO CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS.
CURB JOINT DETAIL
TRANSVERSE EXPANSION JOINTS
TRANSVERSE CONTRACTION JOINTS
NOTE: ALIGN CURB JOINTS WITH SIDEWALK AND CONCRETE PAVEMENT JOINTS WHERE ADJACENT
10 CRASHCORE DEEP MOUNT BOLLARD
BOLLARD NOTES:
1. VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING FOR CONCRETE FOUNDATION
11 SHALLOW MOUNT CRASHCORE BOLLARD
05 MONUMENT SIGNAGE DETAIL
THE GODDARD SCHOOL FOR EARLY CHILDHOOD DEVELOPMENT
06 TEMPORARY SIGN (TYPE 2)
COMING SOON!
1-800-GODDARD
GoddardSchool.com
CONCRETE SIDEWALK
COMBINED CONCRETE CURB AND WALK
PRECAST CONCRETE WHEEL STOPS
6" CONCRETE CURB
STOP
R1-1 (24x24)
RESERVED PARKING
R7-8 (12x18)
VAN ACCESSIBLE
R7-8a (9x18)
SIGN PER PLAN
NOTE: ALL SIGNS SHALL BE IN COMPLIANCE WITH RIVER RIDGE COMMERCE CENTER DEVELOPMENT STANDARDS.
PARKING SIGNS
FLUSH CONCRETE CURB
NOT TO SCALE (REV. 03/22)
ADA PARKING SYMBOL AND STRIPING
NOT TO SCALE (REV. 12/15)
COLD JOINT
CONTROL JOINT
EXPANSION JOINT AT BUILDING/STRUCTURE
EXPANSION JOINT/ISOLATION JOINT
TYPICAL CONCRETE JOINT DETAILS
4" WIDE WHITE STRIPING
WHEEL STOP (WHERE INDICATED)
4" WIDE SINGLE SOLID LINES PAINTED WHITE
NO PARKING
STANDARD
PARKING SPACE DETAIL
NOT TO SCALE (REV. 12/15)

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL

12/18/2024

DATE 12/18/2024

PROJECT NO. 2023.0212

REVISIONS

PROJECT TITLE

THE GODDARD SCHOOL FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

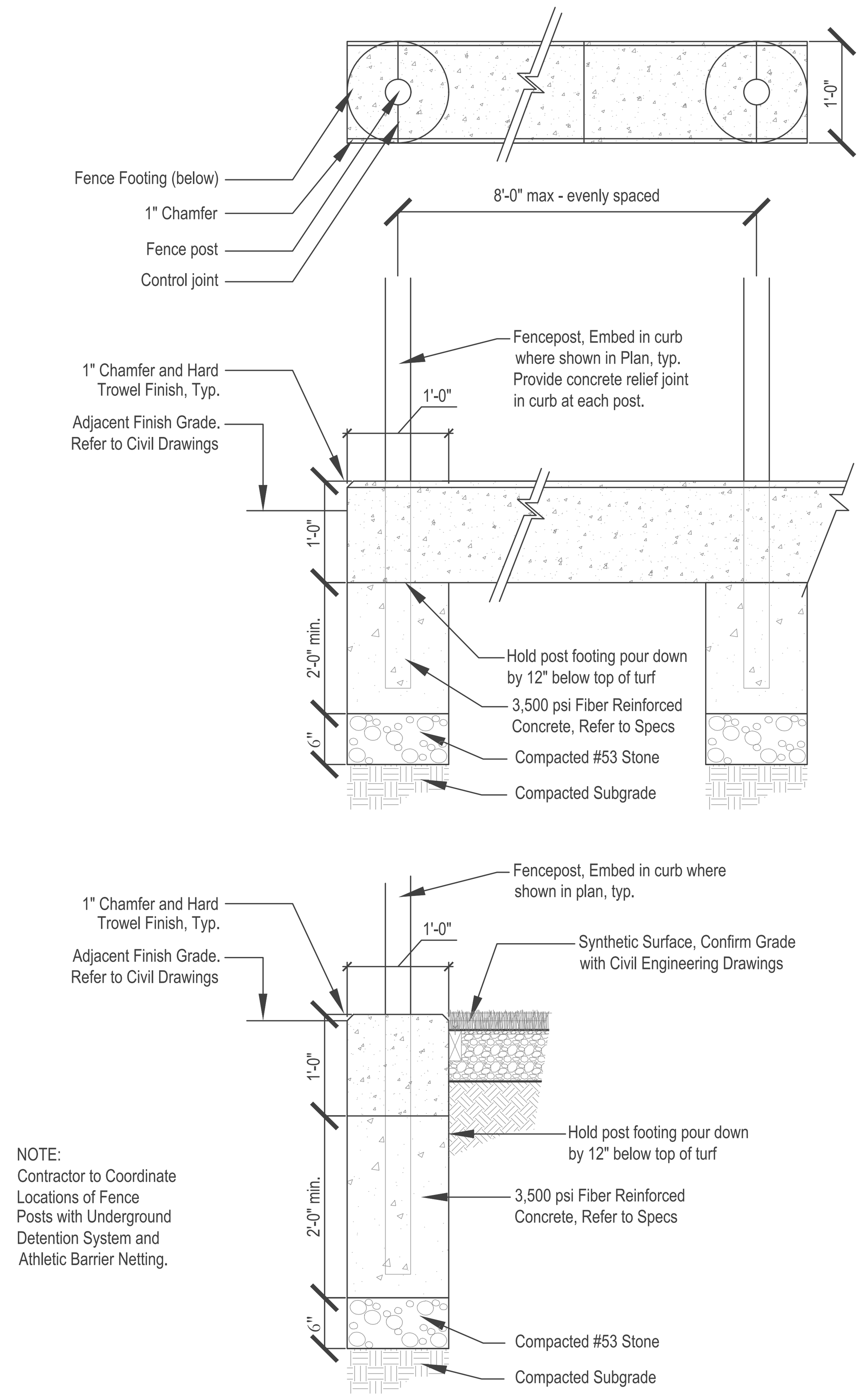
SHEET TITLE

SITE DETAILS

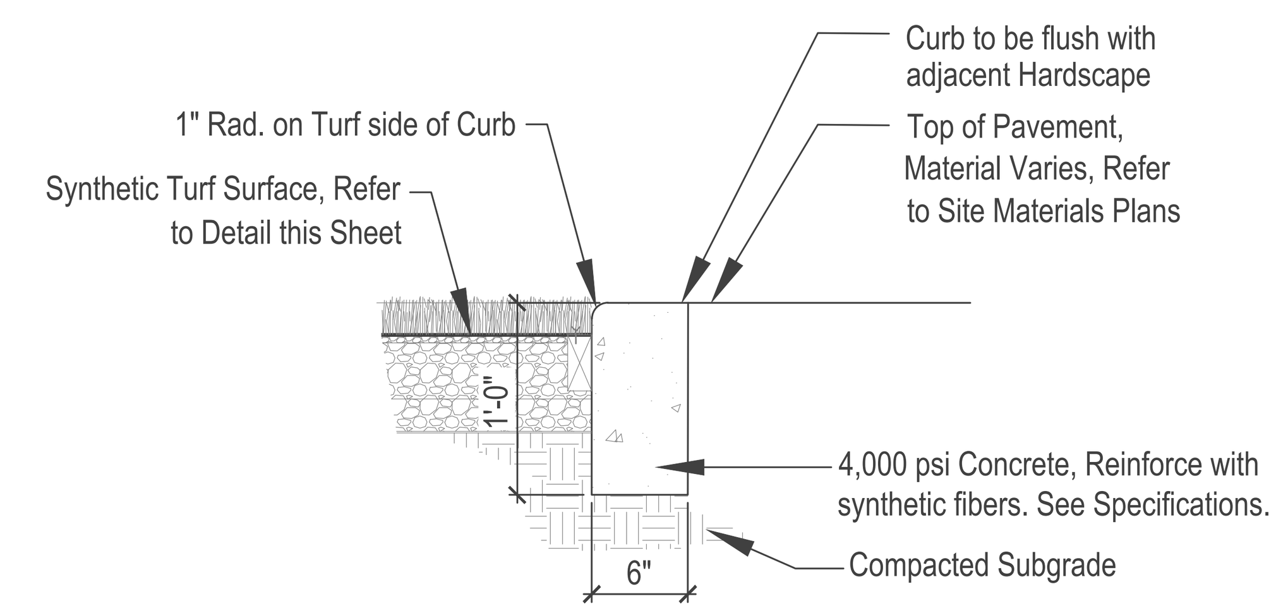
SHEET NUMBER

C2.5

PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 12:56 PM EDITED BY: KCANTER DRAWING FILE: \\10.0.0.12\CLIENT FILES\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C2.5 SITE DETAILS.DWG

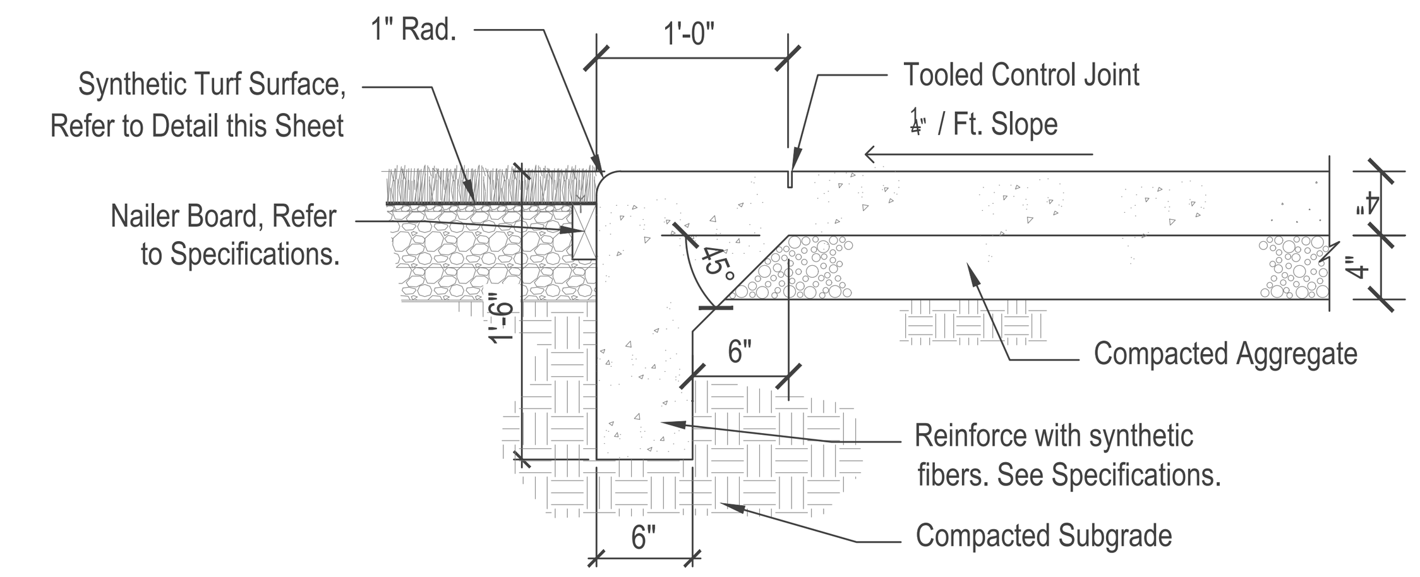


PERIMETER CURB NAILER WITH FENCING AT SYNTHETIC FIELDS

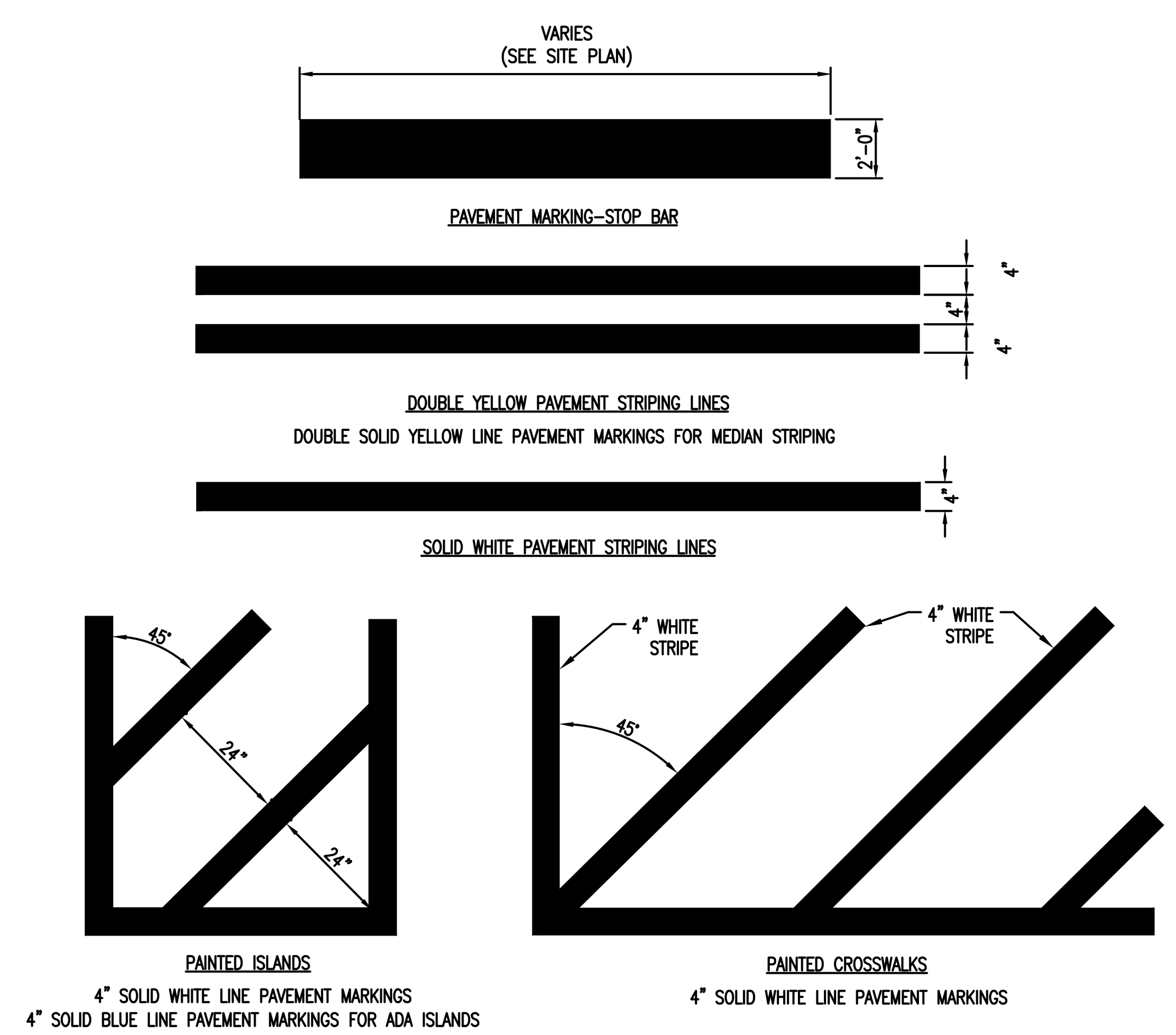


FLUSH PERIMETER NAILER CURB

NOTES:
1. Curb shall have ½" expansion joints at 40'-0" max., control joints at 8'-0" max. unless otherwise noted.
2. Control joints shall be cut ¼" depth of total thickness of slab.
3. Fiber additive: Virgin nylon fibers, ¾" length, Nycon by Nycon Inc., or Forta Nylon by Forta Corporation, added at the batch plant at 1 lb. per cu. yd. of concrete.

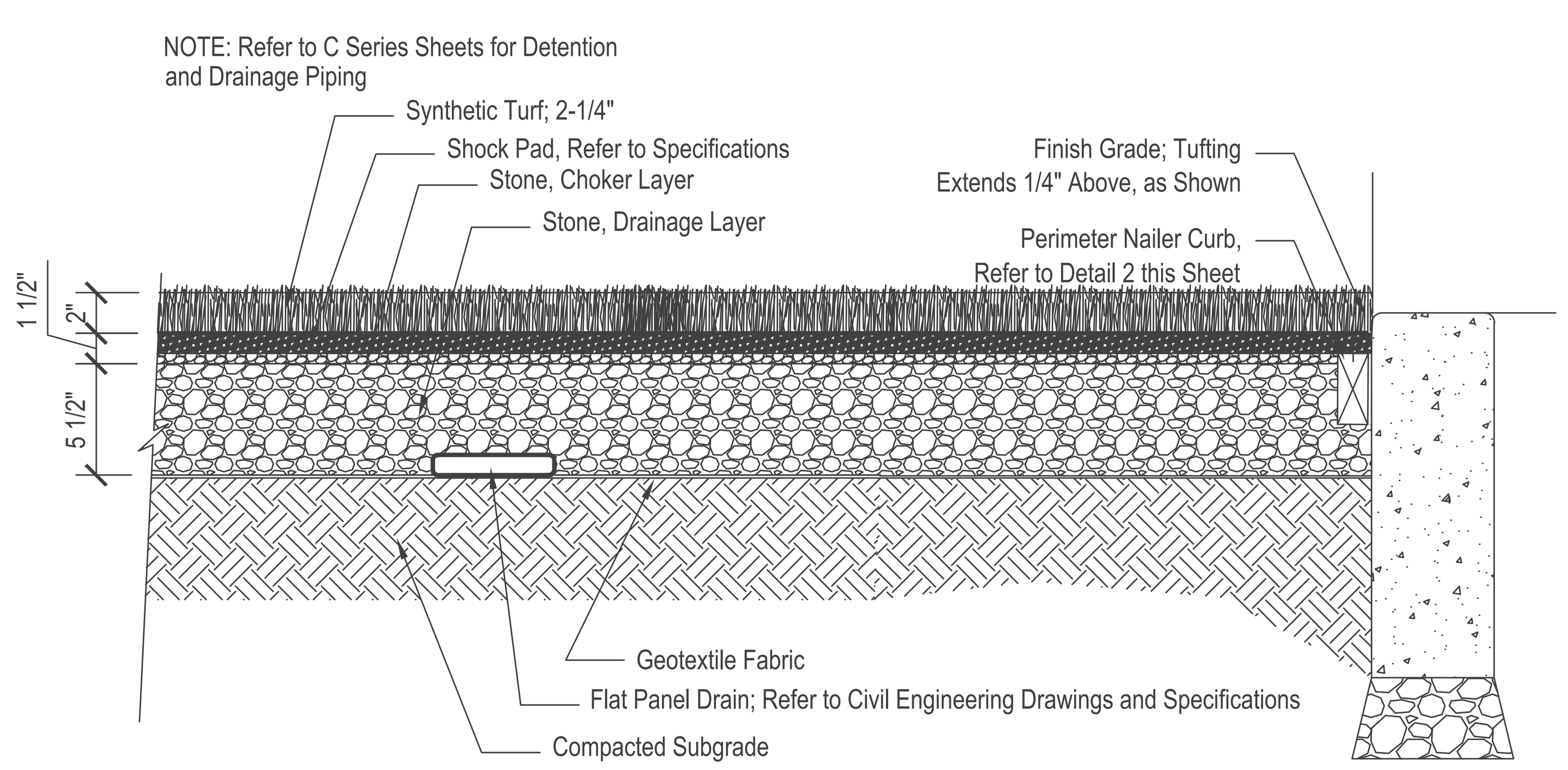


PERIMETER CURB NAILER @ INTEGRAL CURB AND WALK

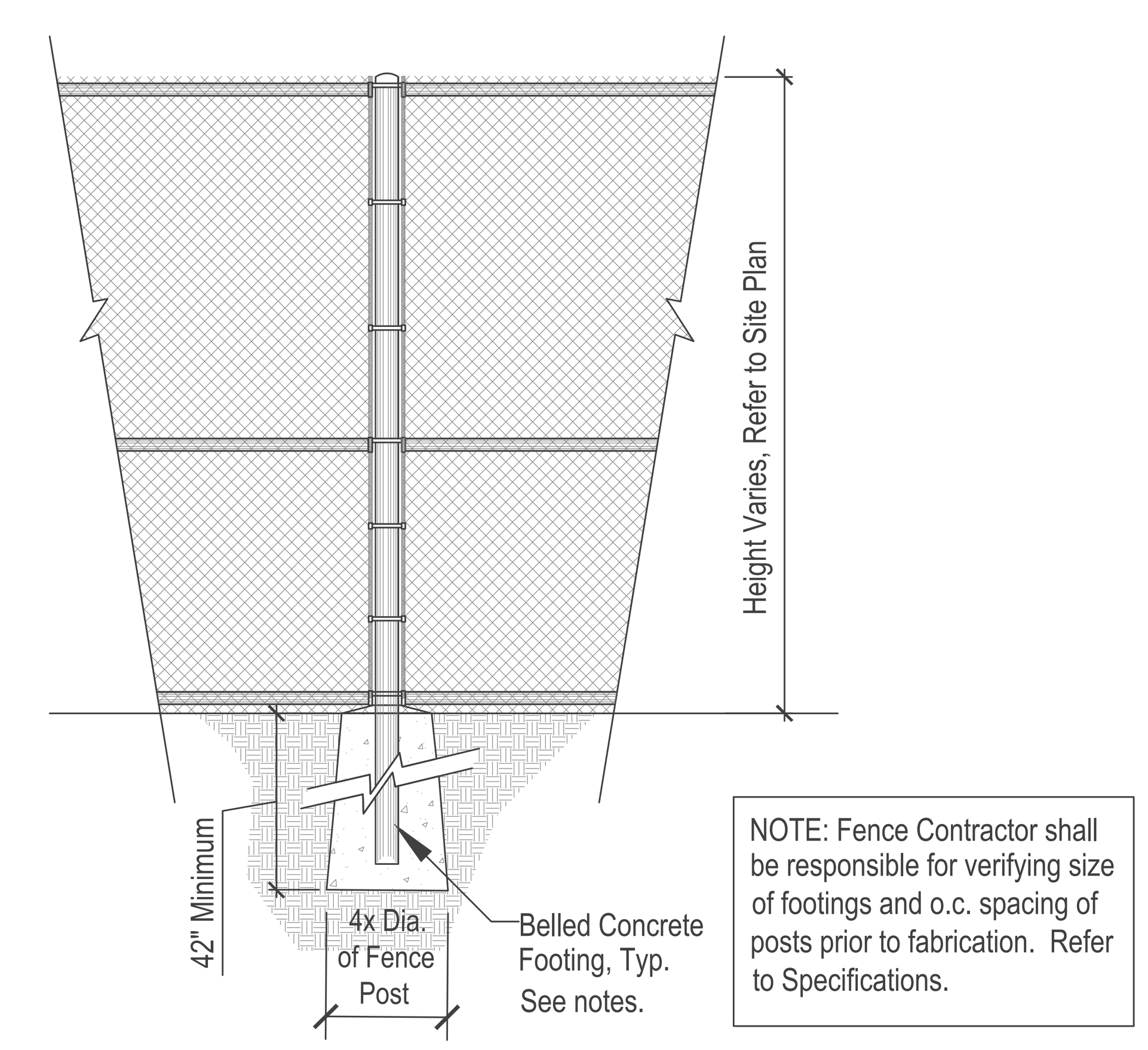


TRAFFIC STRIPING

NOT TO SCALE



SYNTHETIC TURF - TYPICAL SECTION



CHAIN LINK FENCE

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL

KELLY ANN CANTER — REGISTERED PROFESSIONAL ENGINEER — APPROVAL PENDING NOT FOR CONSTRUCTION

12/18/2024

DATE 12/18/2024

PROJECT NO. 2023.0212

REVISIONS

NUMBER	DATE	DESCRIPTION

PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

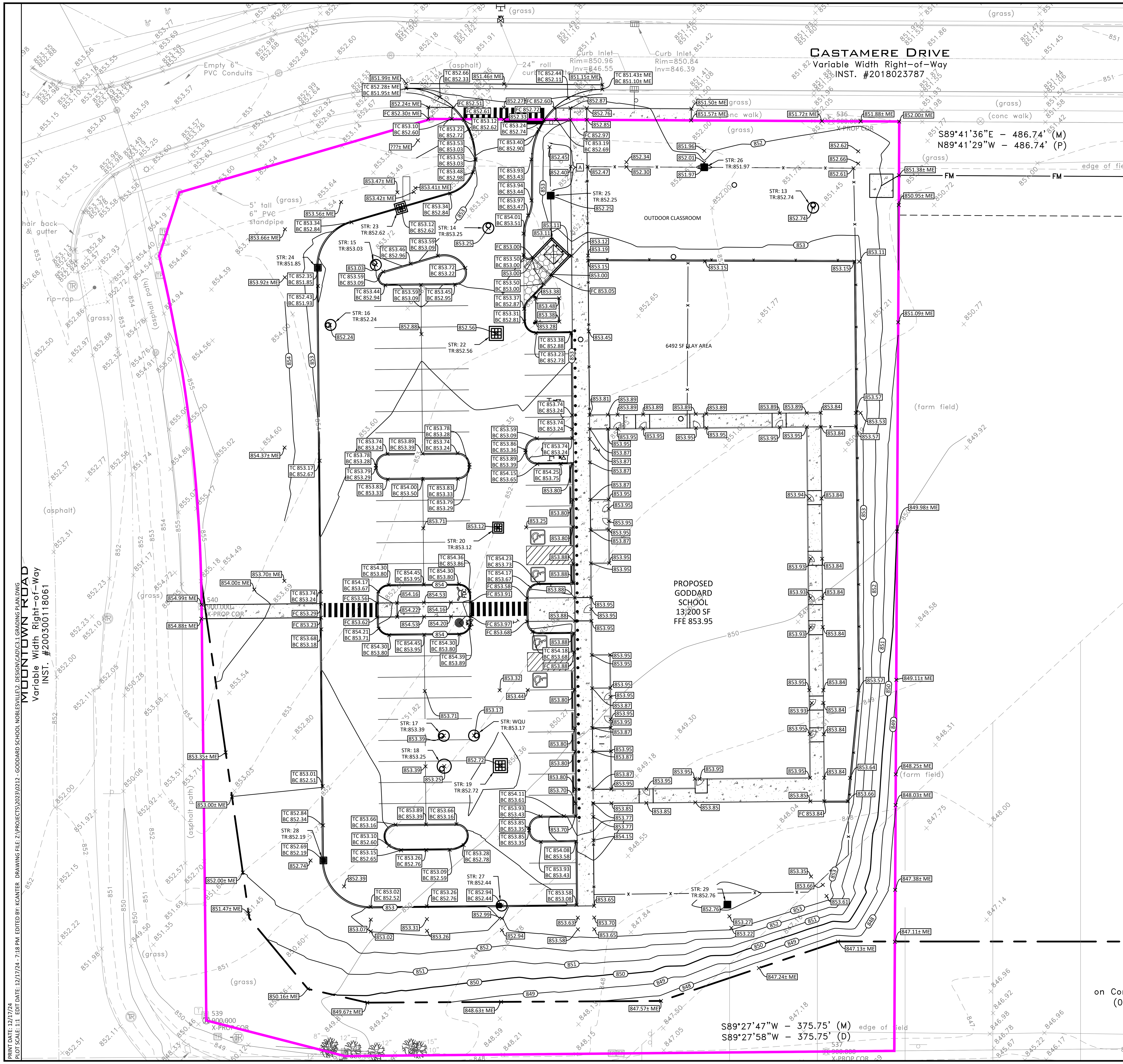
SHEET TITLE

SITE DETAILS

SHEET NUMBER

C2.6

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 12:56 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C2.5 SITE DETAILS.DWG



SCALE: 1"=20'

GRADING LEGEND

ME	MATCH EXISTING
HP	HIGH POINT
LP	LOW POINT
BC	BOTTOM OF CURB
TC	TOP OF CURB
TR	TOP OF RIM/CASTING
FL	FLOWLINE
(000)	CONTOURS
	FLOW LINE
TC 000.00 / BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
FC 000.00	FLUSH CURB
000.00 ME	MATCH EXISTING ELEVATION. CONTRACTOR TO VERIFY ELEVATION SHOWN MATCHES EXISTING TIE-IN ELEVATION. NOTIFY ENGINEER IF VARIES BY ½" OR MORE.
	FLOW ARROW
	FLOOD ROUTE

NOTE: BUILDING FFE = 853.95'

KEYNOTES

A. PROVIDE POSITIVE DRAINAGE TO INLET/LOW POINT

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO STATE AND LOCAL REGULATIONS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS (VERTICAL AND HORIZONTAL) IN THE FIELD PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM THE ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
3. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND INSPECTED BY THE RESPONSIBLE PARTY.
4. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTOR'S AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
5. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START. TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES WHEN EXCAVATING IS AROUND OR OVER EXISTING UTILITIES. THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.
6. TRENCHES FOR ALL STORM DRAIN LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF UNDER OR WITHIN 5 FEET OF PAVEMENT.
7. AFTER STRIPPING TOPSOIL MATERIAL, THE CONTRACTOR SHALL PROOF ROLL WITH A MEDIUM WEIGHT ROLLER TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUB-DRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WITHIN THE PROPOSED PARKING AREAS WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN ALL AREAS. AFTER INSTALLATION, CONTRACTOR SHALL TEST FOR, AND CORRECT ANY DEFICIENT CONDITIONS.
9. ALL PROPOSED SPOT ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
10. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.
11. ALL STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO STANDARD INDOT SPECIFICATIONS.
12. INVERTS AT PIPE OUTLETS ARE GIVEN AT END OF PIPE END SECTION.
13. CONTRACTOR SHALL VERIFY ELEVATION OF ALL EXISTING STORM SEWERS BEFORE INSTALLATION OF THE PROPOSED STORM SEWER. IF A CONDITION IS DISCOVERED THAT PREVENTS INSTALLATIONS PER THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
14. CONTRACTOR SHALL PERFORM GRADING AND COMPACTION AND LIME STABILIZATION OF PAVEMENT SUBGRADE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
15. STRUCTURES RECEIVING SUBSURFACE DRAINS SHALL HAVE BOTH PORTS CORE DRILLED. T OR Y BLIND CONNECTIONS ARE NOT ALLOWED.
16. ALL EXISTING UTILITY CASTINGS, LIDS, AND ACCESS SHALL BE SET TO FINAL GRADE UNLESS OTHERWISE DIRECTED.
17. ANY OFFSITE BORROW AND/OR WASTE SITES THAT ARE NEEDED SHALL BE PERMITTED AS PART OF THIS PERMIT OR BE PART OF AN EXISTING PERMIT.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
WV	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
GV	GAS METER / VALVE
C.O.	CLEAN-OUT
E	ELEC. METER BOX/TRANSFORMER
EP TP	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
AC GEN	AIR CONDITIONER / GENERATOR
M	MAGNAIL SET/FOUND
R	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
TR	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE – SQUARE / ROUND
12" 36"	CONIFEROUS TREE & SIZE DECIDUOUS TREE & SIZE
D S	DRAINAGE /SANITARY MANHOLE
C L	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
WTR	UNDG. WATER LINE
G	UNDG. GAS LINE
UT	UNDG. TELEPHONE LINE
UE	UNDG. ELECTRIC LINE
OET	OVERHEAD ELE. & TEL
OETC	OVERHEAD ELE TEL & CAB
OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

Indiana 811
Know what's below.
Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE

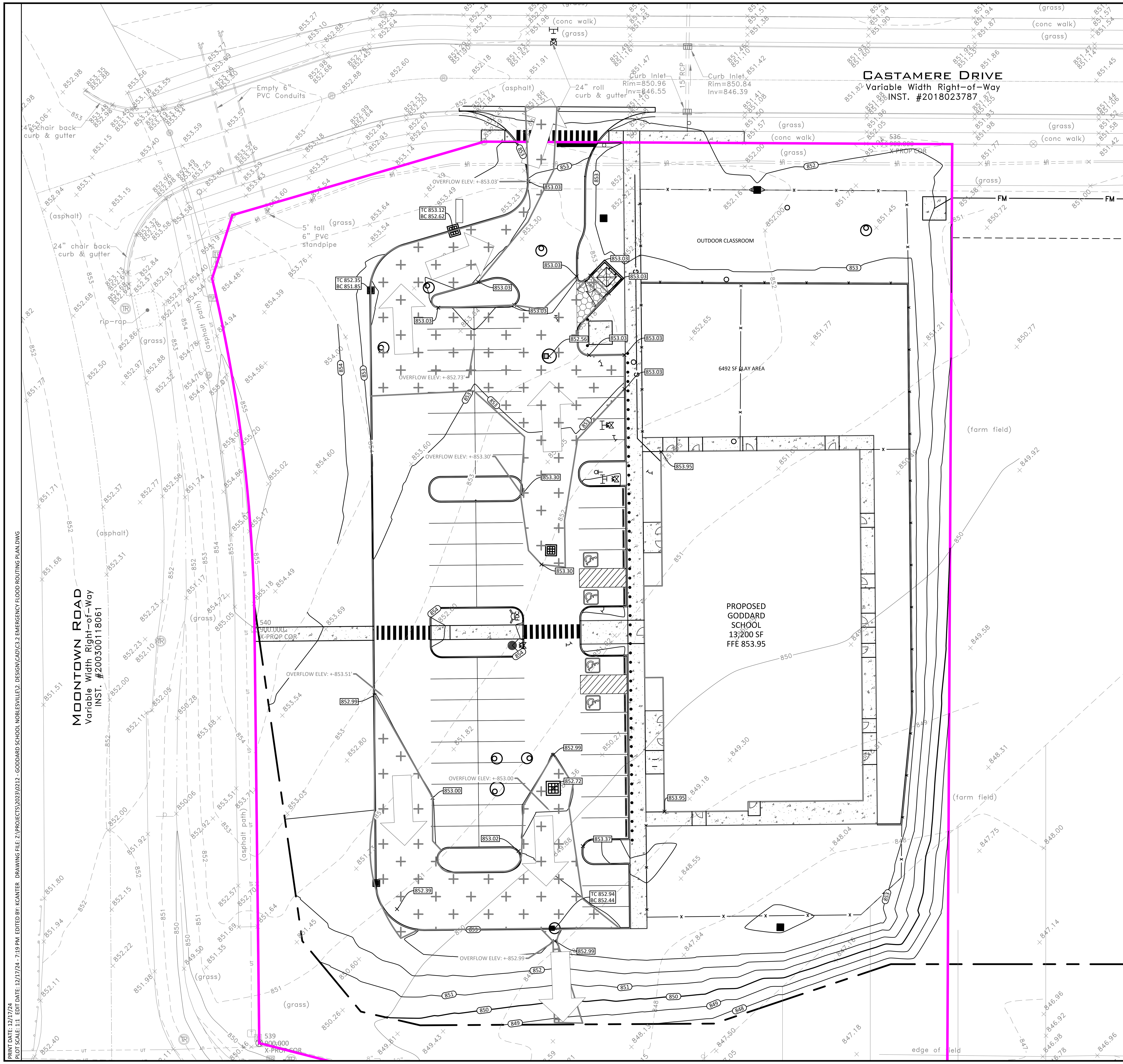
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT

DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE
GRADING PLAN

SHEET NUMBER
C3.1

PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:18 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C3.1 GRADING PLAN.DWG



SCALE: 1"=20'

GRADING LEGEND

ME	MATCH EXISTING
HP	HIGH POINT
LP	LOW POINT
BC	BOTTOM OF CURB
TC	TOP OF CURB
TR	TOP OF RIM/CASTING
FL	FLOWLINE
000	CONTOURS
	FLOW LINE
TC 000.00 BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
FC 000.00	FLUSH CURB
000.00 ME	MATCH EXISTING ELEVATION. CONTRACTOR TO VERIFY ELEVATION SHOWN MATCHES EXISTING TIE-IN ELEVATION. NOTIFY ENGINEER IF VARIES BY $\frac{1}{4}$" OR MORE.
	FLOW ARROW
	FLOOD ROUTE

NOTE: BUILDING FFE = 853.95'

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO STATE AND LOCAL REGULATIONS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS (VERTICAL AND HORIZONTAL) IN THE FIELD PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM THE ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
3. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND INSPECTED BY THE RESPONSIBLE PARTY.
4. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTOR'S AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
5. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START. TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES WHEN EXCAVATING IS AROUND OR OVER EXISTING UTILITIES. THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.
6. TRENCHES FOR ALL STORM DRAIN LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF UNDER OR WITHIN 5 FEET OF PAVEMENT.
7. AFTER STRIPPING TOPSOIL MATERIAL, THE CONTRACTOR SHALL PROOF ROLL WITH A MEDIUM WEIGHT ROLLER TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUB-DRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WITHIN THE PROPOSED PARKING AREAS WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN ALL AREAS. AFTER INSTALLATION, CONTRACTOR SHALL TEST FOR, AND CORRECT ANY DEFICIENT CONDITIONS.
9. ALL PROPOSED SPOT ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
10. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.
11. ALL STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO STANDARD INDOT SPECIFICATIONS.
12. INVERTS AT PIPE OUTLETS ARE GIVEN AT END OF PIPE END SECTION.
13. CONTRACTOR SHALL VERIFY ELEVATION OF ALL EXISTING STORM SEWERS BEFORE INSTALLATION OF THE PROPOSED STORM SEWER. IF A CONDITION IS DISCOVERED THAT PREVENTS INSTALLATIONS PER THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
14. CONTRACTOR SHALL PERFORM GRADING AND COMPACTION AND LIME STABILIZATION OF PAVEMENT SUBGRADE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
15. STRUCTURES RECEIVING SUBSURFACE DRAINS SHALL HAVE BOTH PORTS CORE DRILLED. T OR Y BLIND CONNECTIONS ARE NOT ALLOWED.
16. ALL EXISTING UTILITY CASTINGS, LIDS, AND ACCESS SHALL BE SET TO FINAL GRADE UNLESS OTHERWISE DIRECTED.
17. ANY OFFSITE BORROW AND/OR WASTE SITES THAT ARE NEEDED SHALL BE PERMITTED AS PART OF THIS PERMIT OR BE PART OF AN EXISTING PERMIT.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
WV	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
GV	GAS METER / VALVE
C.O.	CLEAN-OUT
	ELEC. METER BOX/TRANSFORMER
EP TP	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
AC GEN	AIR CONDITIONER / GENERATOR
	MAGNAIL SET/FOUND
	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE – SQUARE / ROUND
12" 36"	CONIFEROUS TREE & SIZE DECIDUOUS TREE & SIZE
	DRAINAGE /SANITARY MANHOLE
	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
WTR	UNDG. WATER LINE
G	UNDG. GAS LINE
UT	UNDG. TELEPHONE LINE
UE	UNDG. ELECTRIC LINE
OET	OVERHEAD ELE. & TEL
OETC	OVERHEAD ELE TEL & CAB
OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

Indiana 811 Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE Kelly Canter

SEAL
KELLY ANN CANTER REGISTERED No. PE11900367 STATE OF INDIANA PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

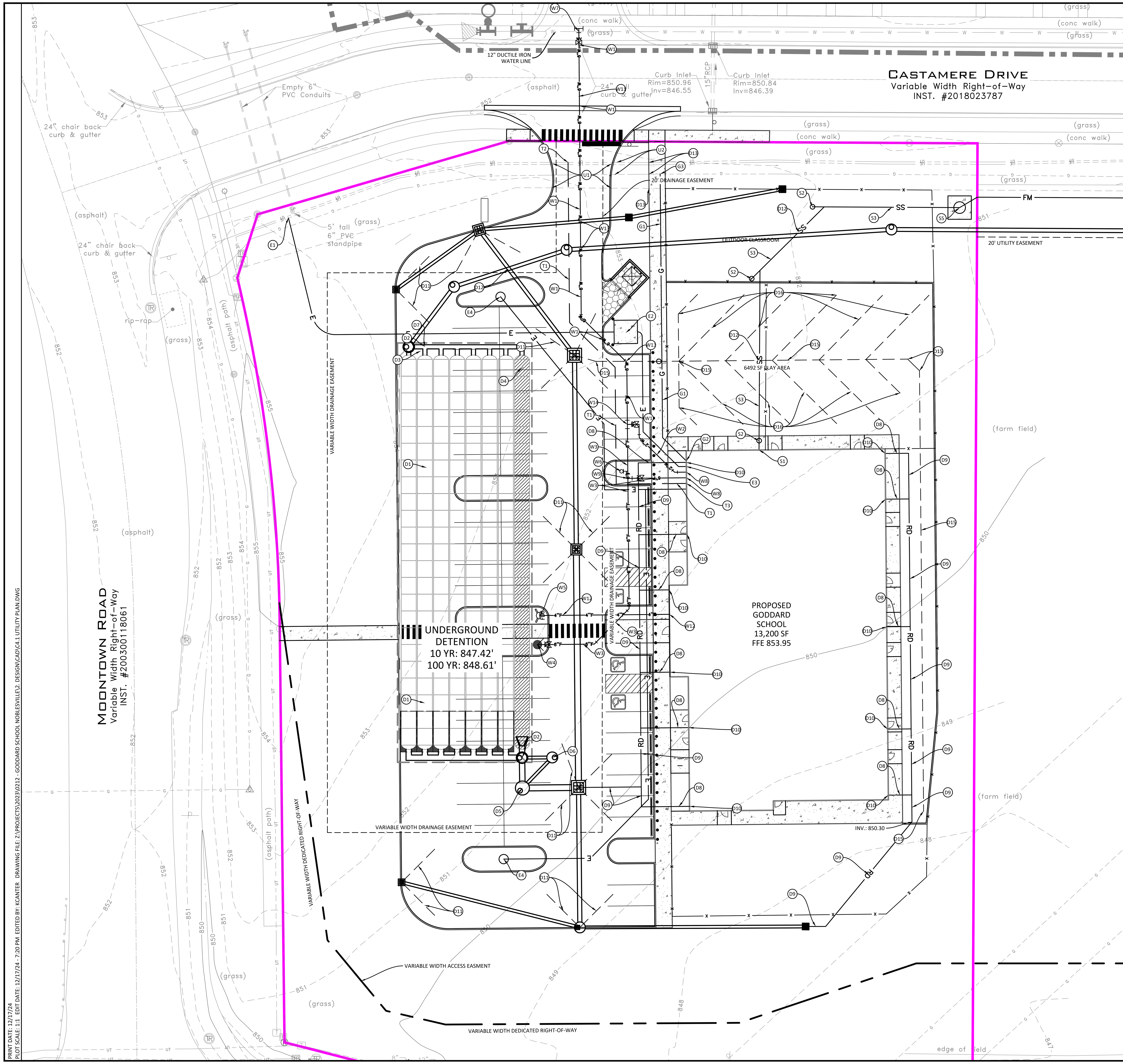
PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
EMERGENCY FLOOD ROUTING PLAN

SHEET NUMBER
C3.2

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:19 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C3.2 - GODDARD SCHOOL - EMERGENCY FLOOD ROUTING PLAN.DWG



PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:20 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.1 UTILITY PLAN.DWG

0' 20' 40'
SCALE: 1"=20'

KEYNOTES

WATER
- W1. 6" C900 PVC WATER LINE PER CITIZEN'S ENERGY GROUP (CEG) STANDARDS
- W2. 2" C901 PVC DOMESTIC WATER LINE PER CEG STANDARDS
- W3. 6" C900 PVC FIRE SERVICE WATER LINE PER CEG STANDARDS.
- W4. FIRE HYDRANT ASSEMBLY PER NOBLESVILLE FIRE DEPARTMENT (NFD) STANDARDS.
- W5. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
- W6. POST INDICATOR VALVE PER CEG AND NFD STANDARDS. PIV TO BE 40' MINIMUM FROM BUILDING. PROVIDE PROTECTIVE POSTS ON EITHER SIDE OF PIV.
- W7. 6" STAINLESS STEEL TAPPING SLEEVE AND VALVE PER CITY STANDARDS.
- W8. CONNECTION TO BUILDING. REFER TO MEP FOR CONTINUATION.
- W9. 6"X6" TEE AND 6" VALVE PER CEG STANDARDS.
- W10. WATER VALVE PER CEG STANDARDS.
- W11. BORE UNDER STREET PER CITY OF NOBLESVILLE STANDARDS
- W12. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
- W13. MAINTAIN 18" VERTICAL SEPARATION.
- W14. 6"X2" TEE AND 2" VALVE PER CEG STANDARDS

SANITARY
- S1. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
- S2. SANITARY CLEANOUT PER CITY STANDARDS.
- S3. 6" SDR-35 PVC SANITARY LATERAL AT 1.05% MIN SLOPE PER CITY STANDARDS.
- S4. CONTRACTOR TO VERIFY FORCEMAIN INVERT. CONNECT NEW FORCEMAIN TO EXISTING FORCEMAIN PER CITY STANDARDS.
- S5. LIFT STATION, SEE LIFT STATION DESIGN PLANS.

DRAINAGE
- D1. UNDERGROUND DETENTION SYSTEM, SEE DETAILS.
- D2. DETENTION MANIFOLD STRUCTURE. SEE DETAILS.
- D3. 6" UNDERDRAIN, CONNECT TO OUTLET CONTROL STRUCTURE
- D4. DETENTION SYSTEM INSPECTION PORT, SEE DETAILS.
- D5. DIVERSION STRUCTURE. SEE DETAILS.
- D6. WATER QUALITY UNIT - XC-4. SEE DETAILS.
- D7. OUTLET CONTROL STRUCTURE. SEE DETAILS.
- D8. 6" DUAL WALL HDPE ROOF DRAIN AT 0.75% MIN. SLOPE
- D9. 8" DUAL WALL HDPE ROOF DRAIN AT 0.5% MIN. SLOPE
- D10. DOWNSPOUT BOOT, SEE PLUMBING PLANS FOR CONTINUATION. SEE DETAILS.
- D11. 20 LF OF 6" DUAL WALL PERFORATED HDPE SUBSURFACE DRAIN (SSD). CAP UPSTREAM END. CONNECT TO STRUCTURE.
- D12. PROVIDE CONCRETE CRADLE IF 18" SEPARATION CANNOT BE MAINTAINED/PROVIDED.
- D13. NOT USED
- D14. LOCATE UTILITY AT STORM CROSSING, PROVIDE DEPTHS, SIZE, AND LOCATION TO ENGINEER. IF CONFLICT EXISTS, LOWER UTILITY, PROVIDE CONFLICT STRUCTURE, OR ALTERNATIVE STORM STRUCTURE AND CROSSING IN COORDINATION WITH UTILITY COMPANY.
- D15. SYNTHETIC TURF 12" COLLECTOR DRAIN AT 0.50% SLOPE MIN. SEE DETAILS.
- D16. 1"X12" FLAT PANEL DRAINS. SEE DETAILS.

ELECTRIC
- E1. ELECTRIC SERVICE TO SITE PER ELECTRICAL PLANS
- E2. TRANSFORMER PAD LOCATION PER LOCAL UTILITY STANDARDS. PROVIDE BOLLARDS AT TRANSFORMER FOR PROTECTION FROM VEHICULAR IMPACT.
- E3. SERVICE TO BUILDING REFER TO ELECTRIC PLANS FOR CONTINUATION.
- E4. ELECTRICAL LIGHT POLE, SEE ELECTRIC PLANS/DETAILS.

TELECOMMUNICATIONS
- T1. TELEPHONE AND FIBER CONDUIT
- T2. TELEPHONE AND FIBER SERVICE
- T3. TELEPHONE AND FIBER SERVICE TO BUILDING,REFER TO MEP FOR CONTINUATION

GAS
- G1. 2" GAS SERVICE LINE.
- G2. GAS METER. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
- G3. CONNECTION TO EXISTING LINE. COORDINATE WITH UTILITY AND OWNER FOR SERVICE.

UTILITY
- U1. PROVIDE GRANULAR BACKFILL OVER EXISTING PIPES TO BE LOCATED UNDER OR WITHIN 5' OF PROPOSED PAVEMENT.
- U2. VERIFY UTILITY CROSSING PRIOR TO CONSTRUCTION TO CONFIRM DEPTH OF UTILITY AND NO CONFLICT AT CROSSINGS.

GENERAL NOTE:
COORDINATE ALL UTILITY LOCATIONS AT THE BUILDING WITH MECHANICAL, ELECTRICAL, AND PLUMBING PLANS.
COORDINATE SITE ELECTRIC WITH ELECTRIC PLANS.

UTILITY LEGEND

- STORM SEWER LINE
- SANITARY SEWER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- ROOF DRAIN
- WATER LINE
- VALVE
- WATER METER PIT
- HYDRANT
- CLEANOUT (STORM & SANITARY)

Indiana 811
Know what's below.
Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO THE PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. EACH SUBCONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
2. ALL MATERIALS AND CONSTRUCTION FOR SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
3. ALL MATERIALS AND CONSTRUCTION FOR STORM SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
4. ALL MATERIALS AND CONSTRUCTION FOR WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
5. ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVED AREAS TO BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL.
6. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
7. ANY WATER MAINS TO HAVE 54" MINIMUM COVER OVER TOP OF PIPE.
8. WATER SERVICE LINE TO THE BUILDING SHALL HAVE A SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION OUTSIDE OF THE BUILDING. (APPLIES TO COMMERCIAL ONLY)
9. STERILIZATION OF WATER MAIN SHALL BE IN ACCORDANCE WITH STATE BOARD OF HEALTH.
10. ALL UTILITY CROSSING AND CLEARANCES TO BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE INDIANA STATE BOARD OF HEALTH.
11. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY ARE TO BE TIED INTO THE PROPOSED STORM SEWER SYSTEM.
12. ALL SEWER PIPES UNDER OR WITHIN 5' OF PAVEMENT SHALL BE BACKFILLED WITH GRANULAR BACKFILL. FOR BACKFILL PURPOSES, PAVED SHOULDERS, CURBS, GUTTER, AND SIDE WALKS ARE CONSIDER PAVEMENT. FOR PIPES WITHIN INDIANA STATE RIGHTS-OF-WAY, BACKFILL SHALL BE PROVIDED PER INDIANA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. LOCAL JURISDICTION REQUIREMENTS MAY DICTATE MORE STRINGENT REQUIREMENTS AT TIME OF CONSTRUCTION AND INSPECTION.
13. CONTRACTOR TO PROVIDE SURVEYED AS-BUILT/RECORD DRAWINGS OF ALL STORM SEWERS AND SANITARY SEWER MAINS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITY HAVING JURISDICTION.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
	GAS METER / VALVE
C.O.	CLEAN-OUT
	ELEC. METER BOX/TRANSFORMER
	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
	AIR CONDITIONER / GENERATOR
	MAGNAIL SET/FOUND
	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE – SQUARE / ROUND
12" 36"	CONIFEROUS TREE & SIZE DECIDUOUS TREE & SIZE
	DRAINAGE /SANITARY MANHOLE
	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
WTR	UNDG. WATER LINE
G	UNDG. GAS LINE
UT	UNDG. TELEPHONE LINE
UE	UNDG. ELECTRIC LINE
OET	OVERHEAD ELE. & TEL
OETC	OVERHEAD ELE TEL & CAB
OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE Kelly Canter

SEAL
KELLY ANN CANTER
REGISTERED
No. PE11900367
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

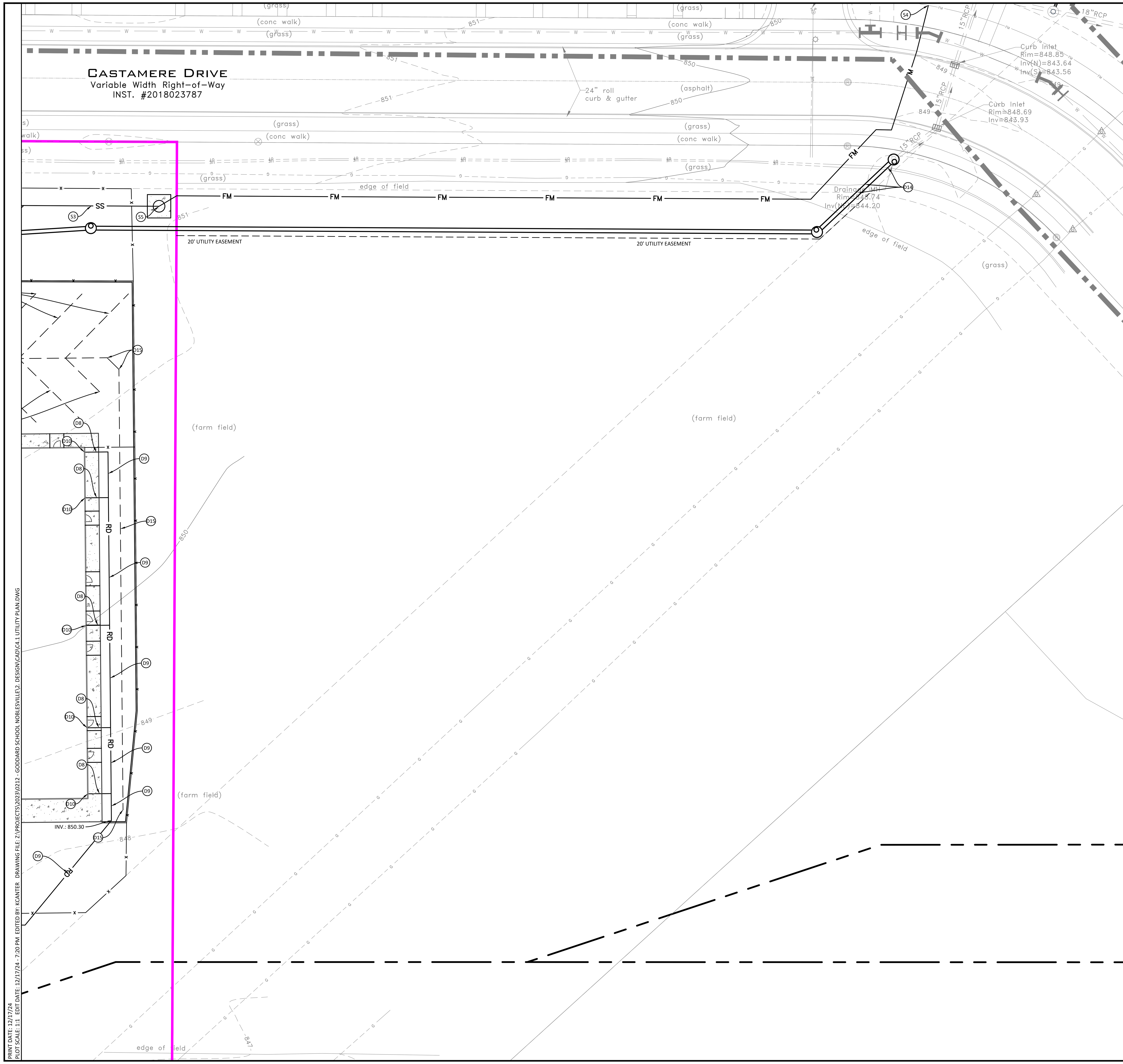
REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
UTILITY PLAN

SHEET NUMBER
C4.1



SCALE: 1"=20'

KEYNOTES

WATER
- W1. 6" C900 PVC WATER LINE PER CITIZEN'S ENERGY GROUP (CEG) STANDARDS
- W2. 2" C901 PVC DOMESTIC WATER LINE PER CEG STANDARDS
- W3. 6" C900 PVC FIRE SERVICE WATER LINE PER CEG STANDARDS.
- W4. FIRE HYDRANT ASSEMBLY PER NOBLESVILLE FIRE DEPARTMENT (NFD) STANDARDS.
- W5. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
- W6. POST INDICATOR VALVE PER CEG AND NFD STANDARDS. PIV TO BE 40' MINIMUM FROM BUILDING. PROVIDE PROTECTIVE POSTS ON EITHER SIDE OF PIV.
- W7. 6" STAINLESS STEEL TAPPING SLEEVE AND VALVE PER CITY STANDARDS.
- W8. CONNECTION TO BUILDING. REFER TO MEP FOR CONTINUATION.
- W9. 6"X6" TEE AND 6" VALVE PER CEG STANDARDS.
- W10. WATER VALVE PER CEG STANDARDS.
- W11. BORE UNDER STREET PER CITY OF NOBLESVILLE STANDARDS
- W12. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
- W13. MAINTAIN 18" VERTICAL SEPARATION.
- W14. 6"X2" TEE AND 2" VALVE PER CEG STANDARDS

SANITARY
- S1. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
- S2. SANITARY CLEANOUT PER CITY STANDARDS.
- S3. 6" SDR-35 PVC SANITARY LATERAL AT 1.05% MIN SLOPE PER CITY STANDARDS.
- S4. CONTRACTOR TO VERIFY FORCEMAIN INVERT. CONNECT NEW FORCEMAIN TO EXISTING FORCEMAIN PER CITY STANDARDS.
- S5. LIFT STATION, SEE LIFT STATION DESIGN PLANS.

DRAINAGE
- D1. UNDERGROUND DETENTION SYSTEM, SEE DETAILS.
- D2. DETENTION MANIFOLD STRUCTURE. SEE DETAILS.
- D3. 6" UNDERDRAIN, CONNECT TO OUTLET CONTROL STRUCTURE
- D4. DETENTION SYSTEM INSPECTION PORT, SEE DETAILS.
- D5. DIVERSION STRUCTURE. SEE DETAILS.
- D6. WATER QUALITY UNIT - XC-4. SEE DETAILS.
- D7. OUTLET CONTROL STRUCTURE. SEE DETAILS.
- D8. 6" DUAL WALL HDPE ROOF DRAIN AT 0.75% MIN. SLOPE
- D9. 8" DUAL WALL HDPE ROOF DRAIN AT 0.5% MIN. SLOPE
- D10. DOWNSPOUT BOOT, SEE PLUMBING PLANS FOR CONTINUATION. SEE DETAILS.
- D11. 20 LF OF 6" DUAL WALL PERFORATED HDPE SUBSURFACE DRAIN (SSD). CAP UPSTREAM END. CONNECT TO STRUCTURE.
- D12. PROVIDE CONCRETE CRADLE IF 18" SEPARATION CANNOT BE MAINTAINED/PROVIDED.
- D13. NOT USED
- D14. LOCATE UTILITY AT STORM CROSSING, PROVIDE DEPTHS, SIZE, AND LOCATION TO ENGINEER. IF CONFLICT EXISTS, LOWER UTILITY, PROVIDE CONFLICT STRUCTURE, OR ALTERNATIVE STORM STRUCTURE AND CROSSING IN COORDINATION WITH UTILITY COMPANY.
- D15. SYNTHETIC TURF 12" COLLECTOR DRAIN AT 0.50% SLOPE MIN. SEE DETAILS.
- D16. 1"X12" FLAT PANEL DRAINS. SEE DETAILS.

ELECTRIC
- E1. ELECTRIC SERVICE TO SITE PER ELECTRICAL PLANS
- E2. TRANSFORMER PAD LOCATION PER LOCAL UTILITY STANDARDS. PROVIDE BOLLARDS AT TRANSFORMER FOR PROTECTION FROM VEHICULAR IMPACT.
- E3. SERVICE TO BUILDING REFER TO ELECTRIC PLANS FOR CONTINUATION.
- E4. ELECTRICAL LIGHT POLE, SEE ELECTRIC PLANS/DETAILS.

TELECOMMUNICATIONS
- T1. TELEPHONE AND FIBER CONDUIT
- T2. TELEPHONE AND FIBER SERVICE
- T3. TELEPHONE AND FIBER SERVICE TO BUILDING,REFER TO MEP FOR CONTINUATION

GAS
- G1. 2" GAS SERVICE LINE.
- G2. GAS METER. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
- G3. CONNECTION TO EXISTING LINE. COORDINATE WITH UTILITY AND OWNER FOR SERVICE.

UTILITY
- U1. PROVIDE GRANULAR BACKFILL OVER EXISTING PIPES TO BE LOCATED UNDER OR WITHIN 5' OF PROPOSED PAVEMENT.
- U2. VERIFY UTILITY CROSSING PRIOR TO CONSTRUCTION TO CONFIRM DEPTH OF UTILITY AND NO CONFLICT AT CROSSINGS.

GENERAL NOTE:
COORDINATE ALL UTILITY LOCATIONS AT THE BUILDING WITH MECHANICAL, ELECTRICAL, AND PLUMBING PLANS.
COORDINATE SITE ELECTRIC WITH ELECTRIC PLANS.

UTILITY LEGEND

—o—	STORM SEWER LINE
—SS—	SANITARY SEWER LINE
—G—	GAS LINE
—E—	ELECTRIC LINE
—T—	TELEPHONE LINE
—RD—	ROOF DRAIN
—W—	WATER LINE
⋈	VALVE
	WATER METER PIT
	HYDRANT
	CLEANOUT (STORM & SANITARY)

Indiana 811
Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO THE PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. EACH SUBCONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
2. ALL MATERIALS AND CONSTRUCTION FOR SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
3. ALL MATERIALS AND CONSTRUCTION FOR STORM SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
4. ALL MATERIALS AND CONSTRUCTION FOR WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
5. ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVED AREAS TO BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL.
6. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
7. ANY WATER MAINS TO HAVE 54" MINIMUM COVER OVER TOP OF PIPE.
8. WATER SERVICE LINE TO THE BUILDING SHALL HAVE A SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION OUTSIDE OF THE BUILDING. (APPLIES TO COMMERCIAL ONLY)
9. STERILIZATION OF WATER MAIN SHALL BE IN ACCORDANCE WITH STATE BOARD OF HEALTH.
10. ALL UTILITY CROSSING AND CLEARANCES TO BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE INDIANA STATE BOARD OF HEALTH.
11. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY ARE TO BE TIED INTO THE PROPOSED STORM SEWER SYSTEM.
12. ALL SEWER PIPES UNDER OR WITHIN 5' OF PAVEMENT SHALL BE BACKFILLED WITH GRANULAR BACKFILL. FOR BACKFILL PURPOSES, PAVED SHOULDERS, CURBS, GUTTER, AND SIDE WALKS ARE CONSIDER PAVEMENT. FOR PIPES WITHIN INDIANA STATE RIGHTS-OF-WAY, BACKFILL SHALL BE PROVIDED PER INDIANA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. LOCAL JURISDICTION REQUIREMENTS MAY DICTATE MORE STRINGENT REQUIREMENTS AT TIME OF CONSTRUCTION AND INSPECTION.
13. CONTRACTOR TO PROVIDE SURVEYED AS-BUILT/RECORD DRAWINGS OF ALL STORM SEWERS AND SANITARY SEWER MAINS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITY HAVING JURISDICTION.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
	GAS METER / VALVE
	CLEAN-OUT
	ELEC. METER BOX/TRANSFORMER
	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
	AIR CONDITIONER / GENERATOR
	MAGNAIL SET/FOUND
	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE – SQUARE / ROUND
12" 36"	CONIFEROUS TREE & SIZE DECIDUOUS TREE & SIZE
	DRAINAGE /SANITARY MANHOLE
	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
— — — WTR	UNDG. WATER LINE
— — — G	UNDG. GAS LINE
— — — UT	UNDG. TELEPHONE LINE
— — — UE	UNDG. ELECTRIC LINE
— — — OET	OVERHEAD ELE. & TEL
— — — OETC	OVERHEAD ELE TEL & CAB
— — — OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88) MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
KELLY ANN CANTER REGISTERED STATE OF INDIANA PROFESSIONAL ENGINEER
APPROVAL PENDING NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

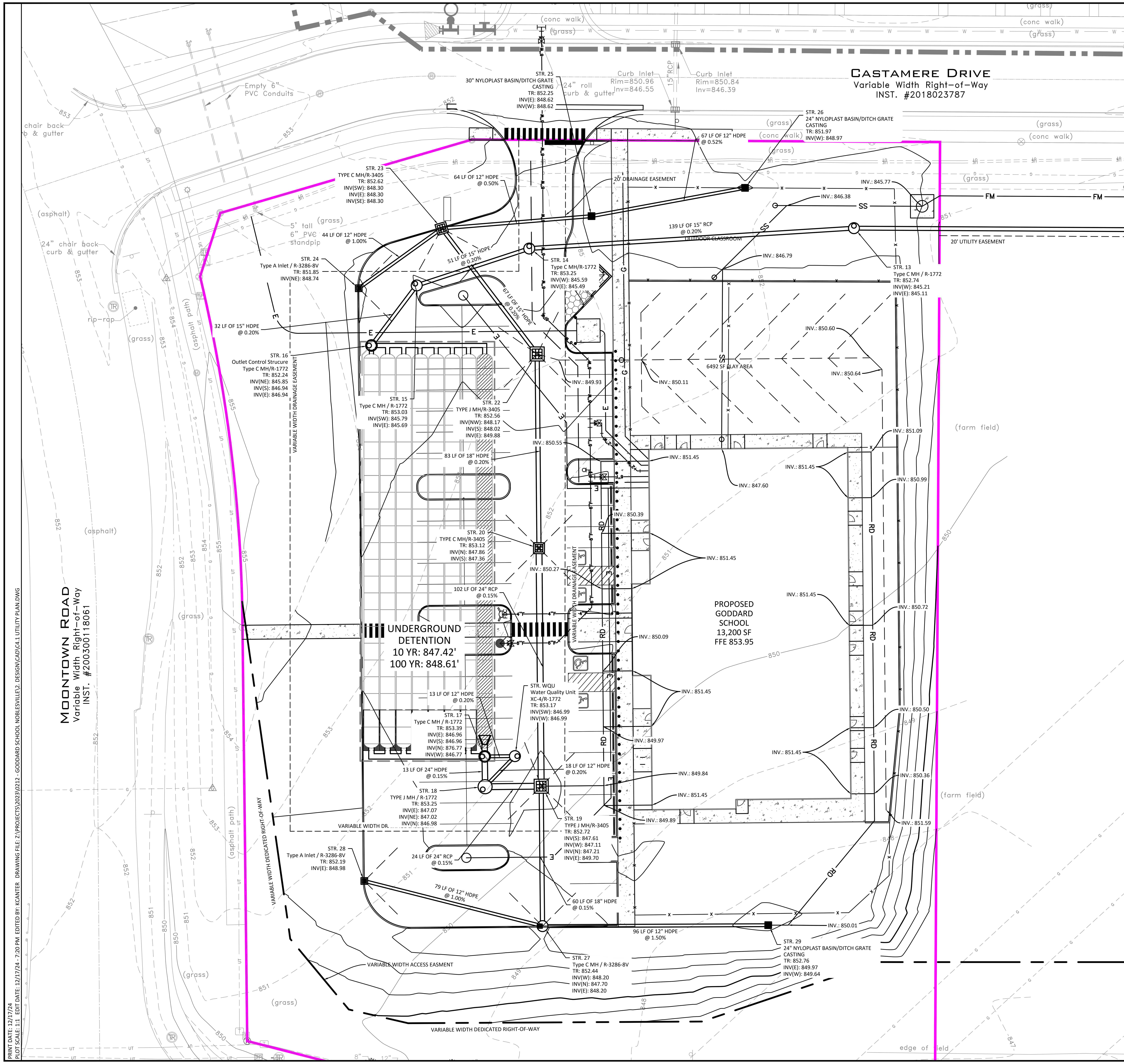
NUMB	DATE	DESCRIPTION

PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
UTILITY PLAN

SHEET NUMBER
C4.2

PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:20 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.1 UTILITY PLAN.DWG



BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

SCALE: 1"=20'

KEYNOTES

WATER

- W1. 6" C900 PVC WATER LINE PER CITIZEN'S ENERGY GROUP (CEG) STANDARDS
- W2. 2" C901 PVC DOMESTIC WATER LINE PER CEG STANDARDS
- W3. 6" C900 PVC FIRE SERVICE WATER LINE PER CEG STANDARDS.
- W4. FIRE HYDRANT ASSEMBLY PER NOBLESVILLE FIRE DEPARTMENT (NFD) STANDARDS.
- W5. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
- W6. POST INDICATOR VALVE PER CEG AND NFD STANDARDS. PIV TO BE 40' MINIMUM FROM BUILDING. PROVIDE PROTECTIVE POSTS ON EITHER SIDE OF PIV.
- W7. 6" STAINLESS STEEL TAPPING SLEEVE AND VALVE PER CITY STANDARDS.
- W8. CONNECTION TO BUILDING. REFER TO MEP FOR CONTINUATION.
- W9. 6"X6" TEE AND 6" VALVE PER CEG STANDARDS.
- W10. WATER VALVE PER CEG STANDARDS.
- W11. BORE UNDER STREET PER CITY OF NOBLESVILLE STANDARDS
- W12. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
- W13. MAINTAIN 18" VERTICAL SEPARATION.
- W14. 6"X2" TEE AND 2" VALVE PER CEG STANDARDS

SANITARY

- S1. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
- S2. SANITARY CLEANOUT PER CITY STANDARDS.
- S3. 6" SDR-35 PVC SANITARY LATERAL AT 1.05% MIN SLOPE PER CITY STANDARDS.
- S4. CONTRACTOR TO VERIFY FORCEMAIN INVERT. CONNECT NEW FORCEMAIN TO EXISTING FORCEMAIN PER CITY STANDARDS.
- S5. LIFT STATION, SEE LIFT STATION DESIGN PLANS.

DRAINAGE

- D1. UNDERGROUND DETENTION SYSTEM, SEE DETAILS.
- D2. DETENTION MANIFOLD STRUCTURE. SEE DETAILS.
- D3. 6" UNDERDRAIN, CONNECT TO OUTLET CONTROL STRUCTURE
- D4. DETENTION SYSTEM INSPECTION PORT, SEE DETAILS.
- D5. DIVERSION STRUCTURE. SEE DETAILS.
- D6. WATER QUALITY UNIT - XC-4. SEE DETAILS.
- D7. OUTLET CONTROL STRUCTURE. SEE DETAILS.
- D8. 6" DUAL WALL HDPE ROOF DRAIN AT 0.75% MIN. SLOPE
- D9. 8" DUAL WALL HDPE ROOF DRAIN AT 0.5% MIN. SLOPE
- D10. DOWNSPOUT BOOT, SEE PLUMBING PLANS FOR CONTINUATION. SEE DETAILS.
- D11. 20 LF OF 6" DUAL WALL PERFORATED HDPE SUBSURFACE DRAIN (SSD). CAP UPSTREAM END. CONNECT TO STRUCTURE.
- D12. PROVIDE CONCRETE CRADLE IF 18" SEPARATION CANNOT BE MAINTAINED/PROVIDED.
- D13. NOT USED
- D14. LOCATE UTILITY AT STORM CROSSING, PROVIDE DEPTHS, SIZE, AND LOCATION TO ENGINEER. IF CONFLICT EXISTS, LOWER UTILITY, PROVIDE CONFLICT STRUCTURE, OR ALTERNATIVE STORM STRUCTURE AND CROSSING IN COORDINATION WITH UTILITY COMPANY.
- D15. SYNTHETIC TURF 12" COLLECTOR DRAIN AT 0.50% SLOPE MIN. SEE DETAILS.
- D16. 1"X12" FLAT PANEL DRAINS. SEE DETAILS.

ELECTRIC

- E1. ELECTRIC SERVICE TO SITE PER ELECTRICAL PLANS
- E2. TRANSFORMER PAD LOCATION PER LOCAL UTILITY STANDARDS. PROVIDE BOLLARDS AT TRANSFORMER FOR PROTECTION FROM VEHICULAR IMPACT.
- E3. SERVICE TO BUILDING REFER TO ELECTRIC PLANS FOR CONTINUATION.
- E4. ELECTRICAL LIGHT POLE, SEE ELECTRIC PLANS/DETAILS.

TELECOMMUNICATIONS

- T1. TELEPHONE AND FIBER CONDUIT
- T2. TELEPHONE AND FIBER SERVICE
- T3. TELEPHONE AND FIBER SERVICE TO BUILDING,REFER TO MEP FOR CONTINUATION

GAS

- G1. 2" GAS SERVICE LINE.
- G2. GAS METER. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
- G3. CONNECTION TO EXISTING LINE. COORDINATE WITH UTILITY AND OWNER FOR SERVICE.

UTILITY

- U1. PROVIDE GRANULAR BACKFILL OVER EXISTING PIPES TO BE LOCATED UNDER OR WITHIN 5' OF PROPOSED PAVEMENT.
- U2. VERIFY UTILITY CROSSING PRIOR TO CONSTRUCTION TO CONFIRM DEPTH OF UTILITY AND NO CONFLICT AT CROSSINGS.

GENERAL NOTE:

COORDINATE ALL UTILITY LOCATIONS AT THE BUILDING WITH MECHANICAL, ELECTRICAL, AND PLUMBING PLANS.
COORDINATE SITE ELECTRIC WITH ELECTRIC PLANS.

UTILITY LEGEND

- STORM SEWER LINE
- SANITARY SEWER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- ROOF DRAIN
- WATER LINE
- VALVE
- WATER METER PIT
- HYDRANT
- CLEANOUT (STORM & SANITARY)

Indiana 811
Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

GENERAL NOTES

1. IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO THE PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. EACH SUBCONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
2. ALL MATERIALS AND CONSTRUCTION FOR SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
3. ALL MATERIALS AND CONSTRUCTION FOR STORM SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
4. ALL MATERIALS AND CONSTRUCTION FOR WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
5. ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVED AREAS TO BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL.
6. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
7. ANY WATER MAINS TO HAVE 54" MINIMUM COVER OVER TOP OF PIPE.
8. WATER SERVICE LINE TO THE BUILDING SHALL HAVE A SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION OUTSIDE OF THE BUILDING. (APPLIES TO COMMERCIAL ONLY)
9. STERILIZATION OF WATER MAIN SHALL BE IN ACCORDANCE WITH STATE BOARD OF HEALTH.
10. ALL UTILITY CROSSING AND CLEARANCES TO BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE INDIANA STATE BOARD OF HEALTH.
11. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY ARE TO BE TIED INTO THE PROPOSED STORM SEWER SYSTEM.
12. ALL SEWER PIPES UNDER OR WITHIN 5' OF PAVEMENT SHALL BE BACKFILLED WITH GRANULAR BACKFILL. FOR BACKFILL PURPOSES, PAVED SHOULDERS, CURBS, GUTTER, AND SIDE WALKS ARE CONSIDER PAVEMENT. FOR PIPES WITHIN INDIANA STATE RIGHTS-OF-WAY, BACKFILL SHALL BE PROVIDED PER INDIANA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. LOCAL JURISDICTION REQUIREMENTS MAY DICTATE MORE STRINGENT REQUIREMENTS AT TIME OF CONSTRUCTION AND INSPECTION.
13. CONTRACTOR TO PROVIDE SURVEYED AS-BUILT/RECORD DRAWINGS OF ALL STORM SEWERS AND SANITARY SEWER MAINS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITY HAVING JURISDICTION.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
	GAS METER / VALVE
	CLEAN-OUT
	ELEC. METER BOX/TRANSFORMER
	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
	AIR CONDITIONER / GENERATOR
	MAGNAIL SET/FOUND
	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE – SQUARE / ROUND
12" / 36"	CONIFEROUS TREE & SIZE / DECIDUOUS TREE & SIZE
	DRAINAGE /SANITARY MANHOLE
	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
WTR	UNDG. WATER LINE
G	UNDG. GAS LINE
UT	UNDG. TELEPHONE LINE
UE	UNDG. ELECTRIC LINE
OET	OVERHEAD ELE. & TEL
OETC	OVERHEAD ELE TEL & CAB
OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE Kelly Canter

SEAL
KELLY ANN CANTER
REGISTERED
No. PE11900367
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

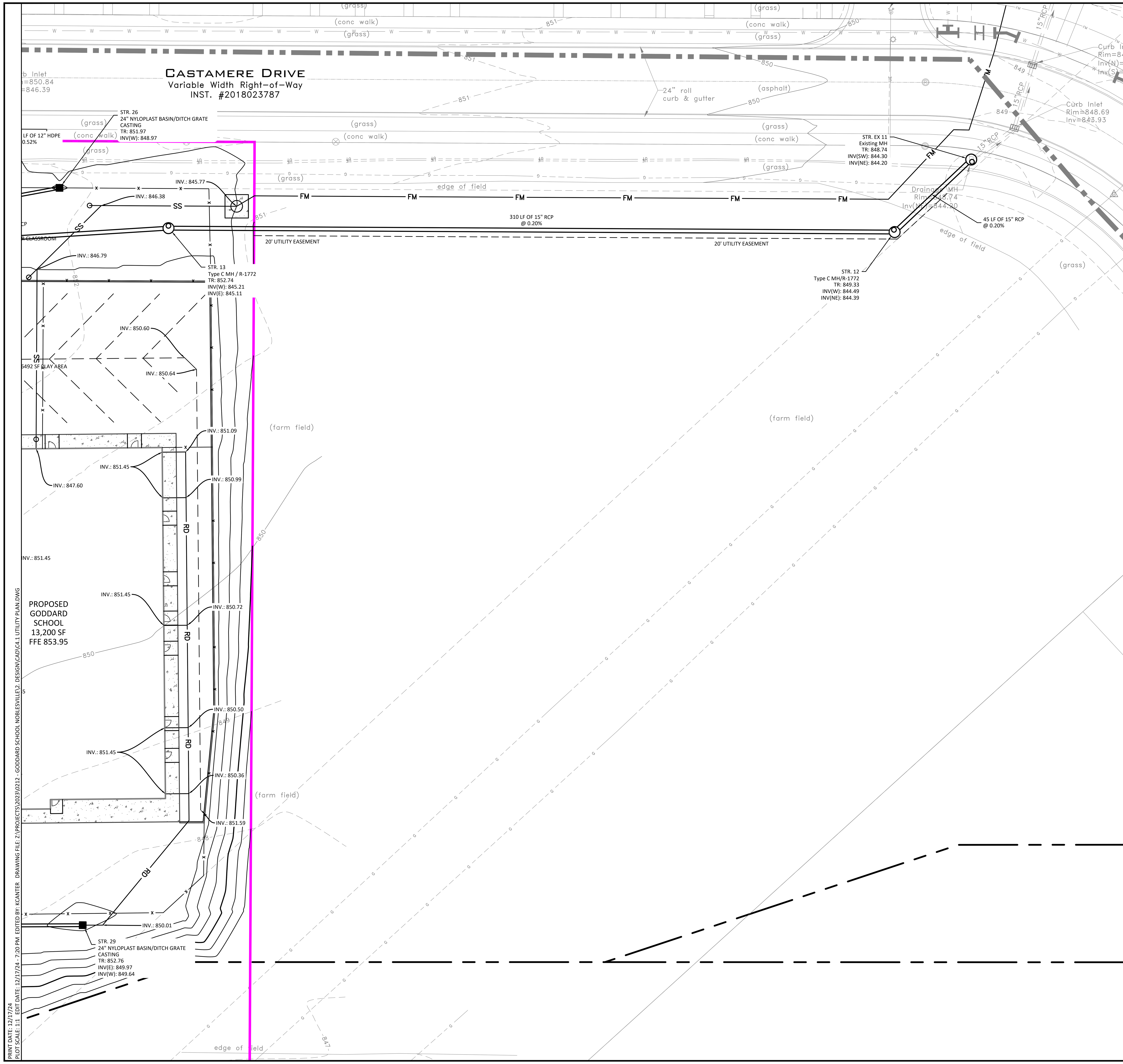
PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
UTILITY PLAN

SHEET NUMBER
C4.3

PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:20 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.1 UTILITY PLAN.DWG



BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

KEYNOTES

WATER
W1. 6" C900 PVC WATER LINE PER CITIZEN'S ENERGY GROUP (CEG) STANDARDS
W2. 2" C901 PVC DOMESTIC WATER LINE PER CEG STANDARDS
W3. 6" C900 PVC FIRE SERVICE WATER LINE PER CEG STANDARDS.
W4. FIRE HYDRANT ASSEMBLY PER NOBLESVILLE FIRE DEPARTMENT (NFD) STANDARDS.
W5. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
W6. POST INDICATOR VALVE PER CEG AND NFD STANDARDS. PIV TO BE 40' MINIMUM FROM BUILDING. PROVIDE PROTECTIVE POSTS ON EITHER SIDE OF PIV.
W7. 6" STAINLESS STEEL TAPPING SLEEVE AND VALVE PER CITY STANDARDS.
W8. CONNECTION TO BUILDING. REFER TO MEP FOR CONTINUATION.
W9. 6"X6" TEE AND 6" VALVE PER CEG STANDARDS.
W10. WATER VALVE PER CEG STANDARDS.
W11. BORE UNDER STREET PER CITY OF NOBLESVILLE STANDARDS
W12. FIRE DEPARTMENT CONNECTION PER NFD STANDARDS.
W13. MAINTAIN 18" VERTICAL SEPARATION.
W14. 6"X2" TEE AND 2" VALVE PER CEG STANDARDS

SANITARY
S1. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
S2. SANITARY CLEANOUT PER CITY STANDARDS.
S3. 6" SDR-35 PVC SANITARY LATERAL AT 1.05% MIN SLOPE PER CITY STANDARDS.
S4. CONTRACTOR TO VERIFY FORCEMAIN INVERT. CONNECT NEW FORCEMAIN TO EXISTING FORCEMAIN PER CITY STANDARDS.
S5. LIFT STATION, SEE LIFT STATION DESIGN PLANS.

DRAINAGE
D1. UNDERGROUND DETENTION SYSTEM, SEE DETAILS.
D2. DETENTION MANIFOLD STRUCTURE. SEE DETAILS.
D3. 6" UNDERDRAIN, CONNECT TO OUTLET CONTROL STRUCTURE
D4. DETENTION SYSTEM INSPECTION PORT, SEE DETAILS.
D5. DIVERSION STRUCTURE. SEE DETAILS.
D6. WATER QUALITY UNIT - XC-4. SEE DETAILS.
D7. OUTLET CONTROL STRUCTURE. SEE DETAILS.
D8. 6" DUAL WALL HDPE ROOF DRAIN AT 0.75% MIN. SLOPE
D9. 8" DUAL WALL HDPE ROOF DRAIN AT 0.5% MIN. SLOPE
D10. DOWNSPOUT BOOT, SEE PLUMBING PLANS FOR CONTINUATION. SEE DETAILS.
D11. 20 LF OF 6" DUAL WALL PERFORATED HDPE SUBSURFACE DRAIN (SSD). CAP UPSTREAM END. CONNECT TO STRUCTURE.
D12. PROVIDE CONCRETE CRADLE IF 18" SEPARATION CANNOT BE MAINTAINED/PROVIDED.
D13. NOT USED
D14. LOCATE UTILITY AT STORM CROSSING, PROVIDE DEPTHS, SIZE, AND LOCATION TO ENGINEER. IF CONFLICT EXISTS, LOWER UTILITY, PROVIDE CONFLICT STRUCTURE, OR ALTERNATIVE STORM STRUCTURE AND CROSSING IN COORDINATION WITH UTILITY COMPANY.
D15. SYNTHETIC TURF 12" COLLECTOR DRAIN AT 0.50% SLOPE MIN. SEE DETAILS.
D16. 1"X12" FLAT PANEL DRAINS. SEE DETAILS.

ELECTRIC
E1. ELECTRIC SERVICE TO SITE PER ELECTRICAL PLANS
E2. TRANSFORMER PAD LOCATION PER LOCAL UTILITY STANDARDS. PROVIDE BOLLARDS AT TRANSFORMER FOR PROTECTION FROM VEHICULAR IMPACT.
E3. SERVICE TO BUILDING REFER TO ELECTRIC PLANS FOR CONTINUATION.
E4. ELECTRICAL LIGHT POLE, SEE ELECTRIC PLANS/DETAILS.

TELECOMMUNICATIONS
T1. TELEPHONE AND FIBER CONDUIT
T2. TELEPHONE AND FIBER SERVICE
T3. TELEPHONE AND FIBER SERVICE TO BUILDING,REFER TO MEP FOR CONTINUATION

GAS
G1. 2" GAS SERVICE LINE.
G2. GAS METER. CONNECTION TO BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
G3. CONNECTION TO EXISTING LINE. COORDINATE WITH UTILITY AND OWNER FOR SERVICE.

UTILITY
U1. PROVIDE GRANULAR BACKFILL OVER EXISTING PIPES TO BE LOCATED UNDER OR WITHIN 5' OF PROPOSED PAVEMENT.
U2. VERIFY UTILITY CROSSING PRIOR TO CONSTRUCTION TO CONFIRM DEPTH OF UTILITY AND NO CONFLICT AT CROSSINGS.

GENERAL NOTE:
COORDINATE ALL UTILITY LOCATIONS AT THE BUILDING WITH MECHANICAL, ELECTRICAL, AND PLUMBING PLANS.
COORDINATE SITE ELECTRIC WITH ELECTRIC PLANS.

UTILITY LEGEND

- STORM SEWER LINE
- SANITARY SEWER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- ROOF DRAIN
- WATER LINE
- VALVE
- WATER METER PIT
- HYDRANT
- CLEANOUT (STORM & SANITARY)

Indiana 811
Know what's below. Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

GENERAL NOTES

1. IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO THE PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. EACH SUBCONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
2. ALL MATERIALS AND CONSTRUCTION FOR SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
3. ALL MATERIALS AND CONSTRUCTION FOR STORM SEWERS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
4. ALL MATERIALS AND CONSTRUCTION FOR WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY STANDARDS AND SPECIFICATIONS.
5. ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVED AREAS TO BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL.
6. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
7. ANY WATER MAINS TO HAVE 54" MINIMUM COVER OVER TOP OF PIPE.
8. WATER SERVICE LINE TO THE BUILDING SHALL HAVE A SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION OUTSIDE OF THE BUILDING. (APPLIES TO COMMERCIAL ONLY)
9. STERILIZATION OF WATER MAIN SHALL BE IN ACCORDANCE WITH STATE BOARD OF HEALTH.
10. ALL UTILITY CROSSING AND CLEARANCES TO BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE INDIANA STATE BOARD OF HEALTH.
11. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY ARE TO BE TIED INTO THE PROPOSED STORM SEWER SYSTEM.
12. ALL SEWER PIPES UNDER OR WITHIN 5' OF PAVEMENT SHALL BE BACKFILLED WITH GRANULAR BACKFILL. FOR BACKFILL PURPOSES, PAVED SHOULDERS, CURBS, GUTTER, AND SIDE WALKS ARE CONSIDER PAVEMENT. FOR PIPES WITHIN INDIANA STATE RIGHTS-OF-WAY, BACKFILL SHALL BE PROVIDED PER INDIANA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. LOCAL JURISDICTION REQUIREMENTS MAY DICTATE MORE STRINGENT REQUIREMENTS AT TIME OF CONSTRUCTION AND INSPECTION.
13. CONTRACTOR TO PROVIDE SURVEYED AS-BUILT/RECORD DRAWINGS OF ALL STORM SEWERS AND SANITARY SEWER MAINS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITY HAVING JURISDICTION.

EXISTING LEGEND

LEGEND:

DESCRIPTION:
SIGN / TWO POST SIGN
WATER VALVE/FIRE HYD/METER
TELE/FIBER OPTIC/GAS MARKER
GAS METER / VALVE
CLEAN-OUT
ELEC. METER BOX/TRANSFORMER
ELEC. / TELEPHONE PEDESTAL
GUARD POST/POST with LIGHT
AIR CONDITIONER / GENERATOR
MAGNAIL SET/FOUND
REBAR SET/FOUND
SQUARE / ROUND / CURB INLET
TRAFFIC/COMBO/ POWER POLE
LIGHT POLE - SQUARE / ROUND
CONIFEROUS TREE & SIZE
DECIDUOUS TREE & SIZE
DRAINAGE /SANITARY MANHOLE
COMBINATION/MISC. LID MANHOLE
BEEHIVE ROUND/SQUARE INLET
GUY WIRE / GROUND LIGHT
UNDG. WATER LINE
UNDG. GAS LINE
UNDG. TELEPHONE LINE
UNDG. ELECTRIC LINE
OVERHEAD ELE. & TEL
OVERHEAD ELE TEL & CAB
OVERHEAD ELECTRIC

VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high-density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88) MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS
NUMB | DATE | DESCRIPTION

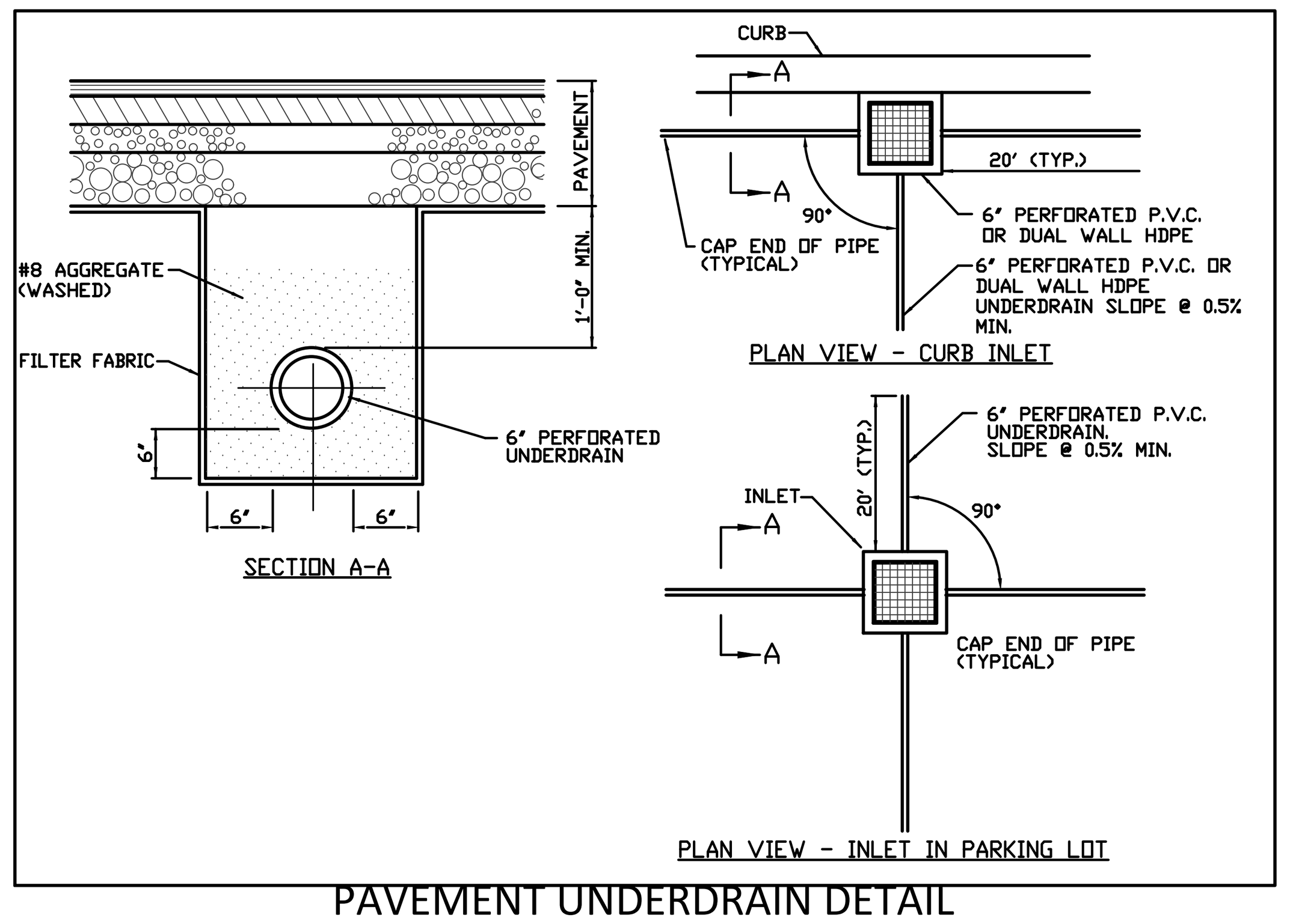
PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

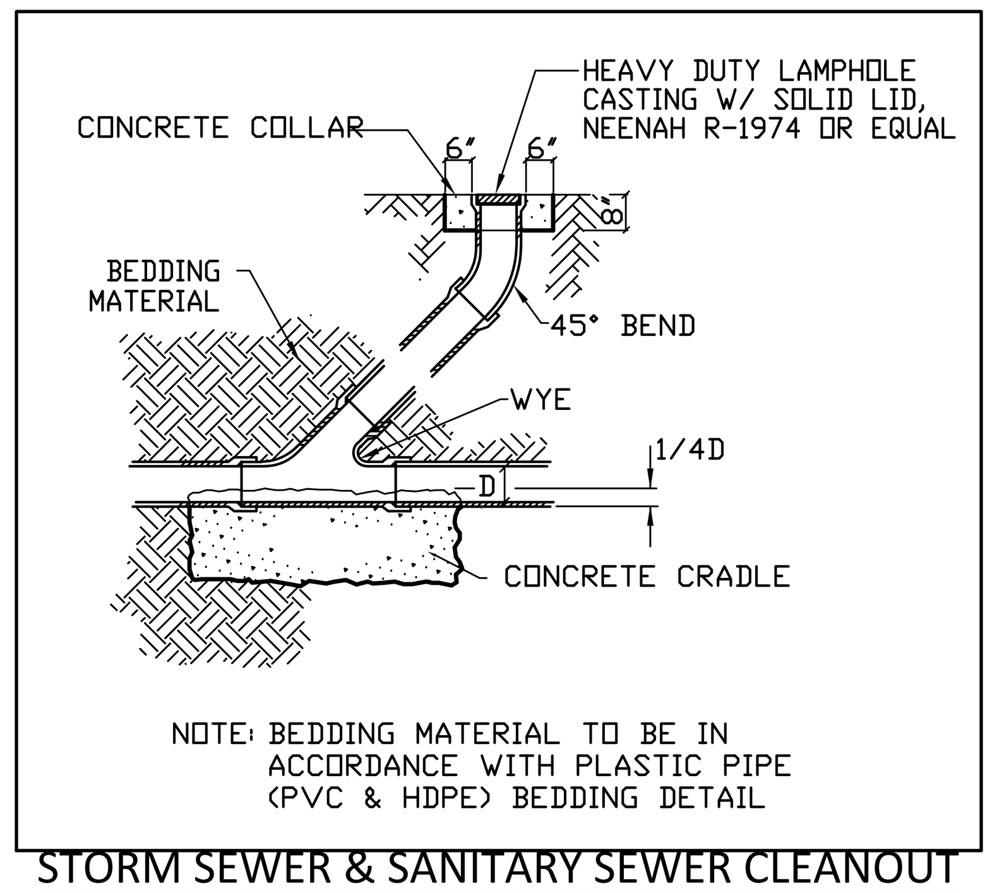
SHEET TITLE
UTILITY PLAN

SHEET NUMBER
C4.4

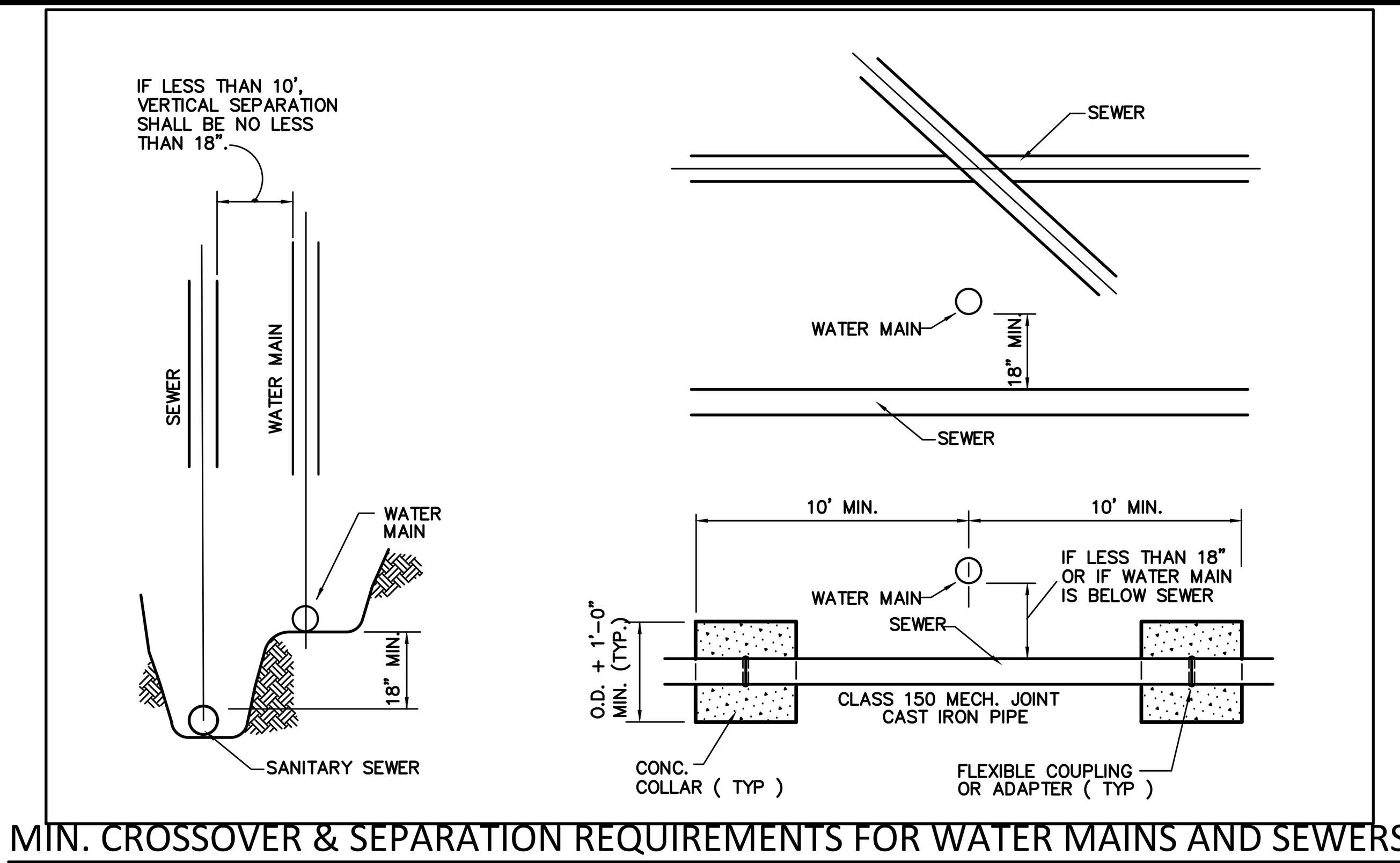
PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:20 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2_DESIGN\CAD\C4.1 UTILITY PLAN.DWG



PAVEMENT UNDERDRAIN DETAIL
NOT TO SCALE

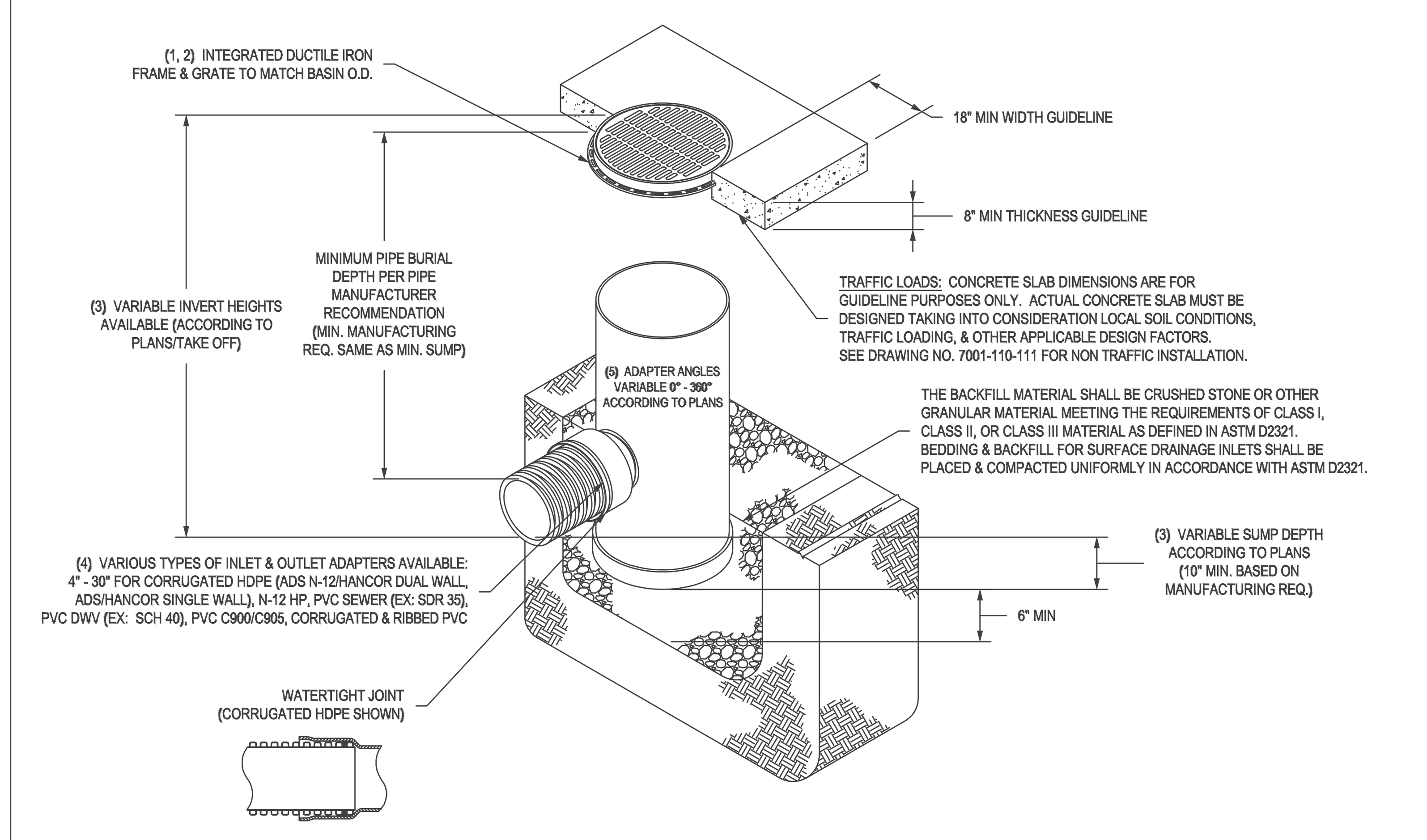


STORM SEWER & SANITARY SEWER CLEANOUT
NOT TO SCALE



MIN. CROSSOVER & SEPARATION REQUIREMENTS FOR WATER MAINS AND SEWERS
NOT TO SCALE

NYLOPLAST 30" DRAIN BASIN: 2830AG _ _X

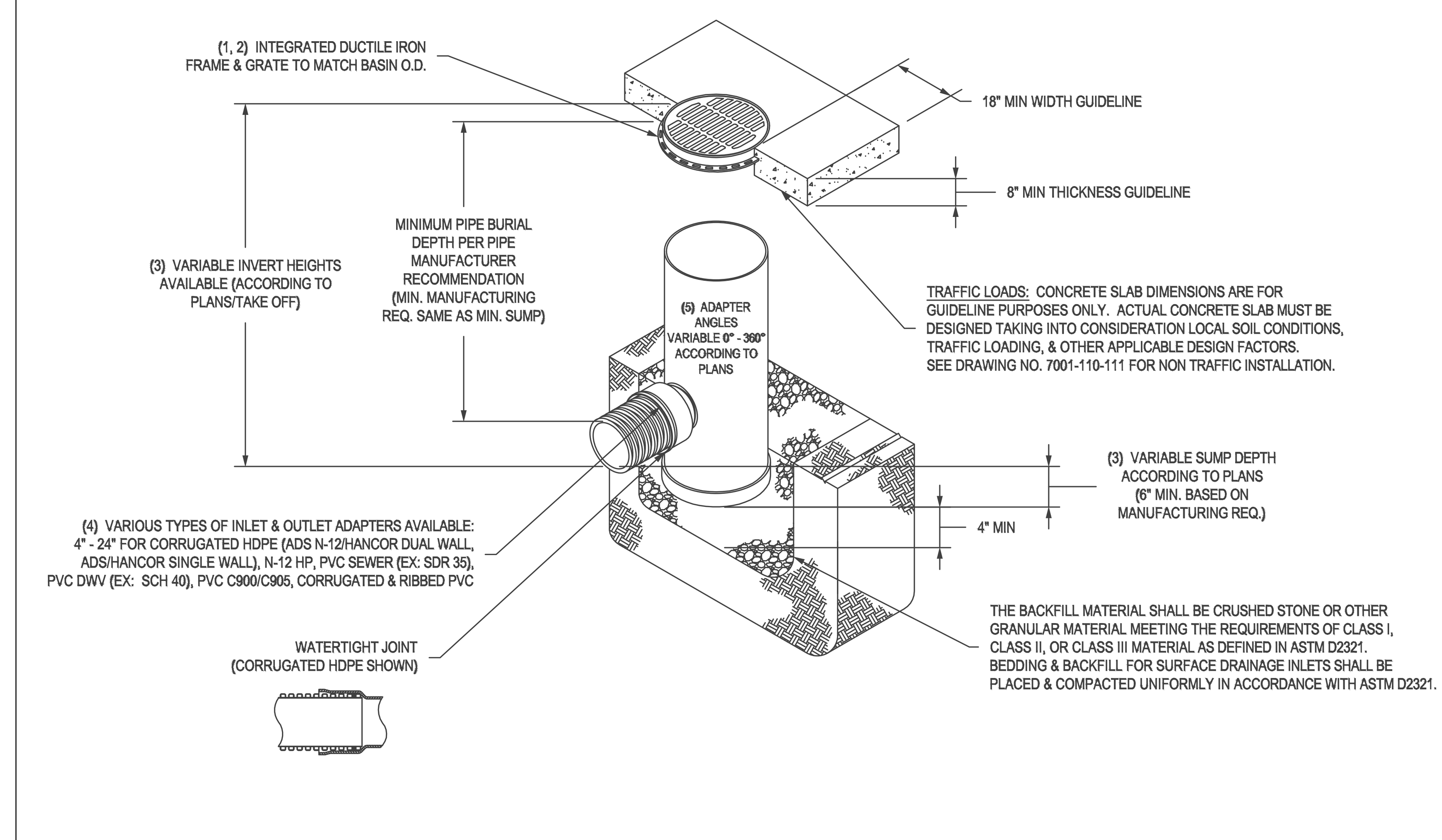


1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2013 NYLOPLAST

DRAWN BY EBC	MATERIAL		3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 04-03-06			
REVISED BY NMH	PROJECT NO./NAME		TITLE 30 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DATE 03-14-16			
DWG SIZE A	SCALE 1:40	SHEET 1 OF 1	DWG NO. 7001-110-193 REV G

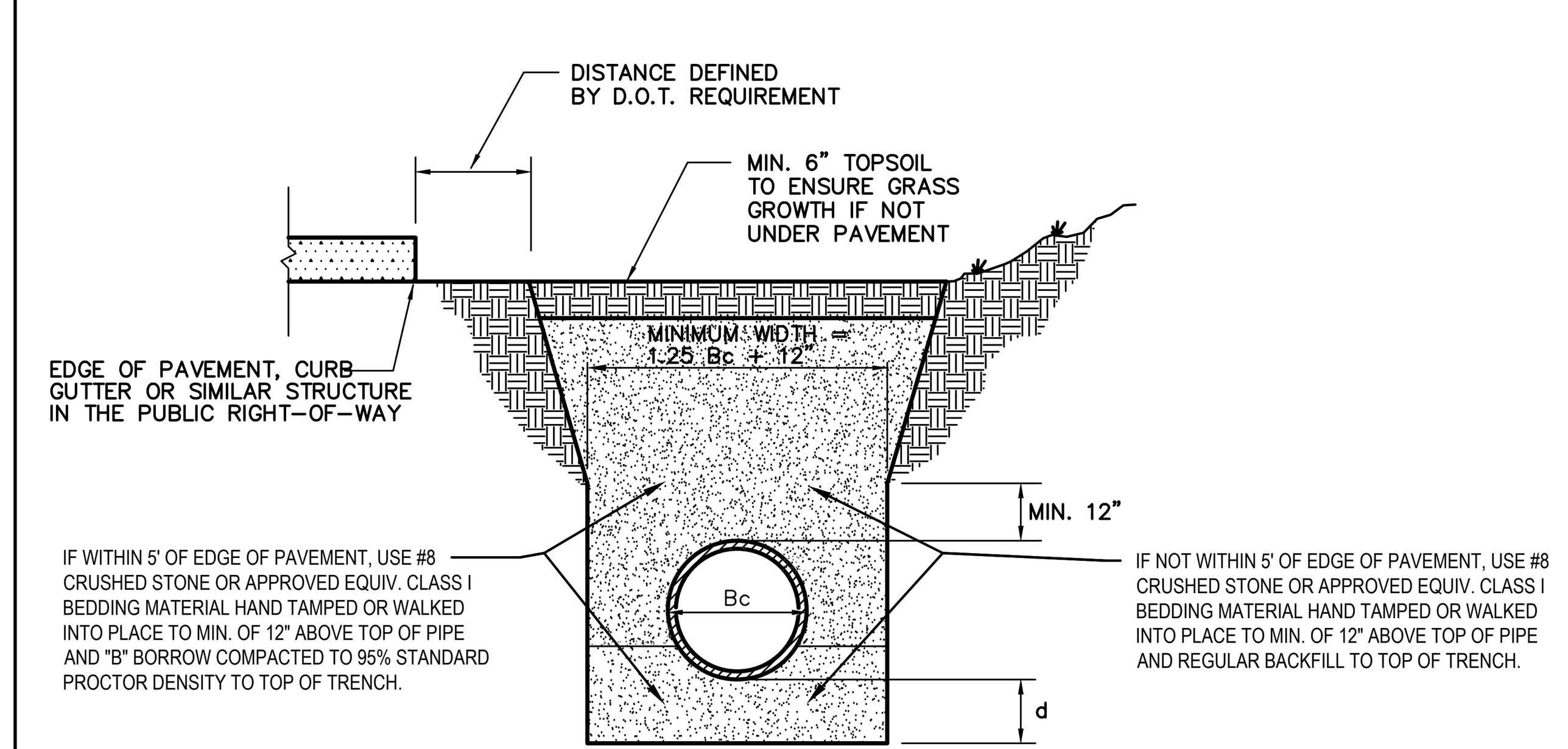
NYLOPLAST 24" DRAIN BASIN: 2824AG _ _X



1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2013 NYLOPLAST

DRAWN BY EBC	MATERIAL		3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 04-03-06			
REVISED BY NMH	PROJECT NO./NAME		TITLE 24 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DATE 03-14-16			
DWG SIZE A	SCALE 1:40	SHEET 1 OF 1	DWG NO. 7001-110-192 REV E



NOTE:
ALL INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.
A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE.

LEGEND
Bc= OUTSIDE DIAMETER
D= INSIDE DIAMETER
d= DEPTH OF BEDDING MATERIAL BELOW PIPE

DEPTH OF BEDDING MATERIAL BELOW PIPE

D	d (MIN)
27" & SMALLER	4
30" TO 60"	4
66" & LARGER	4

PLASTIC PIPE (PVC & HDPE) BEDDING DETAIL
NOT TO SCALE

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
KELLY ANN CANTER
REGISTERED
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB.	DATE	DESCRIPTION

PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE
UTILITY DETAILS

SHEET NUMBER
C4.5

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 2:37 PM EDITED BY: NBALENTINE DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.5 UTILITY DETAILS.DWG

GODDARD SCHOOL MC-3500

NOBLESVILLE, IN, USA

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADS Advanced Drainage Systems, Inc.

ADS SiteAssist™ FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

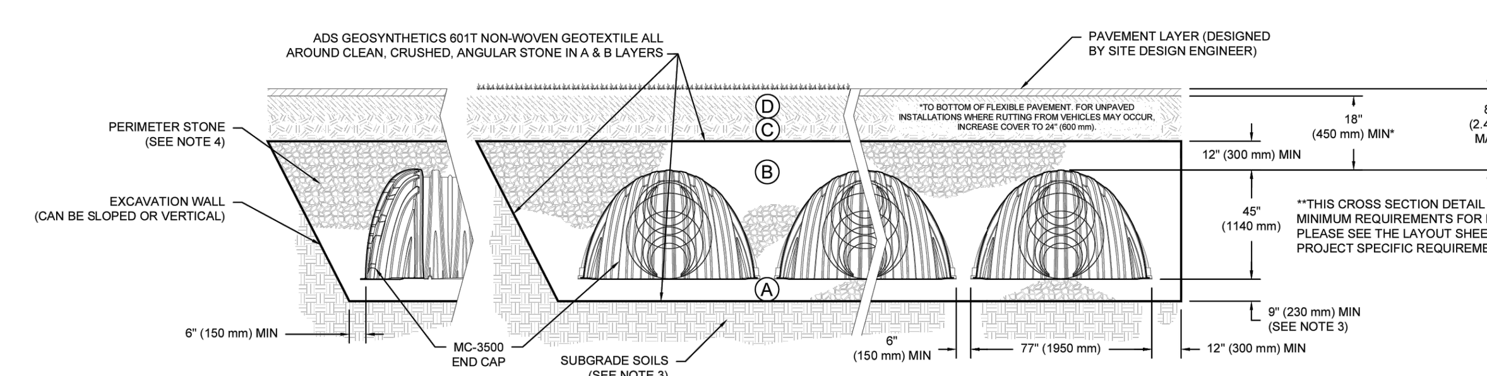
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

GODDARD SCHOOL MC-3500 | NOBLESVILLE, IN, USA | DATE: 12/13/2024 | DRAWN: NB | PROJECT #: | CHECKED: N/A

DATE | DRW | CHK | DESCRIPTION

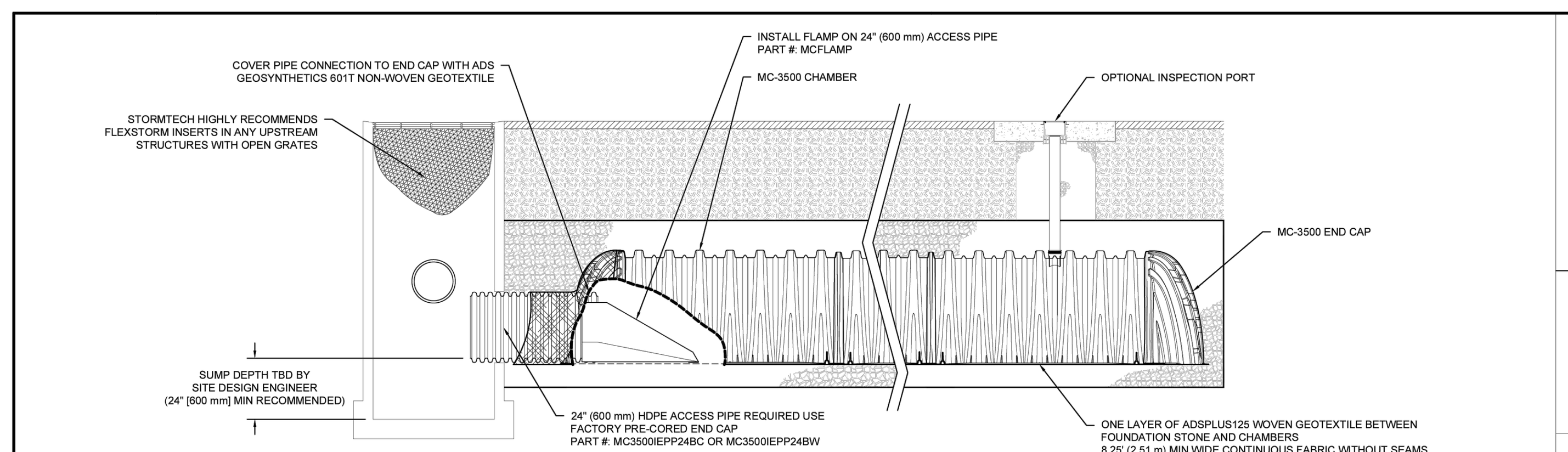
StormTech® Chamber System | 1-800-821-6710 | WWW.STORMTECH.COM

ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

SHEET 3 OF 5

MC-3500 ISOLATOR ROW PLUS DETAIL

NTS



INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

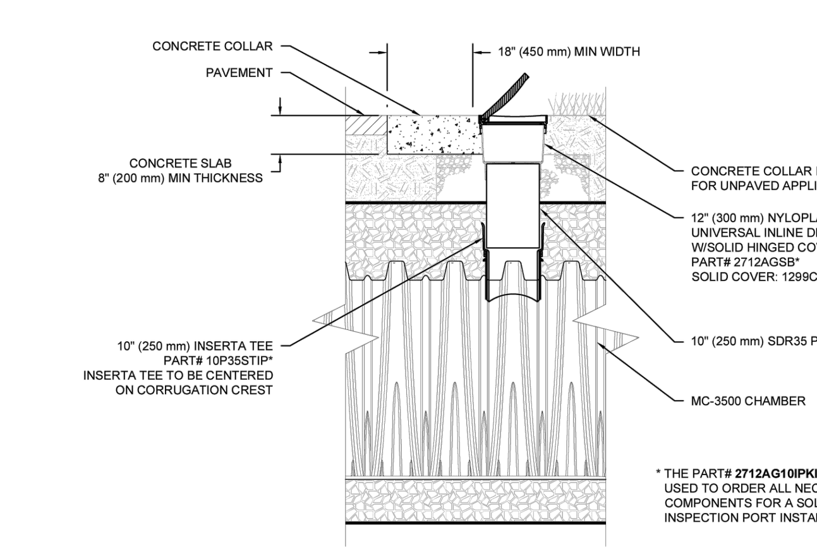
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



* THE PART# **2712AG10IPKIT** CAN BE USED TO ORDER ALL NECESSARY COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION

MC-3500 10" (250 mm) INSPECTION PORT DETAIL

NTS

GODDARD SCHOOL MC-3500 | NOBLESVILLE, IN, USA | DATE: 12/13/2024 | DRAWN: NB | PROJECT #: | CHECKED: N/A

StormTech® Chamber System | 1-800-821-6710 | WWW.STORMTECH.COM

ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

SHEET 4 OF 5

PROPOSED LAYOUT

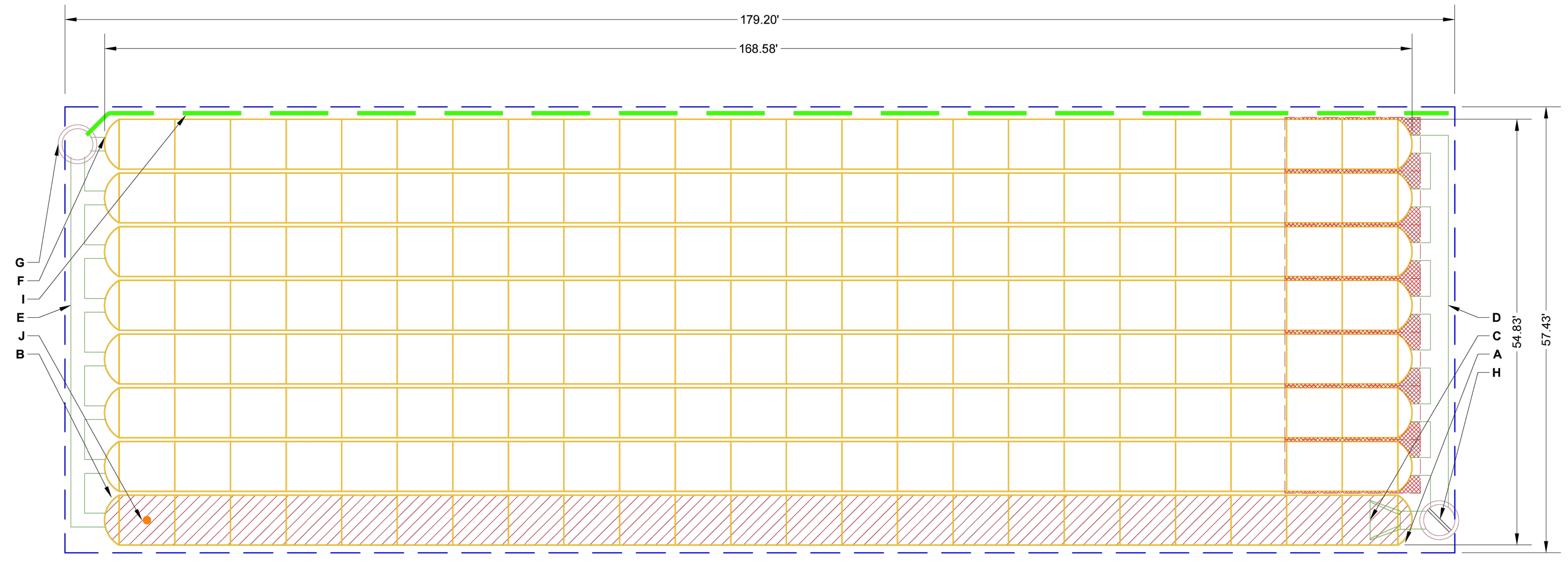
184	STORMTECH MC-3500 CHAMBERS
16	STORMTECH MC-3500 END CAPS
18	STONE ABOVE (in)
9	STONE BELOW (in)
40	STONE VOID
36983	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)
10292	SYSTEM AREA (SF)
473.3	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS:

MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	858.35
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	852.35
TOP OF STONE:	851.85
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	851.85
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	851.85
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	851.85
TOP OF MC-3500 CHAMBER:	850.35
24" x 24" BOTTOM MANIFOLD INVERT:	846.77
24" ISOLATOR ROW PLUS INVERT:	846.77
18" x 18" BOTTOM MANIFOLD INVERT:	846.75
18" BOTTOM CONNECTION INVERT:	846.75
BOTTOM OF MC-3500 CHAMBER:	846.60
UNDERDRAIN INVERT:	845.85
BOTTOM OF STONE:	845.85

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PRE-CORED END CAP, PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
PREFABRICATED END CAP	B	18" BOTTOM PRE-CORED END CAP, PART#: MC3500IEPP18BC / TYP OF ALL 18" BOTTOM CONNECTIONS	1.77"	
FLAMP	C	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
MANIFOLD	D	24" x 24" BOTTOM MANIFOLD, ADS N-12	2.06"	
MANIFOLD	E	18" x 18" BOTTOM MANIFOLD, ADS N-12	1.77"	
PIPE CONNECTION	F	18" BOTTOM CONNECTION	1.77"	
CONCRETE STRUCTURE	G	OCS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)		8.0 CFS OUT
CONCRETE STRUCTURE W/WEIR	H	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		35.8 CFS IN
UNDERDRAIN	I	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		
INSPECTION PORT	J	10" SEE DETAIL		



ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 17.50' OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES

- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

GODDARD SCHOOL MC-3500 | NOBLESVILLE, IN, USA | DATE: 12/13/2024 | DRAWN: NB | PROJECT #: | CHECKED: N/A

DATE | DRW | CHK | DESCRIPTION

StormTech® Chamber System | 1-800-821-6710 | WWW.STORMTECH.COM

ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

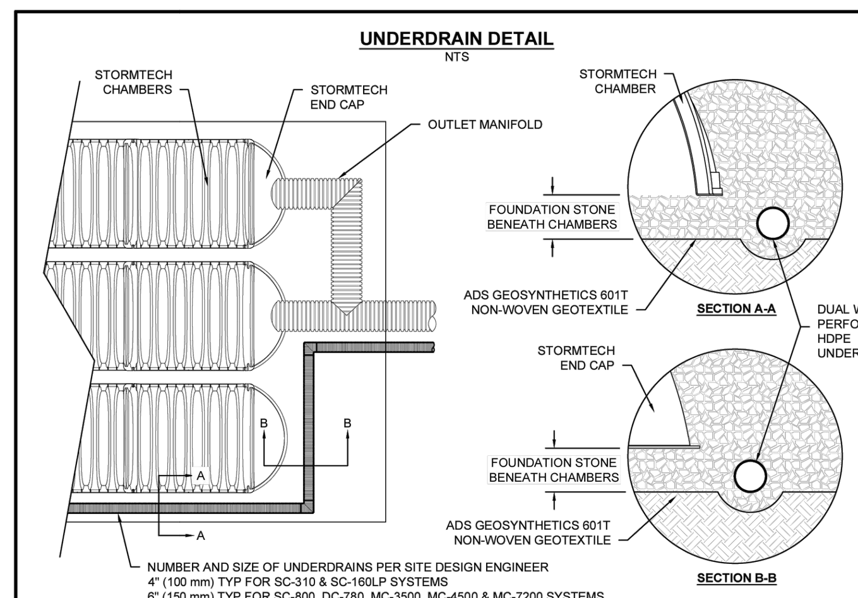
0 15 30

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE PROJECT'S ENGINEER OF RECORD ("EOR") OR OTHER PROJECT REPRESENTATIVE. THIS DRAWING IS NOT INTENDED FOR USE IN BIDDING OR CONSTRUCTION WITHOUT THE EOR'S PRIOR APPROVAL. EOR SHALL REVIEW THIS DRAWING PRIOR TO BIDDING AND/OR CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE EOR TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

SHEET 2 OF 5

UNDERDRAIN DETAIL

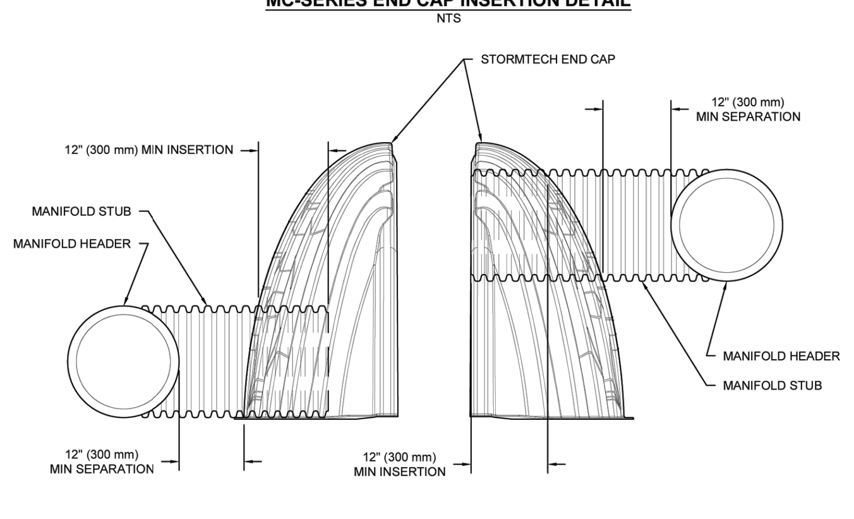
NTS



NUMBER AND SIZE OF UNDERDRAINS PER SITE DESIGN ENGINEER
4" (100 mm) TYP FOR SC-310 & SC-160LP SYSTEMS
6" (150 mm) TYP FOR SC-800, DC-780, MC-3500, MC-4500 & MC-7200 SYSTEMS

MC-SERIES END CAP INSERTION DETAIL

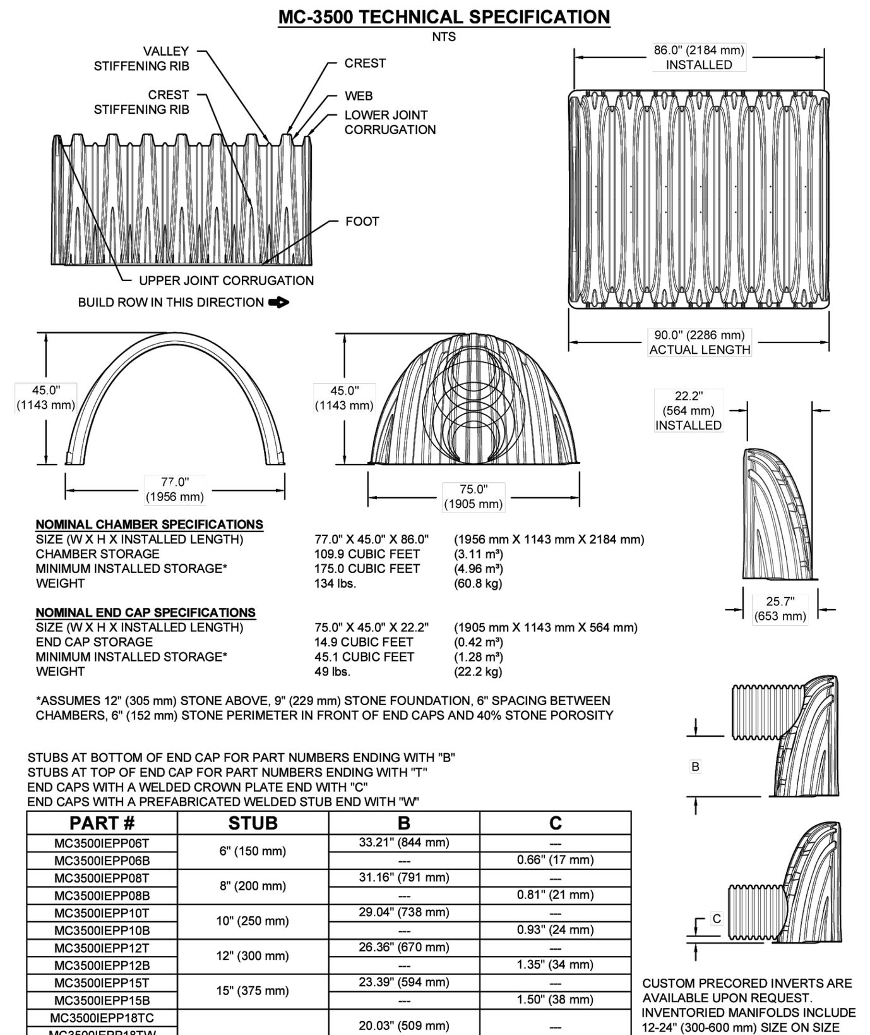
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-3500 TECHNICAL SPECIFICATION

NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

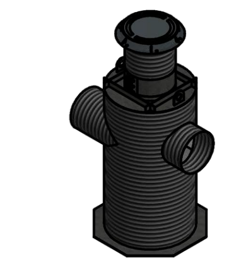
GODDARD SCHOOL MC-3500 | NOBLESVILLE, IN, USA | DATE: 12/13/2024 | DRAWN: NB | PROJECT #: | CHECKED: N/A

StormTech® Chamber System | 1-800-821-6710 | WWW.STORMTECH.COM

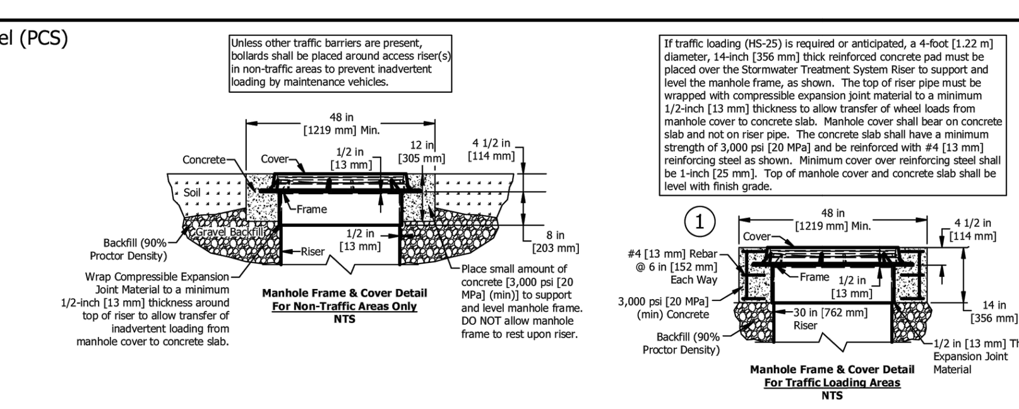
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

SHEET 5 OF 5

Aqua-Swirl® Polymer Coated Steel (PCS) Stormwater Treatment System

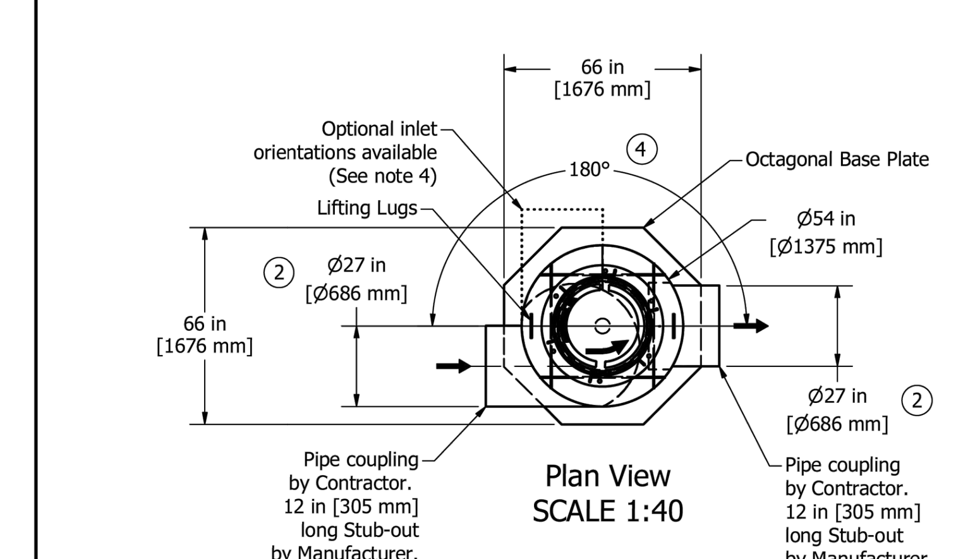


Projected View
SCALE 1:70

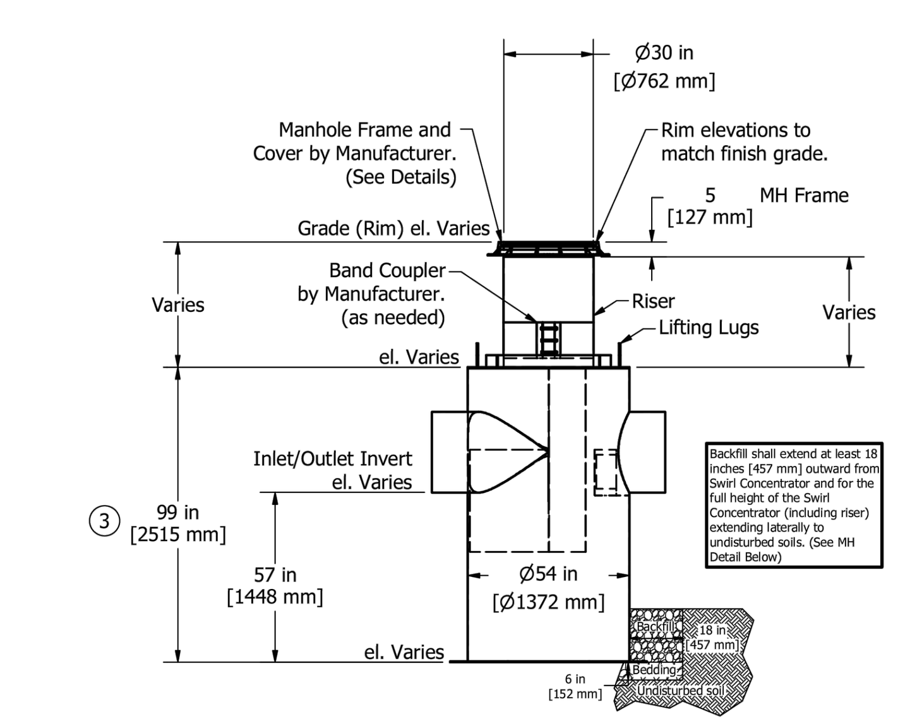


Please see accompanied Aqua-Swirl® specification notes. See Site Plan for actual System orientation. Approximate dry (pick) weight: 2000 lbs [900 kg].

1. As an alternative, 42 in [1067 mm] diameter, HS-20/25 rated precast concrete rings may be substituted. 14 in [356 mm] thickness must be maintained.
2. XC-4 inlet/outlet pipe size ranges up to 27 in [686 mm].
3. XC-4 chamber height may vary up to 99 in [2515 mm], depending on inlet/outlet pipe size.
4. Orientation may vary from a minimum of 90° to a maximum of 180°. Clockwise or counterclockwise orientation as needed.



Plan View
SCALE 1:40



Elevation View
SCALE 1:40

AquaShield™ 2733 Kanasita Drive, Suite 111, Chattanooga, TN 37343 Phone (888) 344-9044 Fax (423) 826-2112 www.aquashieldinc.com

Aqua-Swirl® XCelerator XC-4 CCW	Structure #:	XC-4 STD	Rvwed	Rvw. Date
Standard Detail	Drawn By:	OFlores		
	Scale:	As Shown		
	Date:	2/25/2021		
	U.S. Patent No. 6524473 and other Patent Pending			

VERIDUS GROUP

6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL

KELLY ANN CANTER REGISTERED No. PE11900367 STATE OF INDIANA PROFESSIONAL ENGINEER

APPROVAL PENDING NOT FOR CONSTRUCTION

12/18/2024

DATE	12/18/2024
PROJECT NO.	2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN

4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

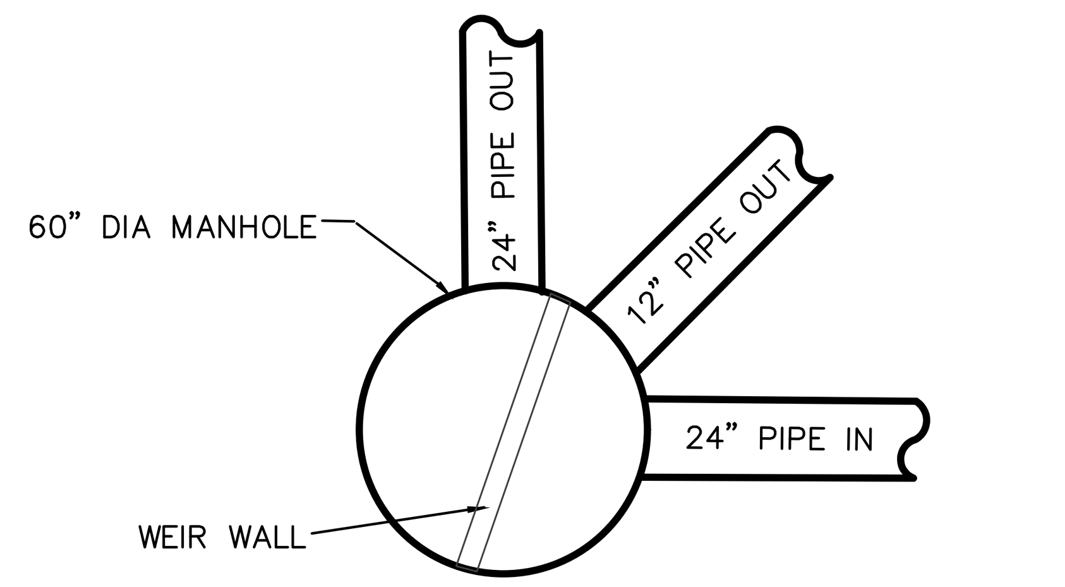
SHEET TITLE

UTILITY DETAILS

SHEET NUMBER

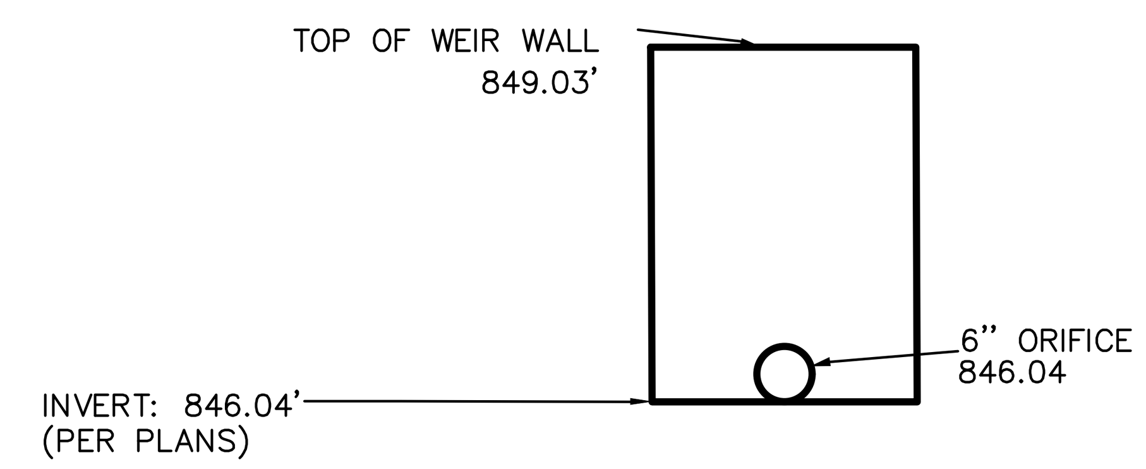
C4.6

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 2:37 PM EDITED BY: NBALENTINE DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.5 UTILITY DETAILS.DWG

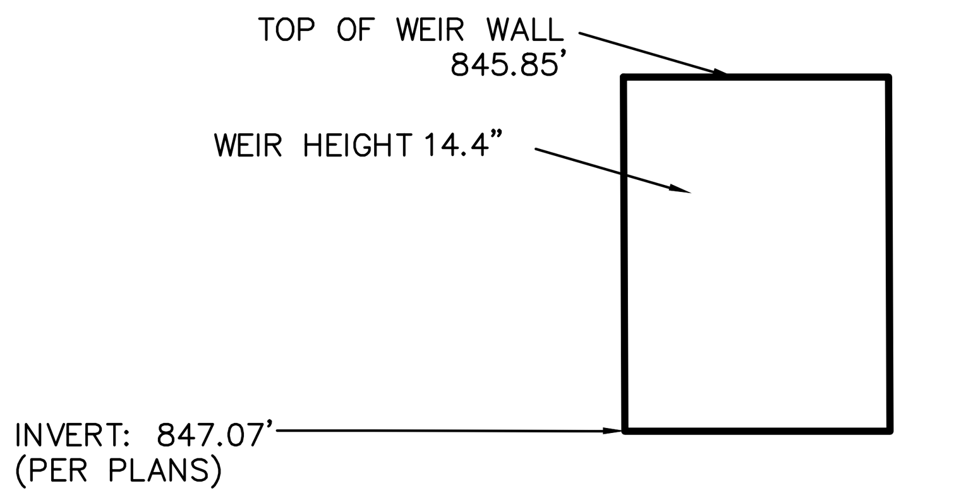


WEIR WALL TO BE CONSTRUCTED OUT OF CAST IN PLACE CLASS A OR HIGHER CONCRETE WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI. WEIR WALL SHALL BE DOWELED INTO BOTH SIDES OF STRUCTURE WITH RECOMMENDED SPACING OF 9"-12" O.C.
REFER TO INDOT SPECIFICATION SECTION 707.04(C).

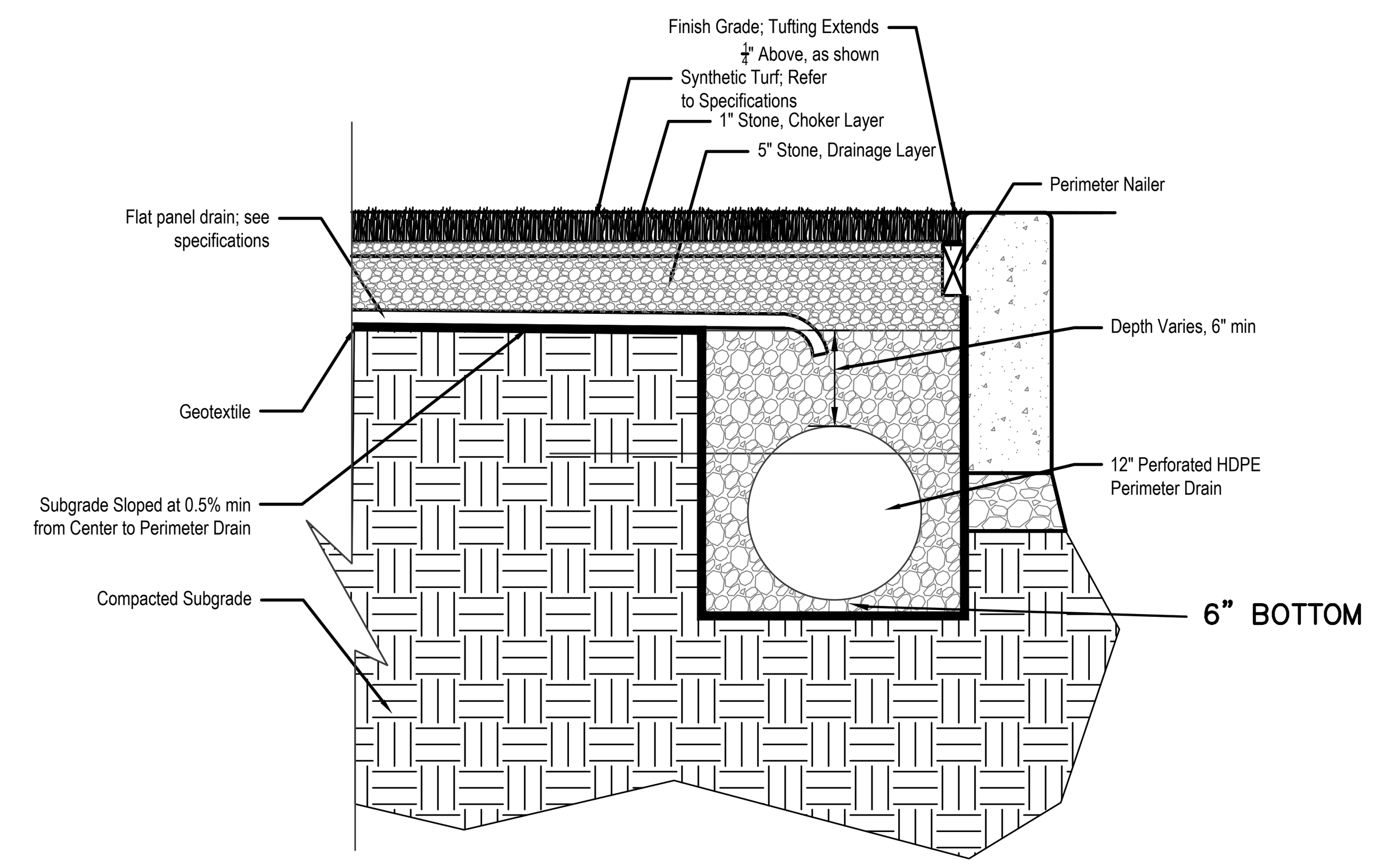
DIVERSION STRUCTURE DETAIL (PLAN VIEW)
NOT TO SCALE



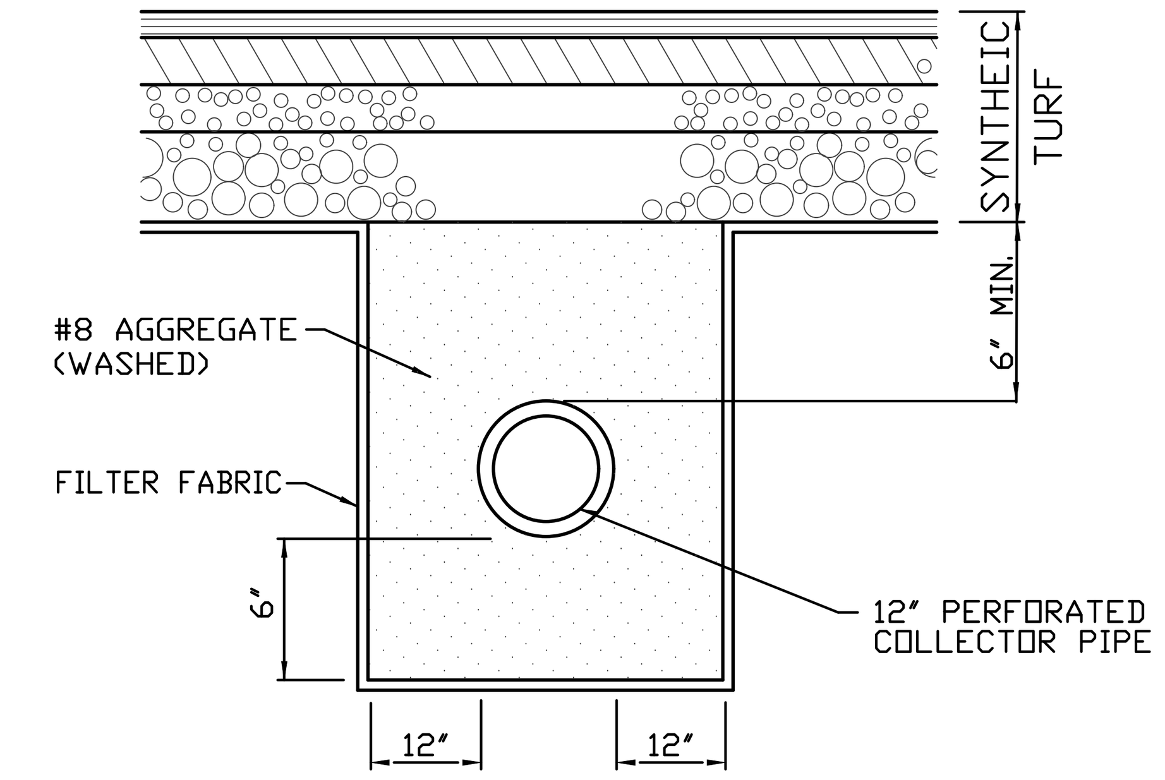
STR 16 OUTLET CONTROL STRUCTURE DETAIL WEIR WALL
NOT TO SCALE



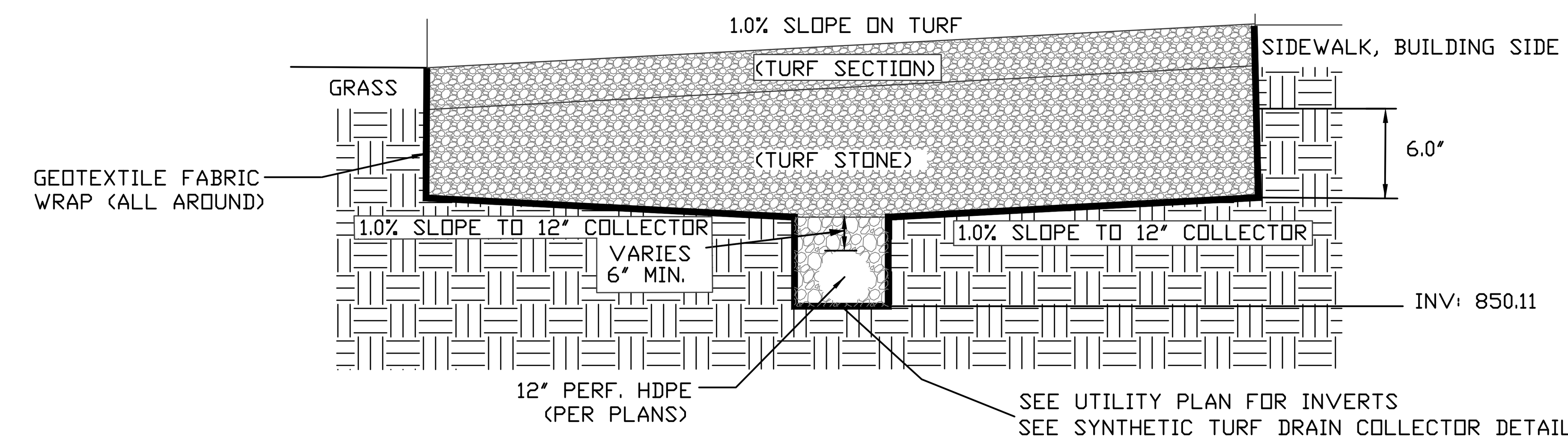
STR 18 DIVERSION STRUCTURE DETAIL WEIR WALL
NOT TO SCALE



SYNTHETIC TURF AND
SUBGRADE DRAINAGE DETAIL
NOT TO SCALE



SYNTHETIC TURF COLLECTOR
DRAIN DETAIL
NOT TO SCALE



SYNTHETIC FIELD UNDERGROUND STONE DETAIL
NOT TO SCALE

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 2:37 PM EDITED BY: NBALENTINE DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.5 UTILITY DETAILS.DWG

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE Kelly Canter

SEAL
KELLY ANN CANTER
REGISTERED
No. PE11900367
STATE OF
INDIANA
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA 46062

SHEET TITLE
UTILITY DETAILS

SHEET NUMBER
C4.7

SEE ALSO:

1. CEG WATER STANDARDS MANUAL
2. CITY OF NOBLESVILLE CONSTRUCTION STANDARDS AND SPECIFICATIONS

SEE ALSO CITIZENS ENERGY WATER STANDARDS FOR SPECIFICATIONS AND DETAILS.

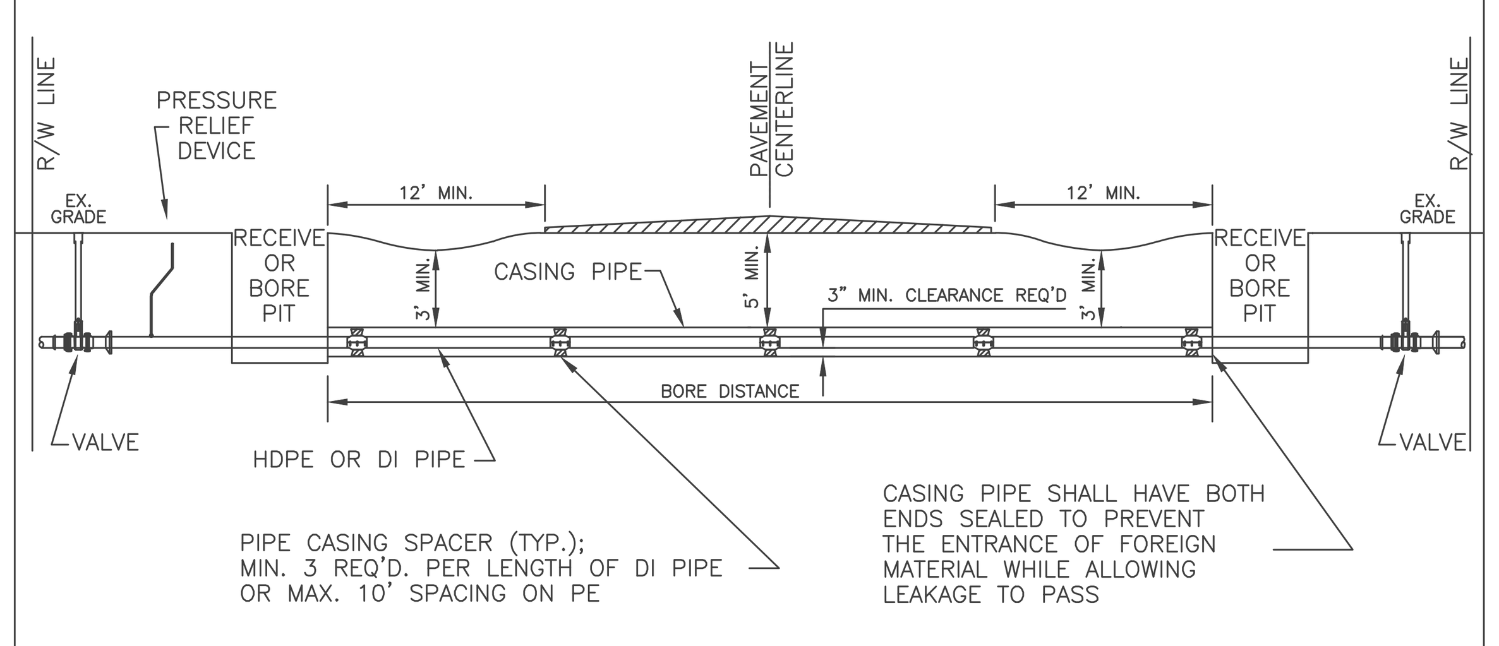
https://info.citizensenergygroup.com/permits-and-forms

https://2545024.fs1.hubspotusercontent-na1.net/hubfs/2545024/site/permits%20and%20forms%20documents/2024%20Water%20Standards%20Manual%20Updated.pdf

CITIZENS WATER STANDARD PRACTICE I

REVISION DATE: 3/1/2010 ISSUE DATE: 3/1/2010

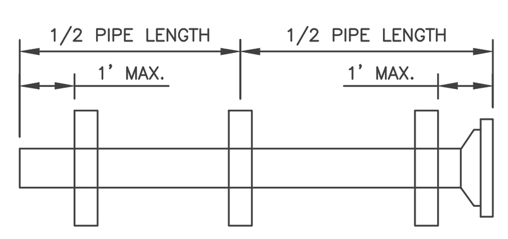
TYPICAL BORING CASING PIPE



SECTION

NOTES:

1. ALL JOINTS IN CASING PIPE SHALL BE RESTRAINED.
2. STEEL CASING SECTIONS SHALL BE CONNECTED BY WELDING. WELD SHALL BE IN ACCORDANCE WITH AWWA C206.
3. POLYETHYLENE CASING SHALL BE CONNECTED BY WELDING.
4. TRACING STATIONS SHALL BE INSTALLED ON EACH END OF CASING
4. LOCATION & TYPE OF PRESSURE RELIEF DEVICE TO BE DETERMINED BY THE UTILITY.

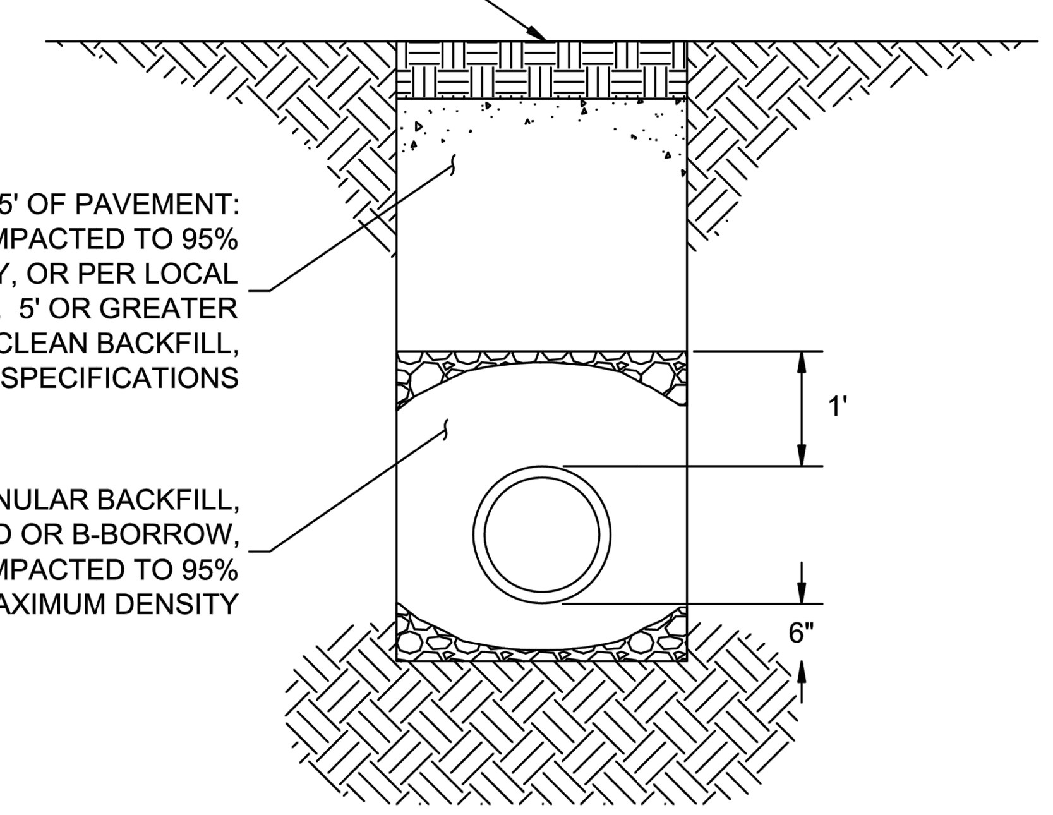


DI PIPE CASING SPACER DETAIL

CITIZENS WATER STANDARD PRACTICE A.1

REVISION DATE: 9/20/2018 ISSUE DATE: 7/17/2013

WATER MAIN AND SERVICE BACKFILL REQUIREMENTS



SCALE: NTS

NOTE: COMPACTED BACKFILL IN LIFTS OF 12" MAXIMUM. TRENCH EXCAVATION SHALL CONFORM TO LOCAL STANDARDS.

CITIZENS WATER STANDARD PRACTICE O.1

REVISION DATE: 8/25/2010 ISSUE DATE: 9/1/2010

VEHICLE INPACT PROTECTION FOR HYDRANTS

ADOPTED CODE FOR THE STATE OF INDIANA, TAKEN FROM THE 2006 INTERNATIONAL FIRE CODE.

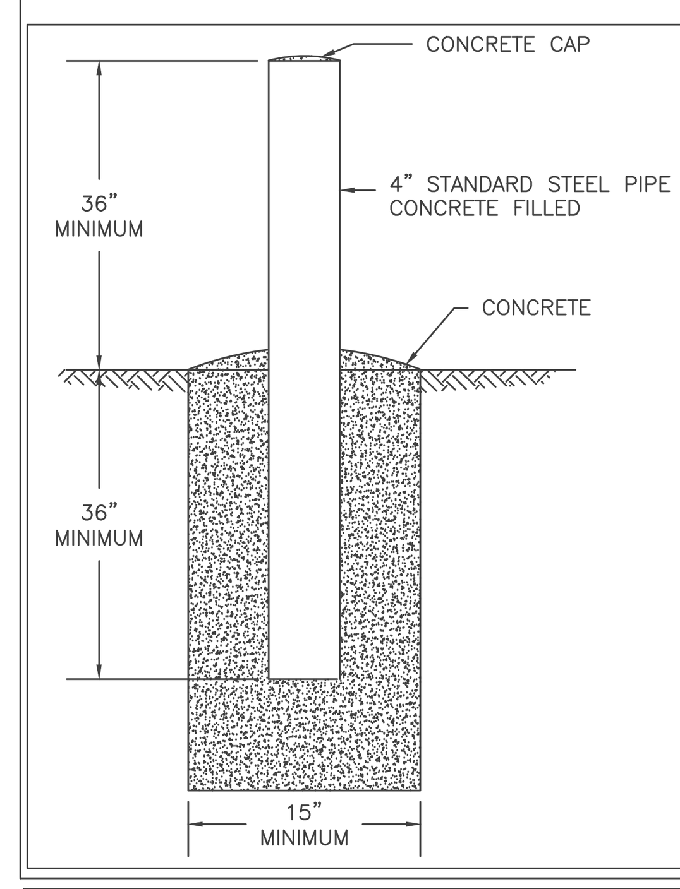
SECTION 312 VEHICLE IMPACT PROTECTION

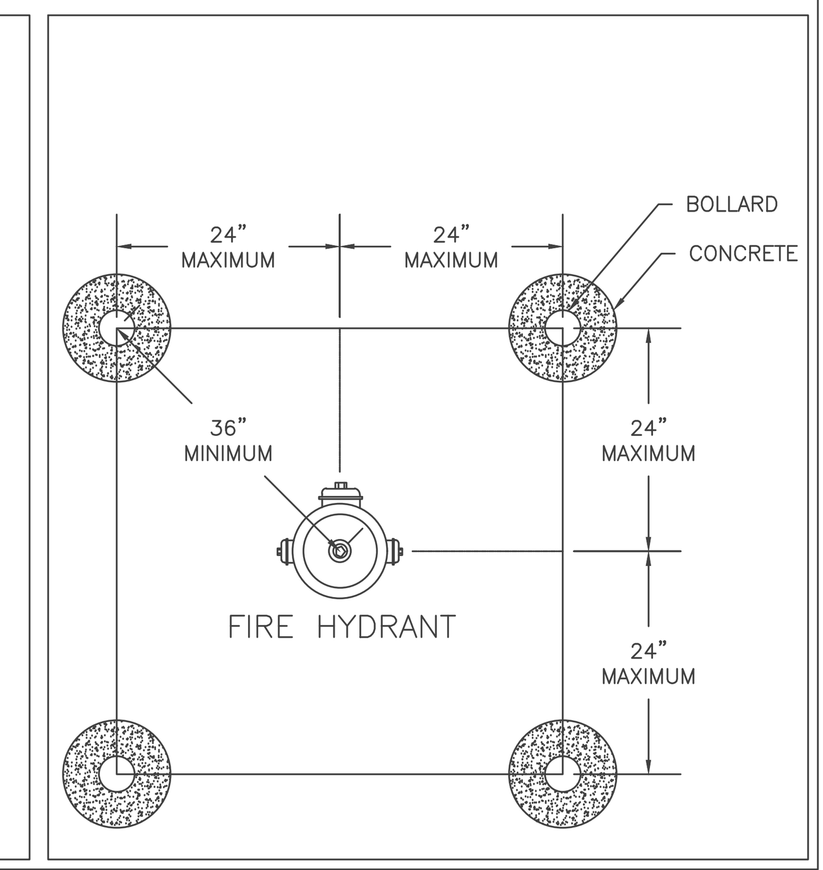
312.1 GENERAL. VEHICLE IMPACT PROTECTION REQUIRED BY THIS CODE SHALL BE PROVIDED BY POSTS THAT COMPLY WITH SECTION 312.2 OR BY OTHER APPROVED PHYSICAL BARRIERS THAT COMPLY WITH SECTION 312.3.

312.2 POSTS. GUARD POSTS SHALL COMPLY WITH ALL OF THE FOLLOWING REQUIREMENTS:

1. CONSTRUCTED OF STEEL NOT LESS THAN 4 INCHES (102 MM) IN DIAMETER AND CONCRETE FILLED.
2. SPACED NOT MORE THAN 4 FEET (1219 MM) BETWEEN POSTS ON CENTER.
3. SET NOT LESS THAN 3 FEET (914 MM) DEEP IN A CONCRETE FOOTING OF NOT LESS THAN A 15-INCH (381 MM) DIAMETER.
4. SET WITH THE TOP OF THE POSTS NOT LESS THAN 3 FEET (914 MM) ABOVE GROUND.
5. LOCATED NOT LESS THAN 3 FEET (914 MM) FROM THE PROTECTED OBJECT

312.3 OTHER BARRIERS. PHYSICAL BARRIERS SHALL BE A MINIMUM OF 36 INCHES (914 MM) IN HEIGHT AND SHALL RESIST A FORCE OF 12,000 POUNDS (53 375 N) APPLIED 36 INCHES (914 MM) ABOVE ADJACENT GROUND SURFACE.

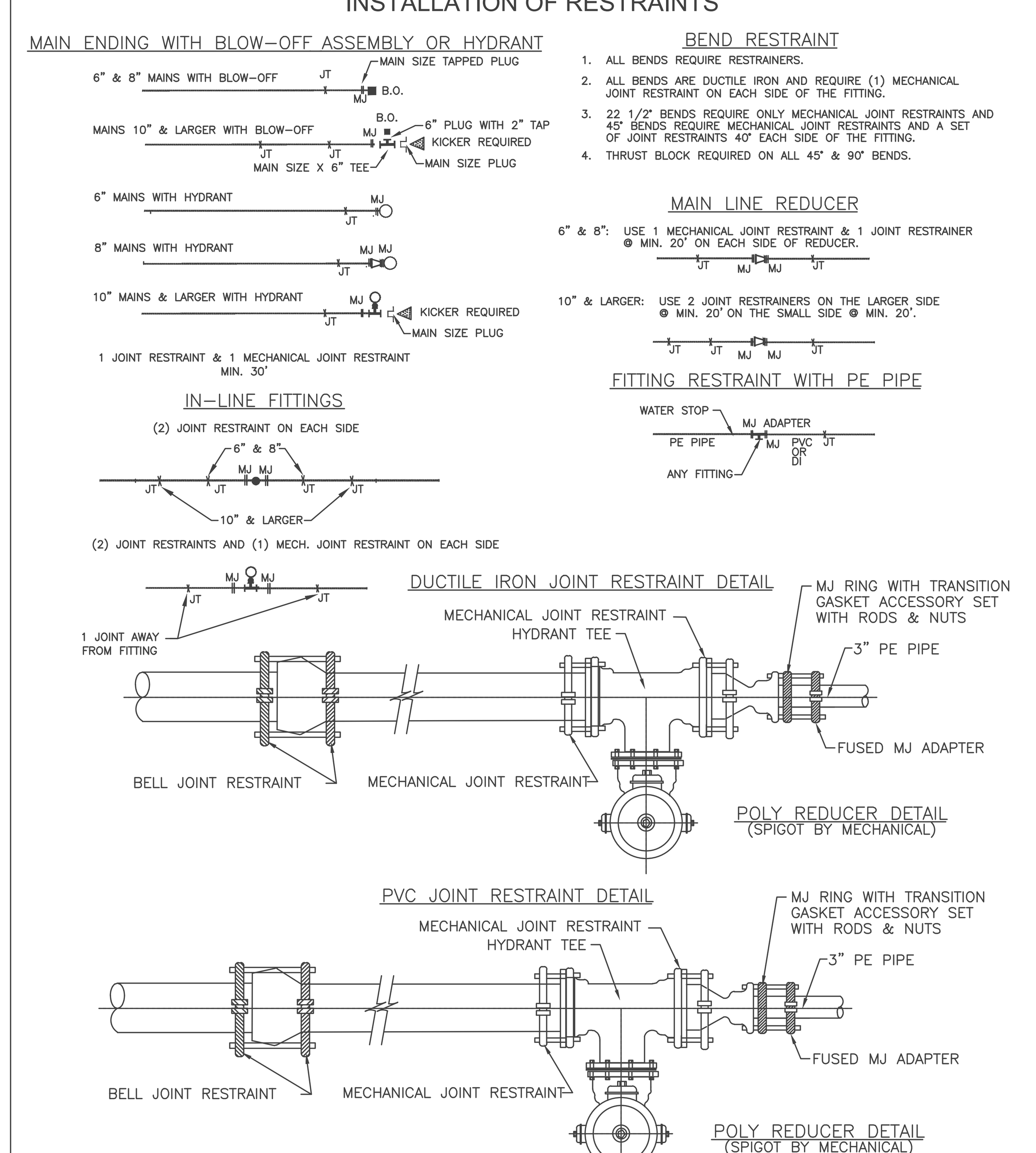




CITIZENS WATER STANDARD PRACTICE O

REVISION DATE: 3/20/2014 ISSUE DATE: 6/8/2009

INSTALLATION OF RESTRAINTS



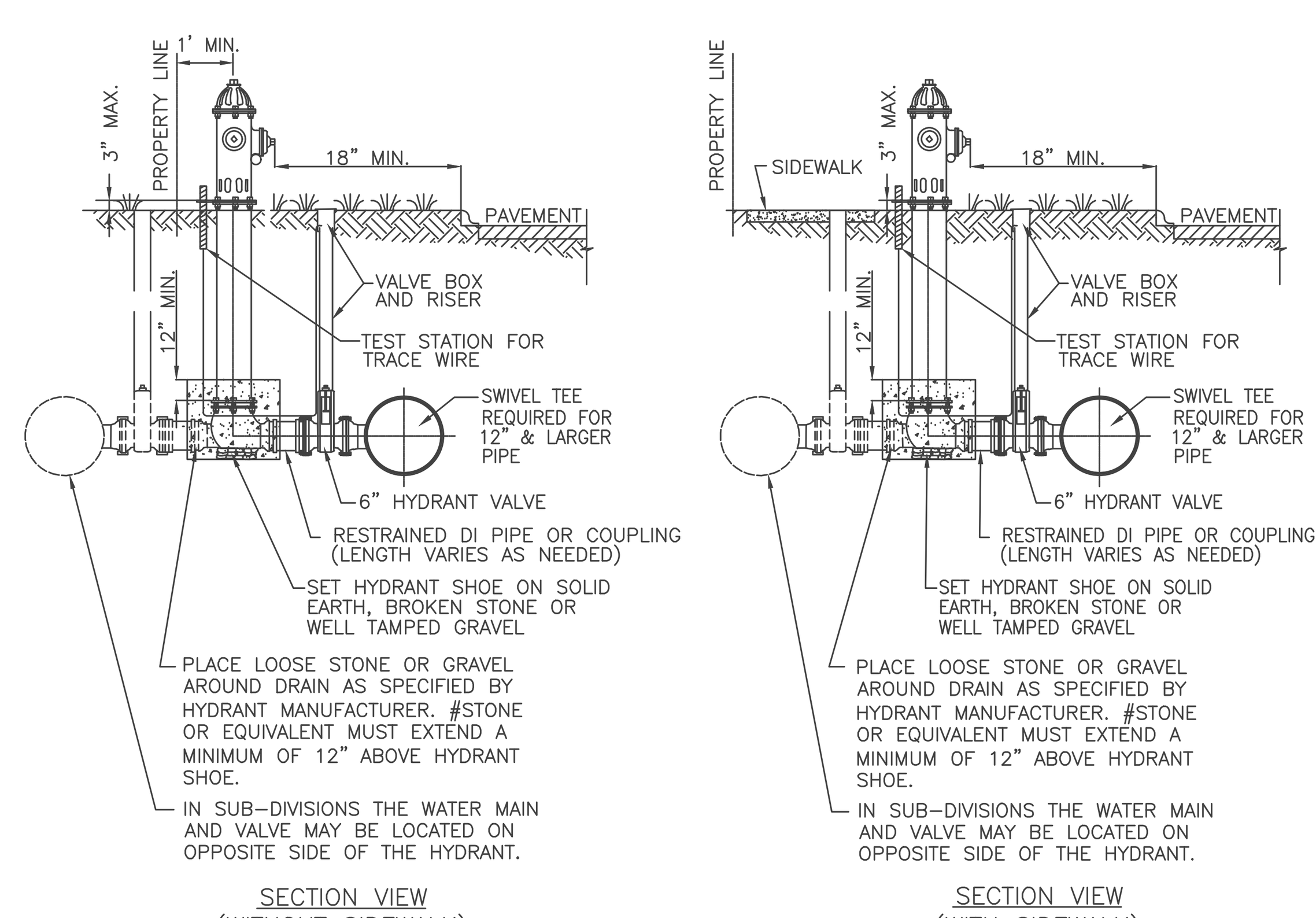
CITIZENS WATER STANDARD PRACTICE B

REVISION DATE: 10/02/2019 ISSUE DATE: 12/31/2019

STANDARD HYDRANT SETTING

NOTES:

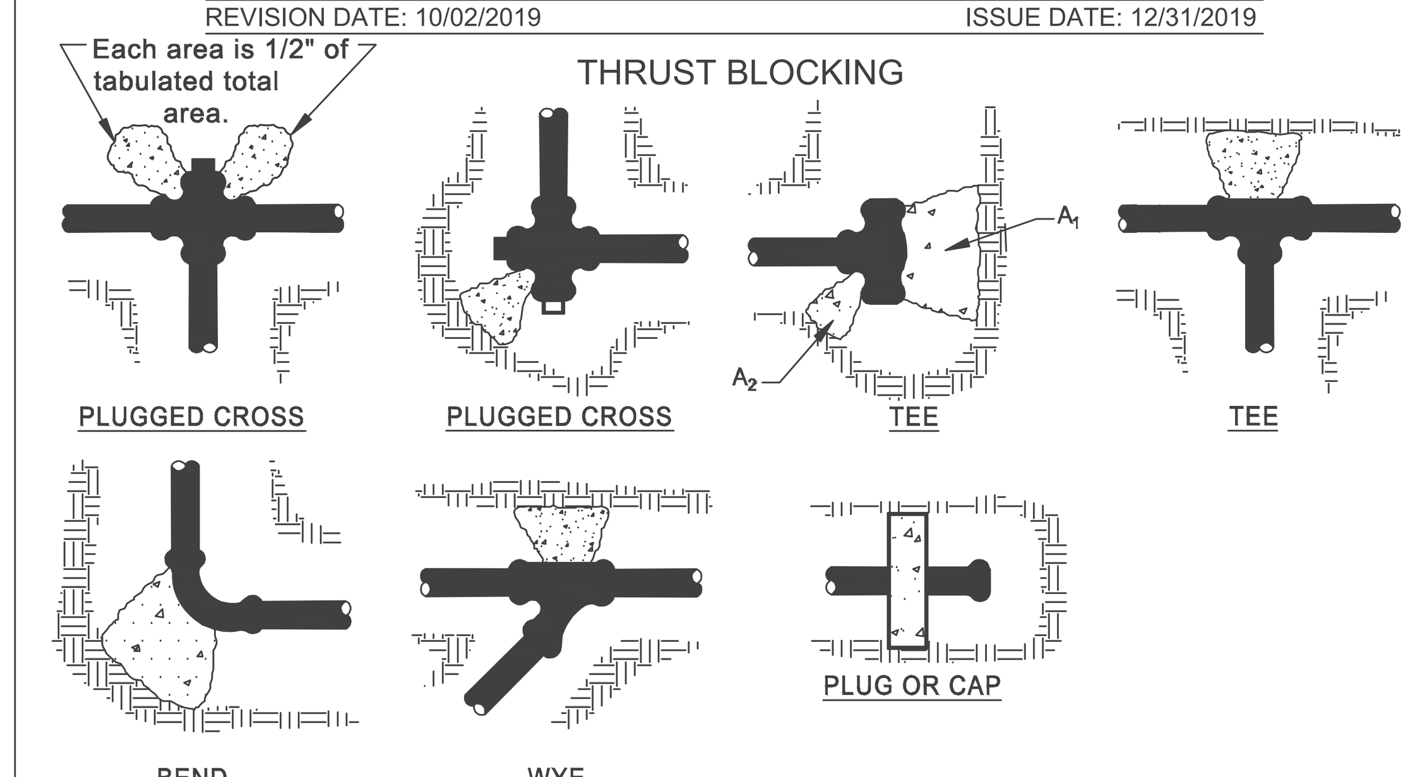
1. ALL HYDRANTS SHALL BE RESTRAINED TO THE HYDRANT TEE WITH DUCTILE IRON BRANCH PIPING ENCASED IN POLYETHYLENE WRAP.
2. SWIVEL 90° BEND MAY BE USED TO INSTALL HYDRANT AND VALVE IN GRASS STRIP BETWEEN CURB & SIDEWALK.
3. A MANUFACTURED "OUT OF SERVICE" SIGN WILL BE REQUIRED ON HYDRANTS UNTIL MAIN HAS BEEN PLACED "IN SERVICE" BY THE INSPECTOR.
4. FOR BRANCH PIPE LONGER THAN 10', INSTALL TRACING WIRE ALONG HYDRANT VALVE RISER.



CITIZENS WATER STANDARD PRACTICE A.2

REVISION DATE: 10/02/2019 ISSUE DATE: 12/31/2019

THRUST BLOCKING



Notes:

1) CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2) KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
3) POLYTHYLENE ENCASEMENT SHALL BE PLACED BETWEEN CONCRETE AND FITTINGS.
4) ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 P.S.I., 2" TO 4" SLUMP AND INCLUDE WIRE MESH FOR REINFORCEMENT.
5) MINIMUM SOIL BEARING SURFACE AREA REQUIREMENTS ARE PROVIDED BELOW BASED ON 150 P.S.I. WATER PRESSURE PLUS 100 P.S.I. WATER HAMMER AND SOIL BEARING CAPACITY OF 3,000 POUNDS PER SQUARE FOOT.

Minimum Soil Bearing Surface Area (ft2)
(Assuming 3,000 psf Soil Bearing Capacity)

Pipe Size	Horizontal Bends			Tee or Dead End (Plug/Cap)
	22-1/2°	45°	90°	
6"		6	8	6
8"		6	8	6
12"	4	6	11	8
16"	6	11	22	15
20"	9	18	36	24
24"	13	27	50	36
30"	20	45	76	57
36"	31	59	115	80

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 2:37 PM EDITED BY: NBALENTINE DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C4.5 UTILITY DETAILS.DWG

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL

KELLY ANN CANTER REGISTERED PROFESSIONAL ENGINEER — APPROVAL PENDING NOT FOR CONSTRUCTION

12/18/2024

DATE 12/18/2024

PROJECT NO. 2023.0212

REVISIONS

NUMBER	DATE	DESCRIPTION

PROJECT TITLE

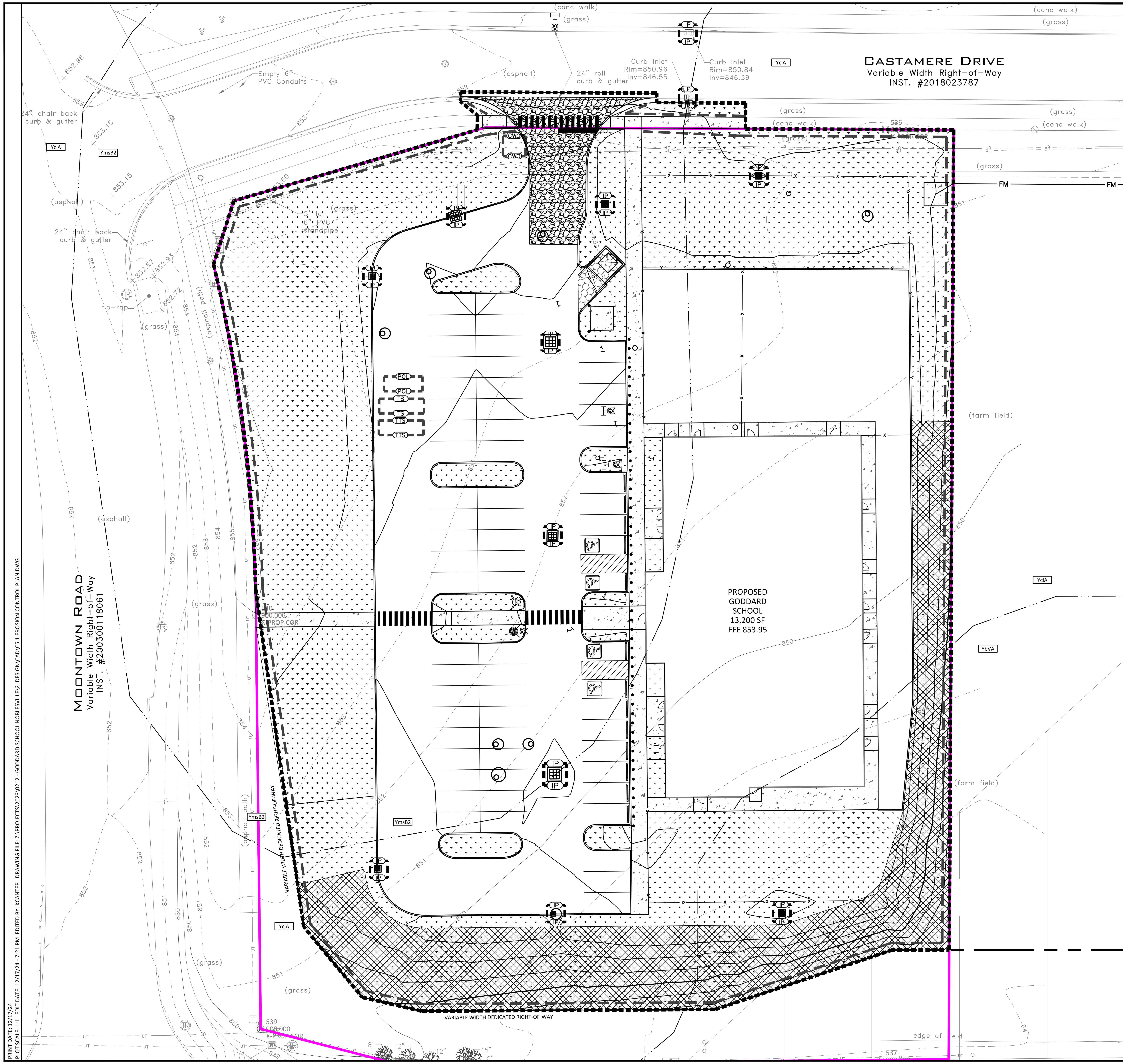
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE

UTILITY DETAILS

SHEET NUMBER

C4.8



SCALE: 1"=20'

EROSION CONTROL LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- TEMPORARY SILT FENCE
- CONSTRUCTION LIMITS
- TEMPORARY CONSTRUCTION FENCE
- TEMPORARY INLET PROTECTION
- TEMPORARY OUTLET PROTECTION (10' LENGTH)
- CONCRETE WASHOUT AREA
- PORT-O-LET LOCATION
- TEMPORARY MATERIAL STORAGE AREA
- TEMPORARY TRASH STORAGE AREA
- TEMPORARY SOIL STORAGE AREA
- EROSION CONTROL BLANKET / EROSION CONTROL GROUND COVER AS APPROVED BY THE ENGINEER
- GRAVEL CONSTRUCTION ENTRANCE
- AREA SUBJECT TO TEMPORARY SEEDING DURING CONSTRUCTION AND PERMANENT SEEDING AND / OR VEGETATION AFTER CONSTRUCTION. REFER TO LANDSCAPE ARCHITECT FOR SEEDING REQUIREMENTS.
- HYDROLOGIC SOIL GROUP BOUNDARY

Br	Brookston silty clay loam, 0 to 2 percent slopes
CrA	Crosby Silt Loam, clay loam-Urban land complex subsoil, 0 to 2 percent slopes
YbVA	Brookson silty clay loam-Urban land complex, 0 to 2 percent slopes
YclA	Crosby silt loam, fine lamyu subsoil-Urban land complex, 0 to 2 percent slopes
YmsB2	Miami silt loam-Urban land complex, 2 to 6 percent slopes, eroded

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY CENTRAL STATES CONSULTING, LLC. PROJECT NUMBER 23-077, DATED 11/02/2023.

GENERAL NOTES

1. LAND ALTERATIONS WHICH STRIPS THE LAND OF VEGETATION, INCLUDING REGRADING, SHALL BE DONE IN A WAY THAT WILL MINIMIZE EROSION.
2. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
3. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
4. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
5. SEDIMENT LADEN WATER SHALL BE DETAINED BY EROSION CONTROL PRACTICES AS NEEDED TO MINIMIZE SEDIMENTATION IN THE RECEIVING STREAM. NO STORM WATER SHALL BE DISCHARGED FROM THE SITE IN A MANNER THAT CAUSES EROSION AT THE POINT OF DISCHARGE.
6. WASTES AND UNUSED BUILDING MATERIALS SHALL NOT BE ALLOWED TO BE CARRIED FROM THE SITE BY STORM WATER RUNOFF. PROPER DISPOSAL OF ALL WASTES AND UNUSED BUILDING MATERIALS IS REQUIRED.
7. SEDIMENT BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS SHALL BE MINIMIZED. CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE SITE FOR DISPOSAL.
8. SOIL WHICH HAS ACCUMULATED NEXT TO EROSION CONTROL DEVICES SHALL BE COLLECTED AND RE-DISTRIBUTED ON SITE AFTER EACH RAINFALL EVENT, AND AT LEAST ONCE A WEEK.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. ALL EXISTING STRUCTURES, FENCING TREES AND ETC. WITHIN CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF SITE. BURNING IS NOT ALLOWED ON SITE.
11. THE SITE IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA AS INDICATED ON THE FLOOD INSURANCE RATE MAP FOR HAMILTON COUNTY, INDIANA PANEL 18057C0137G DATED NOVEMBER 19, 2014.
12. SCHEDULE OF EARTHWORK ACTIVITIES:
    A. THE DURATION OF THE TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM. THE AREA SHALL BE STABILIZED AS SOON AS POSSIBLE. TEMPORARY VEGETATION OR MULCHING SHALL BE USED TO PROTECT EXPOSED AREAS WHEN ACTIVITY CEASES FOR MORE THAN 14 DAYS OR AS DIRECTED BY THE ENGINEER.
    B. TOPSOIL REPLACEMENT SHALL TAKE PLACE FROM MARCH 1 TO OCTOBER 31. STOCKPILE TOPSOIL AT ALL OTHER TIMES OF THE YEAR. PERMANENT AND FINAL VEGETATION AND STRUCTURAL EROSION CONTROL DEVICES SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING OR AS SOON AS POSSIBLE.
    C. STOCKPILES SHALL BE LOCATED AS SHOWN. STOCKPILES SHALL HAVE SILT FENCE AROUND THE PERIMETER AND BE SEEDED IF IT IS UNDISTURBED FOR MORE THAN 14 CONSECUTIVE DAYS.
13. ANY OFFSITE BORROW AND/OR WASTE SITES THAT ARE NEEDED SHALL BE PERMITTED AS PART OF THIS PERMIT OR BE PART OF AN EXISTING PERMIT.

EXISTING LEGEND

LEGEND:

	DESCRIPTION:
	SIGN / TWO POST SIGN
	WATER VALVE/FIRE HYD/METER
	TELE/FIBER OPTIC/GAS MARKER
	GAS METER / VALVE
	CLEAN-OUT
	ELEC. METER BOX/TRANSFORMER
	ELEC. / TELEPHONE PEDESTAL
	GUARD POST/POST with LIGHT
	AIR CONDITIONER / GENERATOR
	MAGNAIL SET/FOUND
	REBAR SET/FOUND
	SQUARE / ROUND / CURB INLET
	TRAFFIC/COMBO/ POWER POLE
	LIGHT POLE – SQUARE / ROUND
12"	CONIFEROUS TREE & SIZE
36"	DECIDUOUS TREE & SIZE
	DRAINAGE /SANITARY MANHOLE
	COMBINATION/MISC. LID MANHOLE
	BEEHIVE ROUND/SQUARE INLET
	GUY WIRE / GROUND LIGHT
WTR	UNDG. WATER LINE
G	UNDG. GAS LINE
UT	UNDG. TELEPHONE LINE
UE	UNDG. ELECTRIC LINE
OET	OVERHEAD ELE. & TEL
OETC	OVERHEAD ELE TEL & CAB
OE	OVERHEAD ELECTRIC
VCP	vitrified clay pipe
RCP	reinforced concrete pipe
PVC	polyethylene coated pipe
HDPE	high–density polyethylene pipe
DI	ductile iron pipe

BENCHMARK DATA

HCSO 104 — PUBLISHED ELEVATIONS 809.09 (NAVD 88)
MEASURED ELEVATION 808.99 (NAVD 88)

A STATE SURVEY STANDARD DISK, STAMPED 104 SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE GROUD, LOCATED AT THE SOUTHWEST CORNER OF MILL CREEK ROAD AND THE OLD CENTRAL INDIANA RAILROAD.

CSC TBM #3044 — ELEVATION 850.88

MAG NAIL WITH HAMILTON COUNTY WASHER FOUND ON THE SOUTHWEST CORNER OF THE CONCRETE BASE OF A TRAFFIC POLE, LOCATED 75.7 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD AND 57.8 FEET NORTH OF THE CENTERLINE OF STATE ROAD 32.

CSC TBM #1

A CUT "X" SET OF THE SOUTH SIDE OF A CONCRETE WALK LOCATED 26.7 FEET SOUTH OF THE CENTERLINE OF CASTAMERE DRIVE AND 433.3 FEET EAST OF THE CENTERLINE OF MOONTOWN ROAD.

Indiana 811
Know what's below.
Call before you dig.

PER INDIANA STATE LAW IS-69-1991. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
KELLY ANN CANTER — REGISTERED — PROFESSIONAL ENGINEER — APPROVAL PENDING — NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE
EROSION CONTROL PLAN

SHEET NUMBER
C5.1

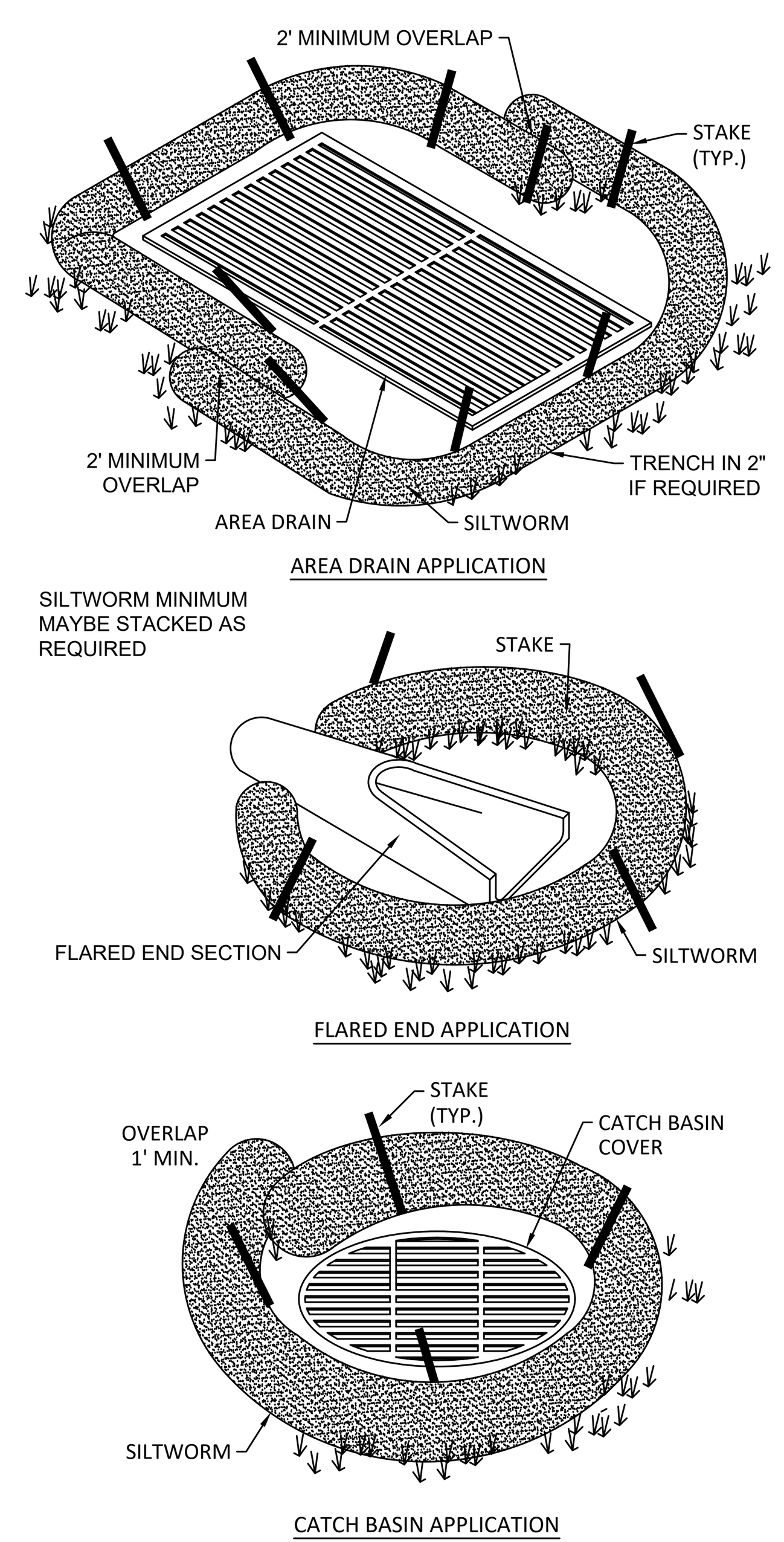
PRINT DATE: 12/17/24 PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 7:21 PM EDITED BY: KCANTER DRAWING FILE: Z:\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C5.1 EROSION CONTROL PLAN.DWG

EROSION CONTROL NOTES:

1. CONSTRUCTION ACTIVITY SHALL CONSIST OF UTILITIES, GRADING, AND STORM SEWER SYSTEM.
2. PRELIMINARY CONSTRUCTION SCHEDULE: CONSTRUCTION SHALL BEGIN IN THE SPRING 2025. COMPLETION OF THE PROJECT IS ANTICIPATED IN 2026. THIS SCHEDULE IS SUBJECT TO CHANGE.
3. LAND ALTERATION WHICH STRIPS THE LAND OF VEGETATION, INCLUDING REGRADING, SHALL BE DONE IN A WAY THAT WILL MINIMIZE EROSION.
4. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
5. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
6. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
7. SEDIMENT LADEN WATER SHALL BE DETAINED BY EROSION CONTROL PRACTICES AS NEEDED TO MINIMIZE SEDIMENTATION IN THE RECEIVING STREAM. NO STORM WATER SHALL BE DISCHARGED FROM THE SITE IN A MANNER THAT CAUSES EROSION AT THE POINT OF DISCHARGE.
8. WASTES AND UNUSED BUILDING MATERIALS SHALL NOT BE ALLOWED TO BE CARRIED FROM THE SITE BY STORM WATER RUNOFF. PROPER DISPOSAL OF ALL WASTES AND UNUSED BUILDING MATERIALS IS REQUIRED.
9. SEDIMENT BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS SHALL BE MINIMIZED. CLEARED SEDIMENT SHALL BE RETURNED TO THE SITE FOR DISPOSAL.
10. SOIL WHICH HAS ACCUMULATED NEXT TO EROSION CONTROL DEVICES SHALL BE COLLECTED AND RE-DISTRIBUTED ON SITE AFTER EACH RAINFALL EVENT, AND AT LEAST ONCE A WEEK.
11. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE SURROUNDED BY ROCK DONUTS.
12. EXISTING VEGETATION SHALL BE PRESERVED IN AREAS NOT DISTURBED BY CONSTRUCTION ACTIVITY.
13. THERE ARE NO BORROW AREAS OTHER THAN THOSE DESIGNATED.
14. ALL APPLICABLE EROSION CONTROL MEASURES SHALL BE PLACED BEFORE ANY LAND DISTURBING ACTIVITIES.
15. SCHEDULE OF EROSION CONTROL ACTIVITIES:
    a. INSTALL INLET PROTECTION AROUND INLETS IMMEDIATELY UPON COMPLETION OF THE STRUCTURE. REMOVE INLET PROTECTION FOR PAVING OPERATION. REPLACE INLET PROTECTION AFTER PAVING IS COMPLETE. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON SEEDED AREAS BEHIND THE CURB.
    b. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM. THE AREA SHALL BE STABILIZED AS SOON AS POSSIBLE. TEMPORARY VEGETATION OR MULCHING SHALL BE USED TO PROTECT EXPOSED AREAS IF PERMANENT VEGETATION CANNOT BE SEEDED WITHIN 14 DAYS OR ACTIVITY CEASES FOR MORE THAN 21 DAYS OR AS DIRECTED BY THE ENGINEER.
    c. TOPSOIL REPLACEMENT SHALL TAKE PLACE FROM MARCH 1 TO OCTOBER 31. STOCKPILE TOPSOIL AT ALL OTHER TIMES OF THE YEAR. PERMANENT AND FINAL VEGETATION AND STRUCTURAL EROSION CONTROL DEVICES SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING OR AS SOON AS POSSIBLE.
16. APPLY FERTILIZER AT A RATE ADEQUATE TO PROVIDE 1 LB. OF ACTUAL NITROGEN PER 1,000 SQUARE FEET. USE COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER CONSISTING OF FAST AND SLOW RELEASE NITROGEN, 50 PERCENT DERIVED FROM NATURAL ORGANIC SOURCES OF UREA-FORM, PHOSPHOROUS, AND IN FOLLOWING COMPOSITION:
    a. FERTILIZER FOR LAWNS: PROVIDE A FAST RELEASE FERTILIZER WITH A COMPOSITION OF 1 LB PER 1,000 SQ. FT. OF ACTUAL NITROGEN, 4 PERCENT PHOSPHOROUS, AND 2 PERCENT POTASSIUM BY WEIGHT.
    b. SLOW-RELEASE FERTILIZER FOR TREES AND SHRUBS: GRANULAR FERTILIZER CONSISTING OF 50 PERCENT WATER-INSOLUBLE NITROGEN, PHOSPHOROUS AND POTASSIUM MADE UP OF A COMPOSITION BY WEIGHT OF 5 PERCENT.
18. ADD LIME TO TOPSOIL TO OBTAIN A pH RANGE OF 6.0 TO 7.0. LIME SHALL BE ASTM C 602, CLASS T, AGRICULTURAL LIMESTONE CONTAINING A MINIMUM OF 80 PERCENT CALCIUM CARBONATE EQUIVALENT, WITH A MINIMUM 99 PERCENT PASSING A NO. 8 (2.36 mm) SIEVE AND A MINIMUM 75 PERCENT PASSING A NO. 50 (250 MICROMETER) SIEVE.
19. CONSTRUCTION TRAFFIC SHALL ENTER THE SITE AT THE GRAVEL CONSTRUCTION ENTRANCE AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.
20. CONTRACTOR TO SEED ALL DISTURBED AREAS. FINISH GRADE TO BE SEED AND STRAW.
21. CONTRACTOR SHALL MONITOR TRUCK WASHING AND SEDIMENT TRACKING ONTO STREETS. STREET CLEANING WILL BE REQUIRED BY OWNER IF ROADWAYS HAVE SOIL FROM THE SITE TRACKED ONTO THEM.

24. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIALS IN THE STREET.

25. PORTABLE TOILETS MUST BE ANCHORED



SILTWORM
P.O. BOX 691, ST JOHN, IN 46373
PHONE (219) 488-7240, www.siltworm.com

SILTWORM GENERAL NOTES

SILTWORM ARE SUPPLIED AND INSTALLED IN DIAMETERS OF 8", 12", OR 18". DIAMETER TOLERANCES ARE 2". SILTWORM WILL BECOME OVAL IN SHAPE WHEN IN PLACE, THUS THE INSTALLED HEIGHT WILL BE LESS THAN NOMINAL DIAMETER. SEE WWW.SILTWORM.COM FOR SUPPLEMENTARY INSTALLATION INFORMATION.

MATERIAL SPECIFICATIONS

NETTING:
SILTWORM IS A TUBULAR KNIT HIGH DENSITY POLYPROPYLENE.
FILL MATERIAL:
IS A KILN DRIED MATERIAL CONSISTING OF WOOD CHIPS, BARK FREE SOFTWOOD, THAT IS 100% RECYCLED.

APPLICATIONS

IN ADDITION TO THE APPLICATIONS SHOWN, SILTWORM CAN ALSO BE PLACED IN DITCHES OR AT THE TOP, ON THE FACE, OR AT THE TOW OF SLOPES AS SEDIMENT TRAPPING DEVICES. THEY CAN ALSO SERVE TO REMOVE SEDIMENT FROM RUNOFF AND RELEASE IT AS SHEET FLOW.
PERIMETER CONTROL:
PLACE SILTWORM DIRECTLY ON TOP OF GRADE, AND OVERLAP ENDS A MINIMUM OF 6". SITE PREPARATION IS MINIMAL, AND THERE IS NO STAKING OR TRENCHING REQUIREMENT FOR GRADES UNDER 12%. ARRANGE THE SILTWORM PERIMETER CONTROL IN A MANNER THAT IS APPLIED PERPENDICULAR TO SHEET FLOW. MAINTAIN CONSISTENT GROUND CONTACT.
SLOPE INTERRUPTION:
PLACE SILTWORM PERPENDICULAR TO SHEET FLOW AND CURL ENDS UP TOWARD THE TOP OF THE SLOPE. STAKE THE SILTWORM EVERY 6', AND OVERLAP THE ENDS BETWEEN 1 TO 2 FEET. PLACE A LINE OF DEFENSE AT THE TOP OF THE SLOPE, AND ANOTHER WITHIN 10' FROM THE TOE OF THE SLOPE.
SILTWORM INSTALLATION ON A SLOPE SHALL BE PLACED ALONG OR ON THE GROUND CONTOUR. WHERE POSSIBLE SILTWORM APPLIED TO THE TOE OF A SLOPE SHOULD BE PLACED 10 FEET AWAY FROM THE TOE IN ORDER TO PROVIDE SEDIMENT STORAGE.
DITCH CHECK:
SILTWORM SHOULD BE INSTALLED WITH A SLIGHT ENTRENCHMENT, AND STAKED EVERY 4' IN THE DITCH CHECK APPLICATION.
FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE ARE SHALL BE 15 ACRES, AT SITES WHICH OUTFALL TO EXCEPTIONAL WATER OR SEDIMENT-IMPAIRED STREAMS, THE MAXIMUM DRAINAGE AREA SHALL BE LIMITED TO 10 ACRES.
SILTWORM SHALL BE PLACED PERPENDICULAR TO THE FLOW OF WATER, SILTWORM SHALL CONTINUE UP THE SIDE SLOPES TO THE UP OF BANK OR A MAXIMUM OF 3 FEET ABOVE THE INSTALLED HEIGHT SILTWORM SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED.

MAINTENANCE

SILTWORMS SHALL BE INSPECTED AFTER EACH RUNOFF EVENT AND SHALL BE REMOVED AND REPLACED IF SIGNS OF UNDERCUTTING OR DOWN STREAMING RILLS ARE OBSERVED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILTWORM WHEN IT HAS ACCUMULATED TO ½ THE ORIGINAL HEIGHT OF THE STRUCTURE.

REMOVAL

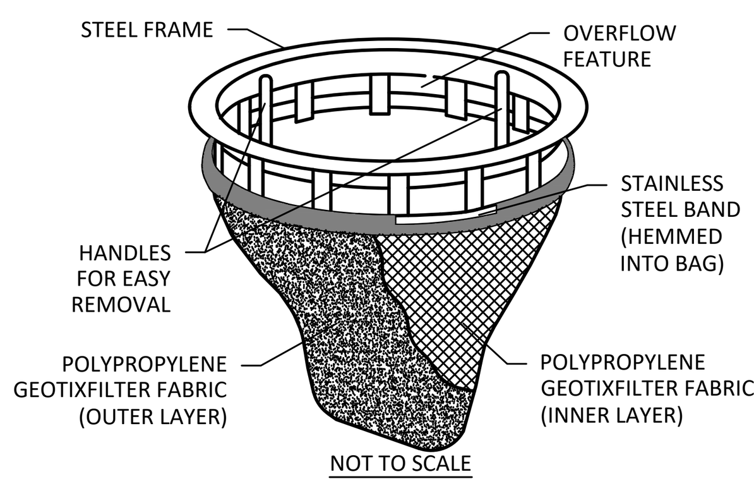
SILTWORM SHALL BE REMOVED FROM SLOPES, DITCHES, PERIMETER, OR INLETS AFTER STABILIZATION IS COMPLETE. THIS MAY BE ACCOMPLISHED BY CUTTING THE SOCK OPEN AND SPREADING THE FILL MATERIAL ON THE SITE. ALL NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED. SILTWORMS APPLIED IN DITCHES SHALL BE COMPLETELY REMOVED.

SILTWORM DETAIL
NOT TO SCALE

SEASONAL SOIL PROTECTION CHART

STABILIZATION PRACTICE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING		A →			*	//////I	//////	*	*/I*			
DORMANT SEEDING	B →										B →	
TEMPORARY SEEDING		C →	E			*//	//I//*	D →				

A = KENTUCKY BLUEGRASS 100 LBS./ACRE; CREEPING RED FESCUE 100 LBS./ACRE; HYDROSEEDED
B = KENTUCKY BLUEGRASS 120 LBS./ACRE; CREEPING RED FESCUE 120 LBS./ACRE; HYDROSEEDED
C = SPRING OATS 3 BUSHELS/ACRE
D = WHEAT OR RYE 2 BUSHELS/ACRE
E = ANNUAL RYE GRASS 40 LBS./ACRE (1 LB/1000 SQ. FT.)
/I/ = IRRIGATION NEEDED DURING JUNE, JULY, AUGUST AND/OR SEPTEMBER



THE CATCH-ALL IS AN INLET AND CATCH BASIN FILTRATION DEVICE DEVELOPED TO PREVENT SEDIMENTATION. CATCH-ALLS ARE AVAILABLE TO FIT VIRTUALLY ANY DRAINAGE STRUCTURE CASTING, AND COULD REPRESENT A BEST MANAGEMENT PRACTICE FOR YOUR EPA PHASE 2 PROGRAM.

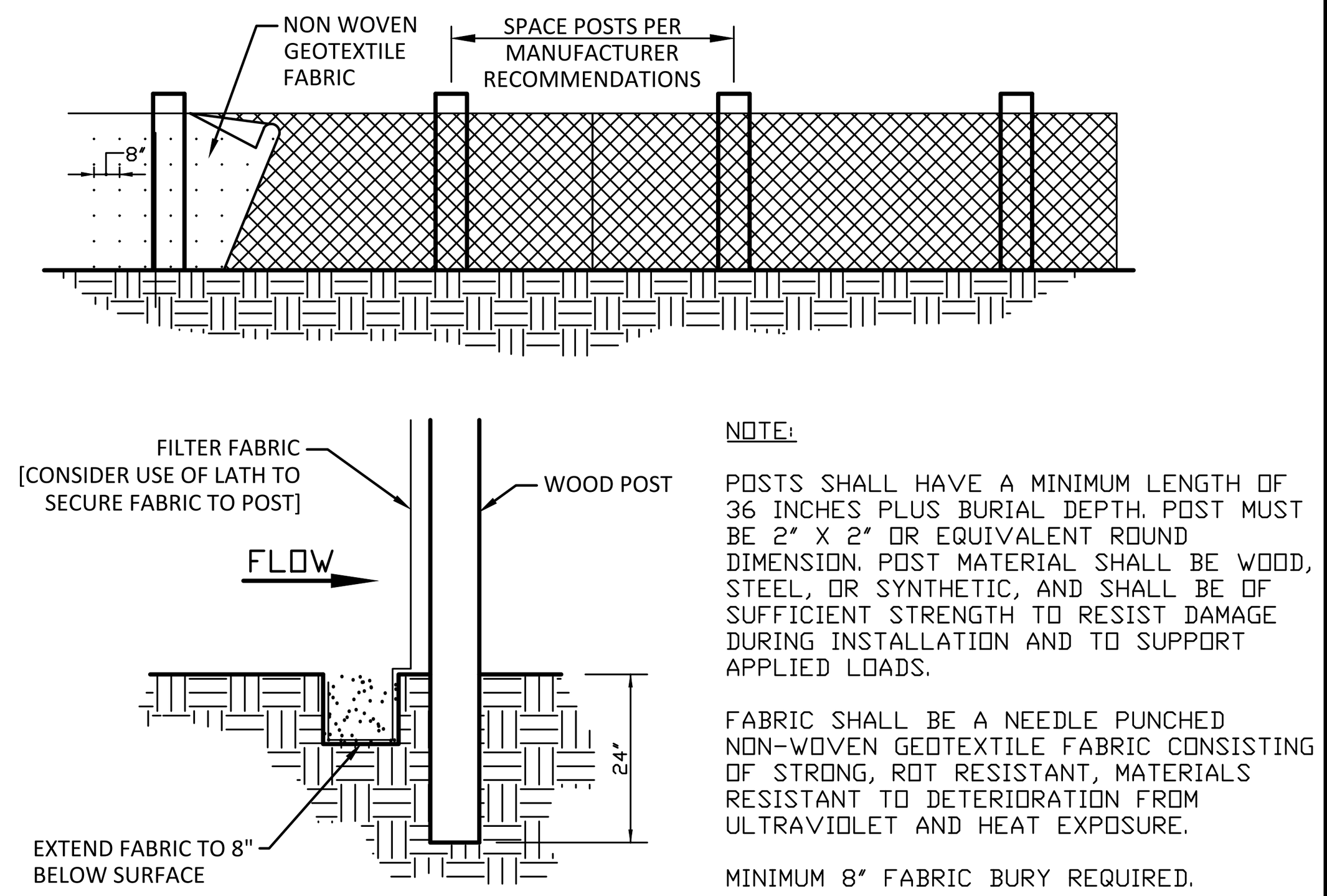
TEMPORARY INSTALLATION: CONSTRUCTION PROJECTS ON HIGHWAYS AND NEW HOUSING DEVELOPMENTS CAN RESULT IN SUBSTANTIAL AMOUNTS OF SEDIMENT DURING A RAINSTORM. TRADITIONAL PRACTICE, USING SILT SCREENS, HAY BALES, AND FILTER FABRIC UNDER STORM GRATES PROVIDE ONLY LIMITED PROTECTION. CATCH-ALL WILL HOLD 2 CUBIC FEET OF GRAVEL, SILT, AND DEBRIS, AND CAN BE MOVED FROM SITE-TO SITE.

CATCH-ALL HAS BEEN APPROVED FOR USE ON MANY MOT ROAD CONSTRUCTION PROJECTS.

PERMANENT INSTALLATION:
COMMERCIAL AND INDUSTRIAL SITES WITH IMPERVIOUS SURFACES, SUCH AS ROADS AND PARKING LOTS, PRODUCE STORMWATER RUN-OFF THAT MAY INCLUDE PAPER REFUSE, CIGARETTES, SEDIMENT, AND EVEN SOME FLOATING OILS. THESE CONTAMINANTS CAN QUICKLY ADD UP TO A SIGNIFICANT AMOUNT IN CATCH BASINS OR MUNICIPAL SYSTEMS. WITHOUT PROPER TREATMENT, STORMWATER LADEN WITH SUCH MATERIALS CAN POLLUTE STREAMS, LAKES, AND NEAR-SHORE WATERS. THE UNIQUE DESIGN OF THE REUSABLE STEEL FRAME OF CATCH-ALL PROVIDES AN OVERFLOW CAPACITY GREATER THAN THE OPEN AREA OF THE GRATE IT FITS UNDER. THIS MEANS LITTLE CHANCE FOR WATER TO BACK UP OR POOL, EVEN BETWEEN SCHEDULED CLEANINGS. THE DURABLE, REINFORCED SEDIMENT BAG CAN BE CLEANED NUMEROUS TIMES AND IS EASILY REPLACED IN THE FIELD. THE ENTIRE UNIT IS INSTALLED BELOW GRADE AND NO REBAR, CLIPS, OR STRAPS ARE EXPOSED ON THE SURFACE. WITH A TOP FLANGE LESS THAN 1/8" THICK, THE ADDITIONAL HEIGHT EXPOSURE OF THE GRATE IS MINIMAL. CATCH-ALL CAN BE AN IMPORTANT SUPPLEMENT FOR CATCH BASINS AND UNDERGROUND STORMWATER STORAGE SYSTEMS THAT ARE USUALLY DIFFICULT TO ACCESS FOR CLEANING. CATCH-ALLS ARE AVAILABLE TO FIT VIRTUALLY ANY DRAINAGE STRUCTURE CASTING.

D2 LAND & WATER RESOURCE INC.
BOX 20792, INDIANAPOLIS, IN 46220
PH. (317) 917-2180, www.d2lwr.com

CATCH—ALL DETAIL
STORMWATER INLET PROTECTOR



NOTE:

POSTS SHALL HAVE A MINIMUM LENGTH OF 36 INCHES PLUS BURIAL DEPTH. POST MUST BE 2" X 2" OR EQUIVALENT ROUND DIMENSION. POST MATERIAL SHALL BE WOOD, STEEL, OR SYNTHETIC, AND SHALL BE OF SUFFICIENT STRENGTH TO RESIST DAMAGE DURING INSTALLATION AND TO SUPPORT APPLIED LOADS.

FABRIC SHALL BE A NEEDLE PUNCHED NON-WOVEN GEOTEXTILE FABRIC CONSISTING OF STRONG, ROT RESISTANT, MATERIALS RESISTANT TO DETERIORATION FROM ULTRAVIOLET AND HEAT EXPOSURE.

MINIMUM 8" FABRIC BURY REQUIRED.

SILT FENCE CONSTRUCTION
NOT TO SCALE

SILT FENCE INSTALLATION REQUIREMENTS:

SITE PREPARATION:

1. PLAN FOR THE FENCE TO BE AT LEAST 10 ft. FROM THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA.
2. PROVIDE ACCESS TO THE AREA IF SEDIMENT CLEANOUT WILL BE NEEDED.

OUTLET CONSTRUCTION (OPTIONAL):

1. DETERMINE THE APPROPRIATE LOCATION FOR A REINFORCED, STABILIZED BYPASS FLOW OUTLET (UNLESS THE FENCE IS DESIGNED TO RETAIN ALL RUNOFF FROM A 2 YEAR FREQUENCY, 24 HR DURATION STORM EVENT)
2. SET THE OUTLET ELEVATION SO THAT WATER DEPTH CANNOT EXCEED 1½ ft. AT THE LOWEST POINT ALONG THE FENCE LINE.
3. LOCATE THE OUTLET WEIR SUPPORT POSTS NO MORE THAN 4 ft. APART, AND INSTALL A HORIZONTAL BRACE BETWEEN THEM. (WEIR HEIGHT SHOULD BE NO MORE THAN 1 ft. DEEP, 5 ft. WIDE, AND 3 ft. LONG ON LEVEL GRADE.
4. EXCAVATE THE FOUNDATION FOR THE OUTLET SPLASH PAD TO MINIMUMS OF 1 ft. AND WATER DEPTH NO MORE THAN 1½ ft. ANYWHERE ELSE ALONG THE FENCE.)
5. FILL THE EXCAVATED FOUNDATION WITH INDOT CA NO. 1 STONE, BEING CAREFUL THAT THE FINISHED SURFACE BLENDS WITH THE SURROUNDING AREA, ALLOWING NO OVERFILL.
6. STABILIZE THE AREA AROUND THE PAD.

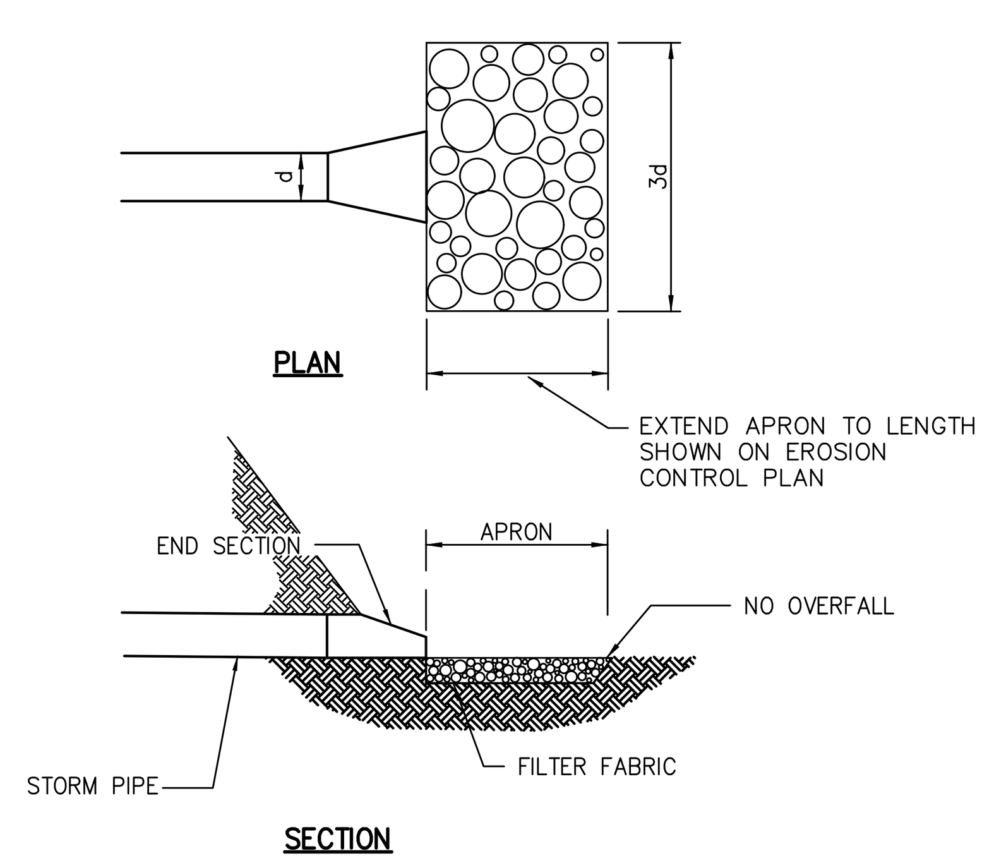
FENCE CONSTRUCTION:

1. ALONG THE ENTIRE INTENDED FENCE LINE, DIG AN 8 in. DEEP FLAT-BOTTOMED OR V-SHAPED TRENCH.
2. ON THE DOWNSIDE SLOPE OF THE TRENCH, DRIVE THE WOOD OR STEEL SUPPORT POSTS AT LEAST 1 ft. INTO THE GROUND (THE DEEPER THE BETTER!), SPACING THEM NO MORE THAN 8 ft. APART IF THE FENCE IS SUPPORTED BY WIRE OR 6 ft. IF EXTRA-STRENGTH FABRIC IS USED WITHOUT SUPPORT WIRE. ADJUST SPACING, IF NECESSARY, TO ENSURE THAT POSTS ARE SET AT THE LOW POINTS ALONG THE FENCE LINE. (NOTE: IF THE FENCE HAS PRE-ATTACHED POSTS OR STAKES, DRIVE THEM DEEP ENOUGH SO THE FABRIC IS SATISFACTORILY IN THE TRENCH AS DESCRIBED IN STEP 6).
3. FASTEN SUPPORT WIRE FENCE (IF THE MANUFACTURER RECOMMENDS ITS USE) TO THE UPSLOPE SIDE OF THE POSTS, EXTENDING IT 8 in. INTO THE TRENCH.
4. RUN A CONTINUOUS LENGTH OF GEOTEXTILE FABRIC IN FRONT (UPSLOPE) OF THE SUPPORT WIRE AND POSTS, AVOIDING JOINTS, PARTICULARLY AT LOW POINTS IN THE FENCE LINE.
5. IF A JOINT IS NECESSARY, NAIL THE OVERLAP TO THE NEAREST POST WITH LATH.
6. PLACE THE BOTTOM 1 ft. OF FABRIC IN THE 8 in. DEEP TRENCH, EXTENDING THE REMAINING 4 in. TOWARD THE UPSLOPE SIDE.
7. BACKFILL THE TRENCH WITH COMPACTED EARTH OR GRAVEL.

NOTE: IF USING A PRE-PACKED COMMERCIAL SILT FENCE RATHER THAN CONSTRUCTING ONE, FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.

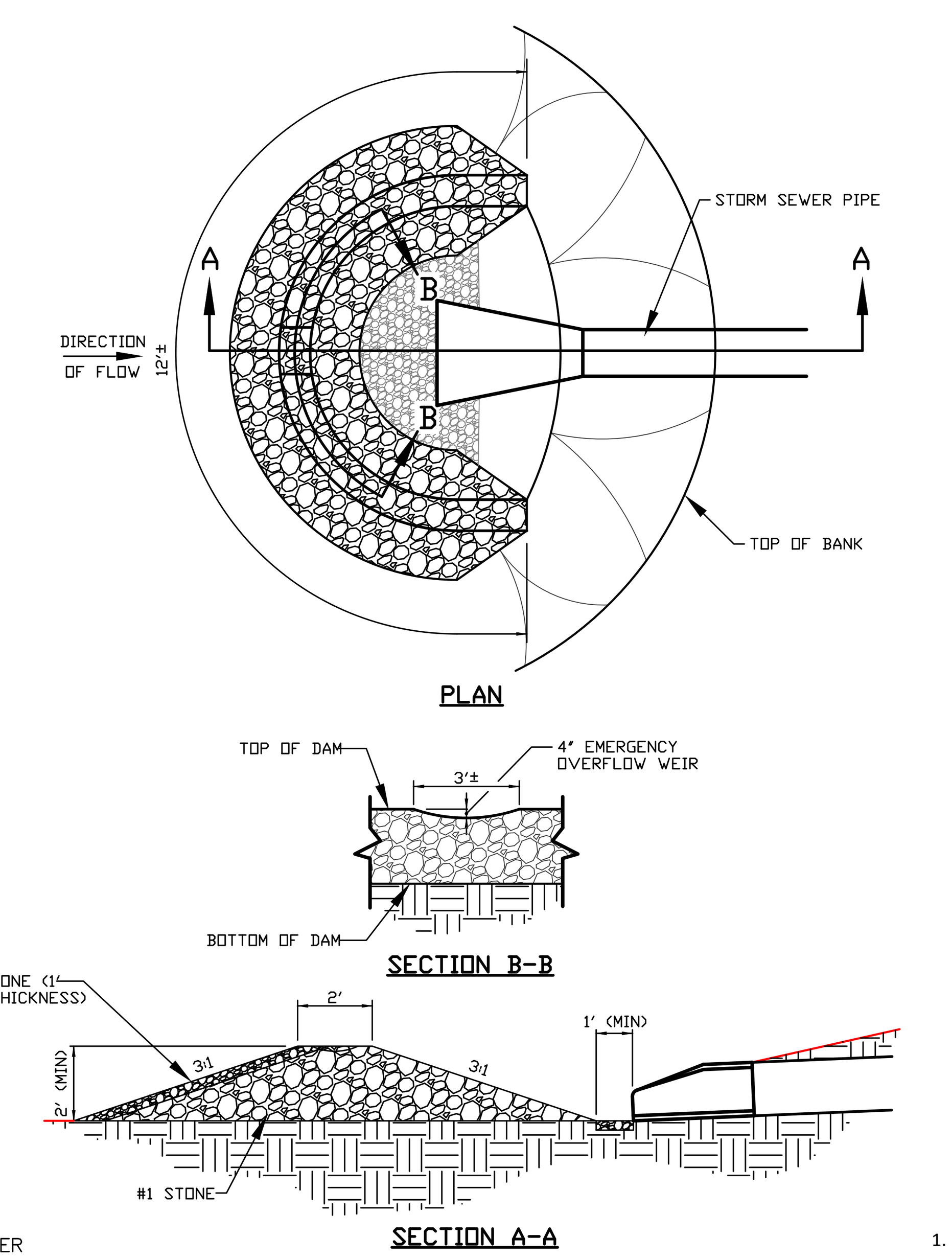
SILT FENCE MAINTENANCE REQUIREMENTS:

1. INSPECT THE SILT FENCE PERIODICALLY AND AFTER EACH STORM EVENT.
2. IF FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY.
3. REMOVE DEPOSITED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT OR IS CAUSING THE FABRIC TO BULGE.
4. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEAN OUT.
5. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED REMOVE THE FENCE AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE, AND STABILIZE.



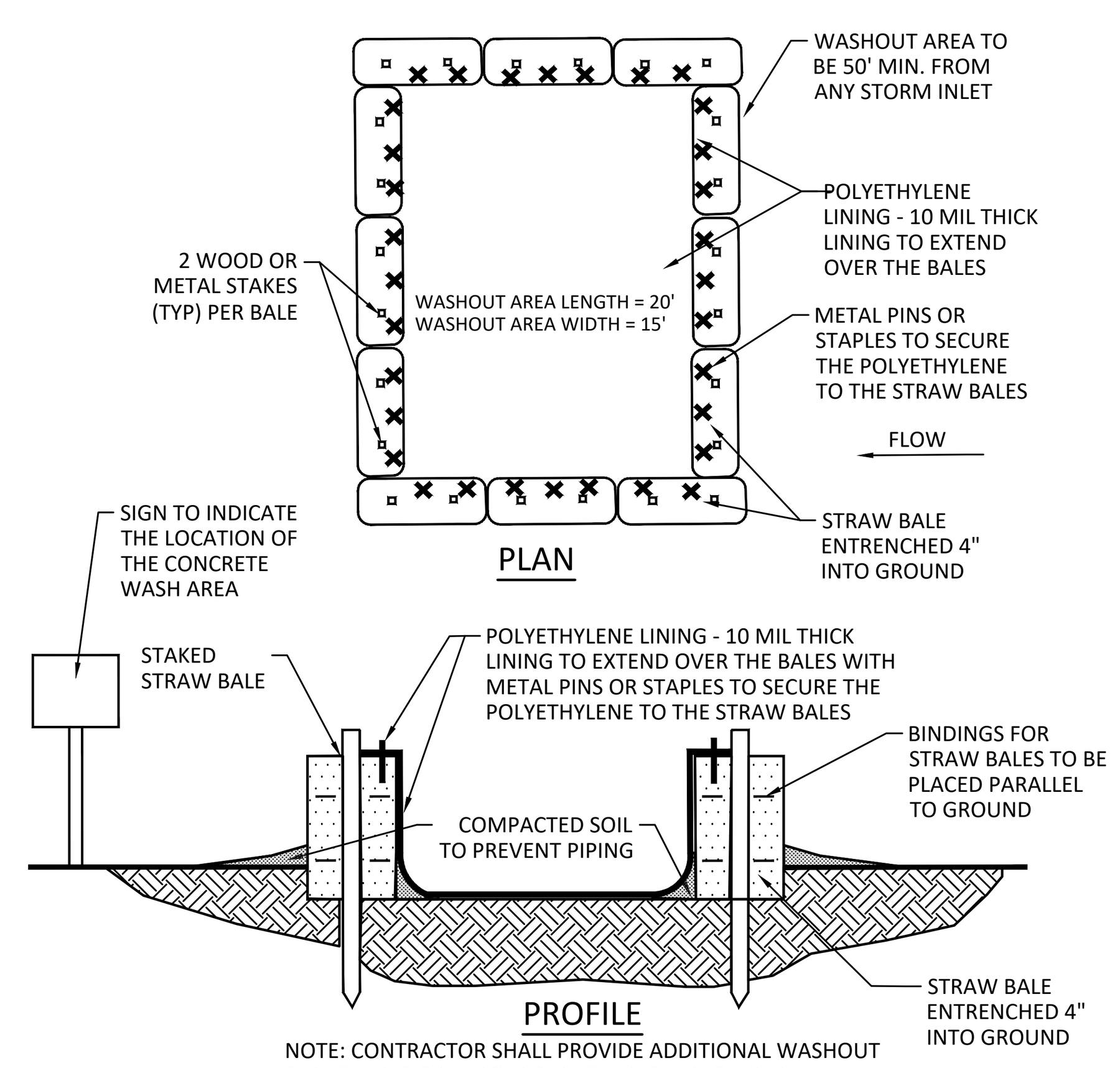
NOTES:
1. FOUNDATION SHALL BE GEOTEXTILE FABRIC FOR STABILIZATION AND WELL-GRADED FILTRATION OR GRAVEL FILTER LAYER AT LEAST 6 IN. THICK
2. STONE SHALL BE HARD, ANGULAR, AND HIGHLY WEATHER-RESISTANT RIPRAP STONE AT A THICKNESS OF 12 IN. MINIMUM OR TWO TIMES THE STONE DIAMETER, WHICHEVER IS GREATER.
3. MAKE SURE THE TOP OF THE RIPRAP APRON IS LEVEL WITH OR SLIGHTLY BELOW THE RECEIVING STREAM. (RIPRAP SHOULD NOT RESTRICT THE CHANNEL OR PRODUCE AN OVERFALL).

OUTLET PROTECTION DETAIL
NOT TO SCALE



MAINTENANCE:
1. INSPECT THE STRUCTURE AFTER EACH STORM EVENT, REMOVING SEDIMENT AND MAKING NEEDED REPAIRS IMMEDIATELY.
2. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZES, REMOVE AND PROPERLY DISPOSE OF ANY UNSTABLE SEDIMENT AND CONSTRUCTION MATERIAL, AND RE-STABILIZE.

ROCK DONUT DETAIL
NOT TO SCALE

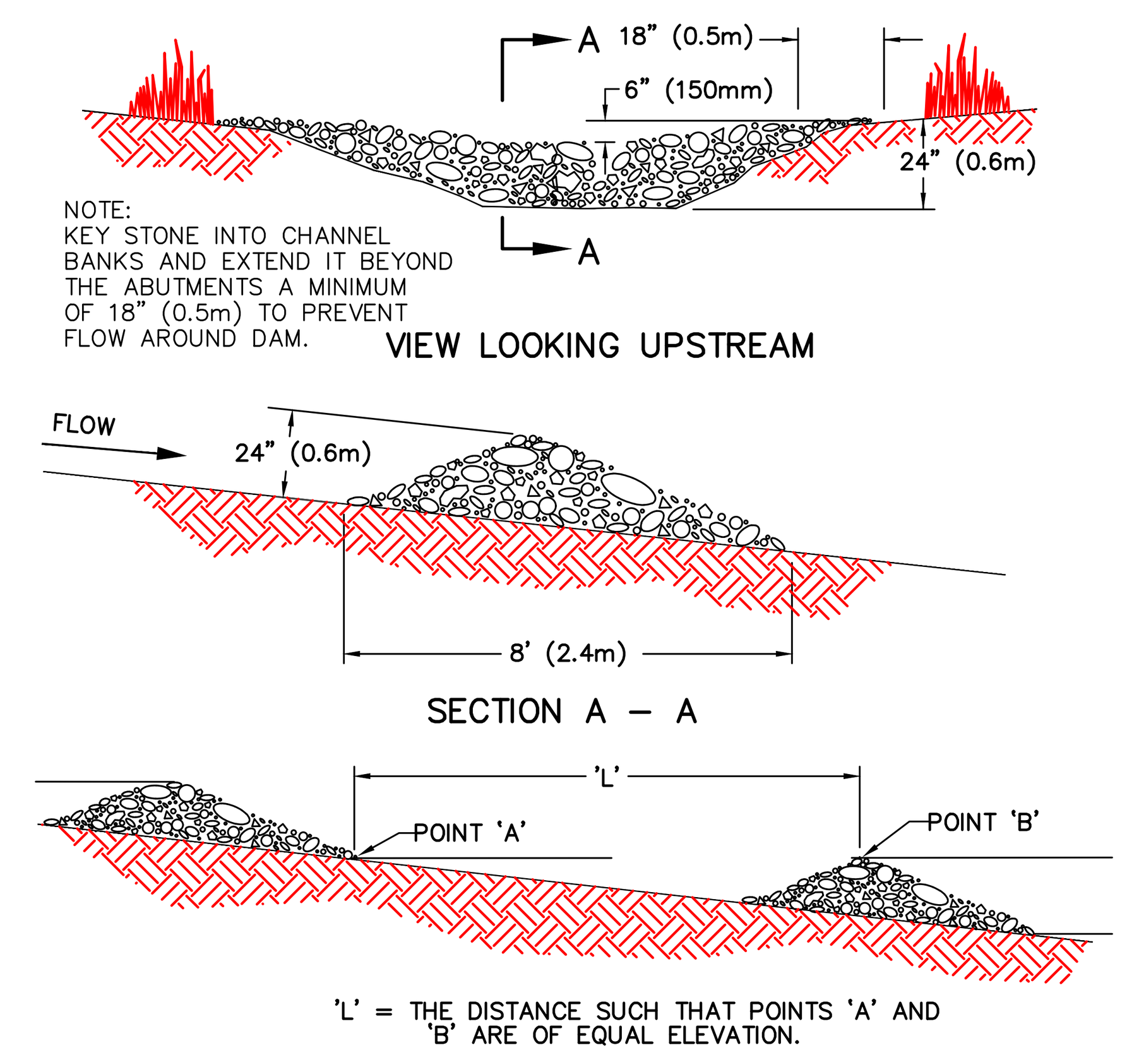


NOTE: CONTRACTOR SHALL PROVIDE ADDITIONAL WASHOUT STRUCTURES OR LARGER STRUCTURES IF REQUIRED

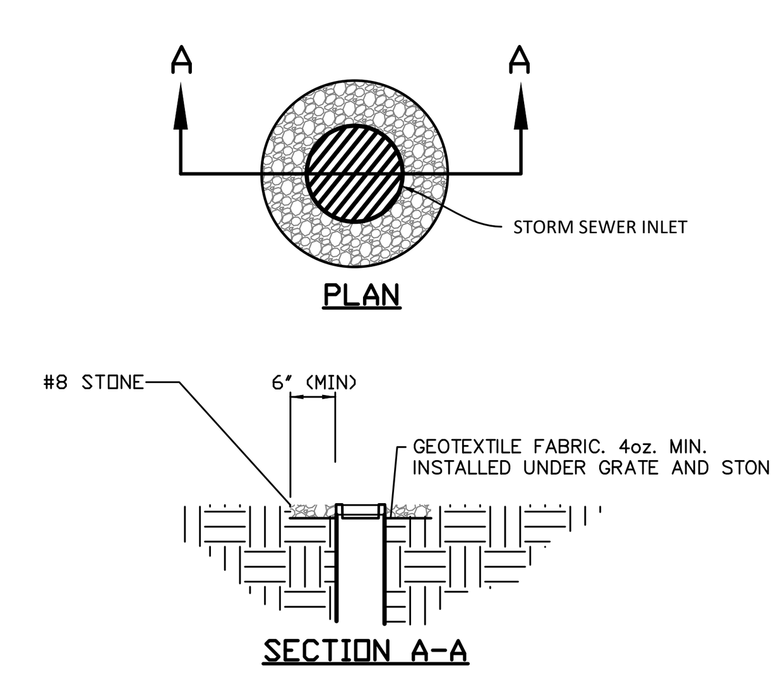
ABOVE GROUND CONCRETE WASHOUT AREA
NOT TO SCALE

CONCRETE WASHOUT NOTES:

1. LOCATE WASH OUT AREA AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR BODIES OF WATER. DO NOT ALLOW RUNOFF FROM THIS AREA BY CONSTRUCTING A TEMPORARY PIT OR BERMED AREA LARGE ENOUGH FOR LIQUID AND SOLID WASTE.
2. TEMPORARY WASH OUT FACILITIES SHOULD HAVE A TEMPORARY PIT AREA OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND SOLID WASTE CONCRETE MATERIALS GENERATED DURING WASH OUT PROCEDURES.
3. ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO WASH OUT PIT.
4. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
5. THE CONCRETE WASHOUT AREA SHALL BE INSPECTED DAILY FOR PUNCTURES OR TEARS IN THE PLASTIC LINER. THE LINER SHALL BE REPLACED UPON REMOVAL OF HARDENED CONCRETE.
6. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES. MAINTAINING TEMPORARY CONCRETE WASH OUT FACILITIES SHOULD INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITY TO A FUNCTIONAL CONDITION. HARDENED CONCRETE MATERIALS SHOULD BE REMOVED AND DISPOSED OF. IN ACCORDANCE WITH LOCAL STANDARDS.
7. CONCRETE WASHOUT AREAS SHALL BE CLEARLY MARKED WITH LATH & FLAGGING AND A SIGN POSTED AND LABELED "CONCRETE WASHOUT". LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.
8. THE CONCRETE WASH OUT AREA SHALL BE REPAIRED AND/OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
9. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL. 10. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT AN APPROVED SITE



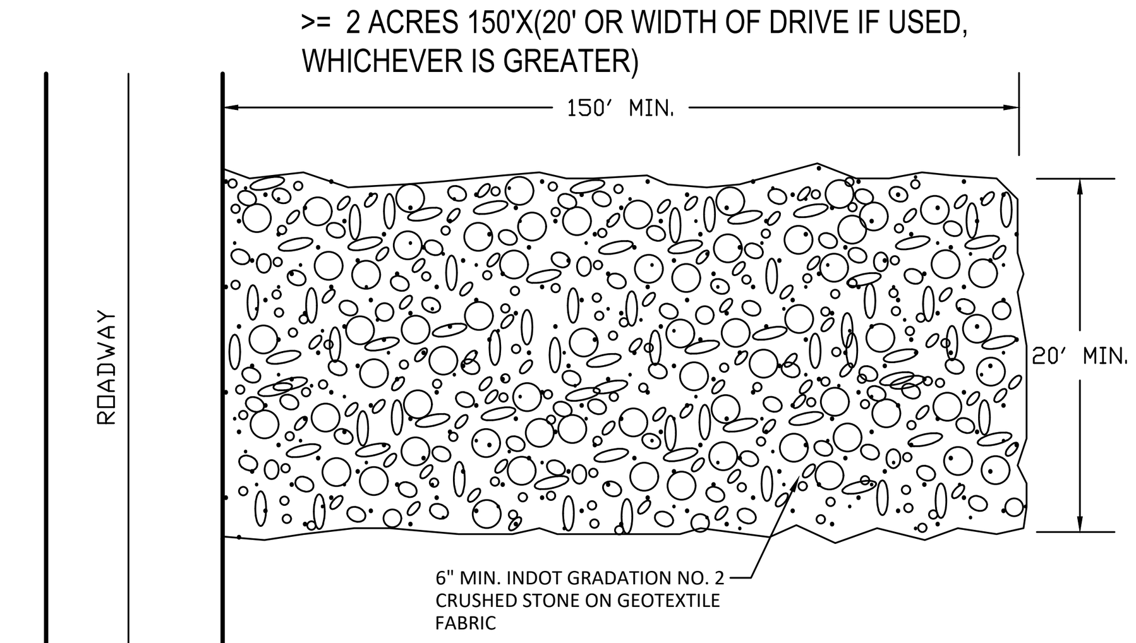
ROCK CHECK DAM
NOT TO SCALE



MAINTENANCE:
1. INSPECT THE STRUCTURE AFTER EACH STORM EVENT, REMOVING SEDIMENT AND MAKING NEEDED REPAIRS IMMEDIATELY.
2. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZES, REMOVE AND PROPERLY DISPOSE OF ANY UNSTABLE SEDIMENT.

INLET (<12") PROTECTION DETAIL
NOT TO SCALE

< 2 ACRES 50'X12'
>= 2 ACRES 150'X(20' OR WIDTH OF DRIVE IF USED, WHICHEVER IS GREATER)



GRAVEL CONSTRUCTION ENTRANCE
NOT TO SCALE

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE INSTALLATION REQUIREMENTS:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA, AND GRADE AND CROWN FOR POSITIVE DRAINAGE.
3. IF SLOPE TOWARDS THE ROAD EXCEEDS 2%, CONSTRUCT A 6-8 in. HIGH WATER BAR (RIDGE) WITH 3:1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 ft. FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD.
4. INSTALL PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
5. PLACE STONE TO DIMENSIONS AND GRADE SHOWN IN THE EROSION/SEDIMENT CONTROL PLAN, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.

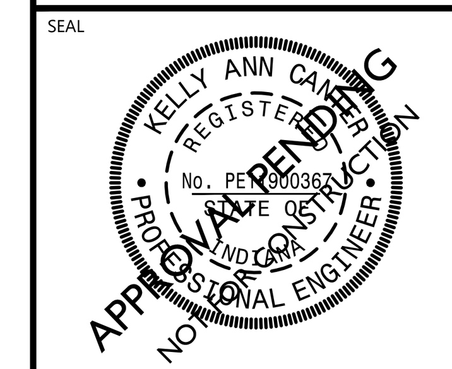
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE MAINTENANCE REQUIREMENTS:

1. INSPECT ENTRANCE PAD AND SEDIMENT AREA WEEKLY AND AFTER STORM EVENTS OF HEAVY USE.
2. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
3. TOP DRESS WITH CLEAN STONE AS NEEDED.
4. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT ROCK TRAP OR BASIN.
5. REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL



12/18/2024

DATE	12/18/2024
PROJECT NO.	2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE

THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE

EROSION CONTROL DETAILS

SHEET NUMBER

C5.5

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 9:55 AM EDITED BY: KCANTER DRAWING FILE: \\10.0.0.12\CLIENT FILES\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2. DESIGN\CAD\C5.5 EROSION CONTROL DETAILS.DWG

SITE NAME

The area scheduled for construction is known as "GODDARD SCHOOL - NOBLESVILLE" (hereinafter referred to as the "Project").

OWNER'S INFORMATION

Name: The Goddard School Of Carmel West
Address: 10445 Commerce Drive
Carmel, Indiana 46220
Representative: Micth Manders
Telephone: (317) 415 0408

OPERATOR'S INFORMATION

Name: TBD
Address: TBD
Representative: TBD
Title: TBD
Telephone: TBD

NOTICE OF INTENT

All parties defined as owners or operators must submit a Notice of Intent (NOI) at least 48 hours prior to commencement of on-site construction activities. Submittal of late NOI's is not prohibited; however, authorization under the construction general permit is only for discharges that occur after permit coverage is granted. Unpermitted discharges may be subject to enforcement actions by the EPA. For the purposes of this permit, an operator is defined as any party meeting either of the following requirements:

a) The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications.
b) The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions.

A1 INDEX OF THE LOCATION OF REQUIRED PLAN ELEMENTS IN THE CONSTRUCTION PLANS

Refer to the Site Plan.

A2 VICINITY MAP

Refer to Title Sheet

A3 PROJECT NARRATIVE

THIS PROJECT CONSIST OF 2.44 ACRES SITE WITH A 13,200 SF BUILDING, PARKING LOT, PLAY AREAS AND ASSOCIATED UTILITIES CONNECTIONS.

THE EXTERIOR SIGNAGE IS PER GODDARD DESIGN STANDARDS AS COORDINATED BY GODDARD UNDER A SEPARATE PERMIT SUBMITTAL. THE INTERIOR LAYOUT IS DESIGNER PER THE CURRENT GODDARD PROTOTYPE DESIGN STANDARDS.

A4 PROJECT LOCATION

The property is located 3302 Westfield Rd, between Castamere Dr and Westfield Rd in NOBLESVILLE, IN 46062, at a latitude of 40°02'38" N and a longitude of 86°38'20" W.

A5 LEGAL DESCRIPTION OF THE PROJECT SITE

See Sheet T1.1 - Title sheet

A6 11" x 17" PLAT

Refer to the Site Plan.

A7 100-YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES

The lot is located in an unshaded Zone "X" (areas determined to be outside the 0.2 percent annual chance floodplain) as indicated on the Hamilton, Indiana, Flood Insurance Rate Map 18057C0137G dated 11/19/2024

A8 ADJACENT LAND USE

North: Residential
East: Residential
South: Residential
West: Residential

A9 IDENTIFICATION OF U.S. EPA APPROVED OR ESTABLISHED TMDL

White river has an approved TMDLs plan, dated 04/09/2004

A10 IDENTIFICATION OF ALL RECEIVING WATERS

White River is the ultimate receiving water for the project area.

A11 IDENTIFICATION OF DISCHARGES TO A WATER ON THE CURRENT 303(D) LIST OF IMPARED WATERS AND THE POLLUTANT(S) FOR WHICH IT IS IMPARED

The project will be discharging to Vestal Ditch.
Vestal Ditch is not on the 303(d) list for E.coli.
White river is on the 303(d) list for E.coli

A12 SOILS MAP INCLUDING SOIL DESCRIPTION AND LIMITATIONS

The Natural Resources Conservation Service (NRCS) Web Soil Survey of Hamilton County, Indiana, indicates Brookston silty clay, Crosby silt loam fine-loamy subsoil, Brookston silty clay loam-urbanland complex, Crosby silt loam, fine loamy subsoil-urban land complex, and Miami silt loam-urban land complex) are located on the site.

The on-site soil will be treated as recommended by the geotechnical engineer if the conditions are unsuitable for the proposed construction. Remedial treatments may include, but are not limited to, removal of unsuitable soil and backfilling with engineered material, installation of a geofabric within or under the pavement system, or treatment of the subgrade with lime.

A13 LOCATION AND NAME OF ALL WETLANDS, LAKES, AND WATERCOURSES ON AND ADJACENT TO THE SITE

Vestral Ditch is located on the east side of the project,
No wetlands, Lakes have been identified on the site that may be impacted.

A14 STATE AND FEDERAL WATER QUALITY PERMITS

IDEM GCSP

A15 IDENTIFICATION AND DELINEATION OF EXISTING COVER, INCLUDING NATURAL BUFFERS

The project will it affect the existing cover

A16 EXISTING SITE TOPOGRAPHY

Refer to the Existing Topography Plan

A17 LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE

There is no Run-off entering the site

A18 SPECIFIC POINT WHERE STORMWATER DISCHARGE WILL LEAVE THE SITE

Stormawater drainage from the site will be conveyed by a proposed storm sewer.The project drainage will be divided by two where the north side of the project will discharge to the east along Castamere Dr, and the south side of the project will be discharge to the south side in direction to Westfield Dr.

A19 LOCATION OF ALL EXISTING STUCTURES ON PROJECT SITE

Refer to the Utility Plan or Storm Sewer Plan and Profiles

AXX LOCATIONS, SIZE, AND DIMENSIONS FOR PROPOSED STORMWATER SYSTEMS

Locations of stormwater systems: Refer to the Utility Plan or Storm Sewer Plan and Profiles
Size of storm sewer: Refer to the Utility Plan or Storm Sewer Plan and Profiles
Details of storm inlets and manholes: Refer to Site Details

A20 EXISTING PERMENANT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR THE PORPOSE OF STORMWATER MANAGEMNT

There are no location on site where surface water may be discharged into ground water

A21 IDENTIFICATION OF ALL POTENTIAL DISCHARGES TO GROUND WATER

There are no locations on site where surface water may be discharged into ground water.

A22 PROJECT ACREAGE

Total Acreage: 2.44 Acres

A23 PROJECT LAND DISTURBANCE

Proposed Land Disturbance: 2.44 Acres

A24 PROPOSED FINAL SITE TOPOGRAPHY

Refer to the Grading Plan

A25 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS

Approximate boundaries of disturbed areas are as identified on the Erosion Control Plan.

A26 LOCATIONS, SIZE, AND DIMENSIONS OF ALL STORMWATER DRAINAGE SYSTEMS SUCH AS CULVERTS, STORMWATER SEWER, AND CONVEYANCE CHANNELS

Refer to Utility Plan sheets C4.1 and C4.2

A27 LOCATIONS OF SPECIFIC POINTS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE

Refer to Utility Plan sheets C4.1 and C4.2

A28 LOCATIONS OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS

Refer to Utility Plan sheets C4.1 and C4.2

A29 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL

Excess soil shall be immediately stockpiled, surrounded with silt fence and seeded and/or removed from the construction site in accordance with all applicable laws. If topsoil stockpiles are anticipated for this project, they are shown on the Erosion Control Plan.

A30 CONSTRUCTION SUPPORT ACTIVITIES THAT ARE EXPECTED TO BE PART OF THE PROJECT

Erosion and Sediments control measurements.

A31 LOCATION OF ANY IN-STREAM ACTIVITIES THAT ARE PLANNED FOR THE PROJECT INCLUDING, BUT NOT LIMITED TO, STREAM CROSSINGS AND PUMP AROUNDS

Not applicable to this project

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

The following potential pollutant sources may be associated with construction activities on site:

1. Material storage areas (more specifically described below)
2. Construction waste material
3. Fuel storage areas and fueling stations
4. Exposed soils
5. Leaking vehicles and equipment
6. Sanitary waste from temporary toilet facilities
7. Litter
8. Windblown dust
9. Soil tracking off site from construction equipment

The following construction materials may be staged or stored on site at various points during development of the site:

1. Structural fill
2. Pavement Base Stone
3. HDPE, PVC, RCP or Ductile Iron pipe
4. Precast concrete, HDPE or PVC drainage and sanitary structures
5. Rock rip-rap

B2 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS

Construction entrances will be in place prior to any site construction or demolition. Entrances are shown on the Erosion Control Plan, refer to the Erosion Control Details for details.

B3 TEMPORARY AND PERMANANT SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON

Surface stabilization is required on any bare or thinly vegetated area that is scheduled or likely to remain inactive for a period of 15 days or more.
Refer to the Temporary Seeding Detail within Erosion Control Details for specifics on soil amendments, seed mixtures and mulching.

A. Loosen lawn area to a minimum depth of 6 inches. Mix soil amendments and fertilizers with topsoil at rates specified. Organic soil amendments such as peat, compost or manure shall be applied at 2" depth evenly over soil and incorporated into the top 6" of topsoil. Provide fertilizer with percentage of nitrogen required to provide not less than 1 pound of actual nitrogen per 1,000 sq. ft. of lawn area and not less than 4 percent phosphoric acid and 2 percent potassium. At least 50 percent of nitrogen to be organic form. Delay mixing of fertilizer if planting will not follow placing of planting soil within a few days.
B. Fertilizer for lawns: provide a fast release fertilizer with a composition of 1 lb per 1,000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium by weight.
C. Slow-release fertilizer for trees and shrubs: granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorous and potassium made up of a composition by weight of 5 percent
D. Grade lawn and grass areas to a smooth, even surface with loose, uniformly fine texture. Limit fine grading to areas that can be planted within immediate future. Remove trash, debris, stones larger than 1 inch diameter, and other objects that may interfere with planting or maintenance operations. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds 5 miles per hour.
E. Distribute seed evenly over entire area by sowing equal quantity in 2 directions at right angles to each other.
F. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with a fine spray.
G. Install erosion control blankets as indicated on the plan.
H. Protect seeded areas against erosion by spreading clean, seed-free straw mulch after completion of seeding operations. Spread uniformly to form a continuous blanket not less than 1-1/2 inches loose measurements over seeded areas.
I. Water newly planted lawn areas and keep moist until new grass is established. Immediately repair any lawn areas disturbed by construction activities including tree and shrub installation.
J. Refer to the Permanent Seeding Details within the Erosion Control Detail Sheet, for timing of permanent seeding, grass seed specifications and mulching specifications.

B4 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS

Proposed swales will be stabilized with erosion control blankets, and rock donuts will be installed to slow runoff to inlets. Straw bales and silt fences will not be allowed as concentrated flow protection measures. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B5 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS

Sheet flow areas will be protected by seed and mulch or hydroseeding. Erosion control blankets will be installed on sloped areas where the slope exceeds 6:1 (horizontal to vertical). Silt Fencing will be utilized to prevent sedimentation from leaving the site. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B6 RUNOFF CONTROL MEASURES

Permanent Vegetations, Sil fence, Etc. See erosion control plan , Sheet C5.1

B7 STORMWATER OUTLET PROTECTION SPECIFICATIONS

Stormwater outlets will be protected by riprap aprons to prevent scour erosion. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B8 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS

Rip rap aprons at outlets will be utilized to prevent grade destabilization. Refer to the Erosion Control Plan for locations and the Erosion Control Details for details.

B9 DEWATERING APPLICATION AND MANAGEMENT METHODS

No dewatering

B9 MEASURES UTILIZED FOR WORK WITHIN WATERBODIES

N/A

B11 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE

Inspection Schedule/Reporting
All impacted areas, as well as all erosion and sediment control devices, will be inspected every seven (7) calendar days and within 24 hours after a rainfall of 0.5 inch or greater. Where sites have been final or temporarily stabilized or on sites where runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), such inspections shall be conducted at least once every month.

Inspections shall be conducted and a written report prepared, by a designated and qualified person familiar with the USEPA NPDES Storm Water General Permit, this SWPPP, and the Project.

Inspection reports shall be completed including scope of the inspection, name(s) and qualifications of personnel making the inspection, the date of the inspection, observations relating to the implementation of the SWPPP, and any actions taken as a result of incidents of noncompliance noted during the inspection. The inspection report should state whether the site was in compliance or identify any incidents of noncompliance. The contractor shall keep a copy of the inspection reports on site and permanently for a period of two years following construction. The on-site reports may be requested by inspections conducted by the local governing authority.

Construction Entrance
Locations where vehicles exit the site shall be inspected for evidence of off-site sediment tracking. Each contractor and subcontractor shall be responsible for maintaining the Construction Entrance and other controls as described in this SWPPP.

Material Storage Inspections
Inspectors must evaluate areas used for storage of materials that are exposed to precipitation. The purpose is to ensure that materials are protected and/or impounded so that pollutants cannot discharge from storage areas. Off-site material storage areas used solely by the subject project are considered to be part of the project and must be included in the erosion control plans and the site inspection reports.

Soil Stabilization Inspections
Seeded areas will be inspected to confirm that a healthy stand of vegetation is maintained. The site has achieved final stabilization once all areas are covered with pavement or have a stand of vegetation with at least 70% of the background vegetation density. The density of 70% or greater must be maintained to be considered as stabilized. The operator or their representative will water, fertilize, and reseed disturbed areas as needed to achieve this goal.

Erosion and Sediment Control Inspections

All controls should be inspected at least once every seven (7) calendar days and following any storm event of 0.5 inch or greater. The following is a list of inspection/maintenance practices that will be used for specific controls:

1. Geotextiles/Erosion Control Mats: Missing or loose matting must be replaced or re-anchored.
2. Inlet Protection: If silt fence inlet protection is to be used, sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%.
3. Diversion Swales: Clean debris or other obstructions as needed. Damage from storms or normal construction activities (i.e., tire ruts) shall be repaired immediately.
4. Mulching: Inspect for thin or bare spots caused by natural decomposition or weather-related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection.
5. Sediment Trap: Accumulated silt shall be removed and the basin shall be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to one-half of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.
6. Sediment Basin: Inspect frequently to check for damage and to ensure obstructions are not diminishing the effectiveness of the structures. Sediment shall be removed and the basin shall be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to 20% of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.
7. Silt Fence: Removal of built-up sediment will occur when the sediment reaches one-third the height of the fence.
8. Stabilized Construction Entrance: Periodic re-grading and top dressing with additional stone.
9. Straw Bales: Replace straw bales that show signs of deterioration.
10. Vegetation: Protect newly seeded areas from excessive runoff and traffic until vegetation is established. Establish a watering and fertilizing schedule.
11. Good Housekeeping: Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges through screening of outfalls and daily pickup of litter.

In the event that sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize adverse impacts. An example of this may be the situation where sediment has washed into the street and could be carried into the storm sewers by the next rainfall and/or pose a safety hazard to users of public streets.
Modifications/Revisions to SWPPP.

Based on inspection results, any necessary modification to this SWPPP shall be implemented within seven calendar days of the inspection. A modification is necessary if a control measure or operational procedure does not provide adequate pollutant control. All revisions shall be recorded on a Record of Revisions within seven calendar days of the inspection.

It is the responsibility of the operator to maintain effective pollutant discharge controls. Physical site conditions or contractor/subcontractor practices could make it necessary to install more controls than were originally planned. For example, localized concentrations of surface runoff or unusually steep areas could require additional silt barrier or other structural controls. Assessing the need for and installing additional controls will be a continuing contractor/subcontractor responsibility until final stabilization is achieved. Contractors and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update this SWPPP in order to accomplish the intended goals.

Notice of Termination
Compliance of the site with the General Construction Permit remains the responsibility of all operators that have submitted an NOI until such time as they have submitted a Notice of Termination (NOT). The permittee's authorization to discharge under the General Construction Permit terminates at midnight of the day the NOT is signed.

All permittees must submit an NOT within thirty (30) days after one or more of the following conditions have been met:

1. Final stabilization has been achieved on all portions of the site for which the permittee was responsible.

2. Another operator/permittee has assumed control over all areas of the site that have not been finally stabilized.

3. In residential construction operations, temporary stabilization has been completed and the residence has been transferred to the homeowner.

B12 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND-DISTURBING ACTIVITIES

1. Schedule pre-construction meeting with local stormwater authority.
2. Install construction entrance.
3. Utilize the gravel construction entrance for installation of the perimeter silt fence. Add stone if needed. Post the NOI at the entrance. Add protection measures to existing inlets.
4. Install staging area, fueling station, material storage area and concrete truck washout.
5. Strip the top soil and grade.
6. Complete the cut and fills on the site. Final grade and seed the pond slopes. Install check dams or stabilize the slopes with erosion control blankets.
7. Prior to building construction install stone surface for paved areas.
8. Building pads left dormant for more than 15 days, must be temporarily seeded.
9. Start building construction. Install staging area for building materials.
10. Install storm sewer and other utilities. Provide inlet protection immediately upon completion of the inlet and install riprap outlet protection prior to installing outlets. Final grade and stabilize slopes when inlets are functioning.
11. Seed the perimeter of the site.
12. Complete utility installation, curbs, paving and building construction.
13. Install landscaping plant material and stabilize all disturbed areas.

Remove all erosion and sediment control practices when areas have a uniform grass cover.

B13 EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS

Since the entire site is under a single ownership, there are not any individual building lots.

B14/B15 MATERIAL HANDLING AND SPILL PREVENTION AND RESPONSE PLAN

Solid Waste Disposal
No solid material, including building materials, is permitted to be discharged to surface waters or buried on site. All solid waste materials, including disposable materials incidental to the construction activity, must be collected in containers or closed dumpsters. The collection containers must be emptied periodically and the collected material hauled to a landfill permitted by the State and/or appropriate local municipality to accept the waste for disposal.

A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper solid waste procedures.

Hazardous Waste
Whenever possible, minimize the use of hazardous materials and generation of hazardous wastes. All hazardous waste materials will be disposed in the manner specified by federal, state, or local regulations or by the manufacturer.

Use containment berms in fueling and maintenance areas and where potential for spills is high.

A foreman or supervisor should be designated in writing to oversee, enforce and instruct construction workers on proper hazardous waste procedures. The location of any hazardous waste storage areas should be indicated on the stormwater pollution prevention plan by the operator following on-site location of the facility.

Dust Control/Off-Site Vehicle Tracking
During construction, water trucks should be used, as needed, by each contractor or subcontractor to reduce dust. After construction, the site should be stabilized to reduce dust.

Construction traffic should enter and exit the site at a Construction Entrance with a rock pad or equivalent device. The purpose of the rock pad is to minimize the amount of soil and mud that is tracked onto existing streets. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts.

Sanitary/Septic
Contractors and subcontractors must comply with all state and local sanitary sewer, portable toilet, or septic system regulations. Sanitary facilities shall be provided at the site by each contractor or subcontractor throughout construction activities. The sanitary facilities should be utilized by all construction personnel and be serviced regularly. All expenses associated with providing sanitary facilities are the responsibility of the contractors and subcontractors. The location of any sanitary facilities should be indicated on the stormwater pollution prevention plan by the operator following on-site location of said facilities.

Water Source
Water used to establish and maintain grass, to control dust, and for other construction purposes must originate from a public water supply or private well approved by the State or local health department.

Equipment Fueling and Storage Areas
Equipment fueling, maintenance, and cleaning should only be completed in protected areas (i.e., bermed area). Leaking equipment and maintenance fluids will be collected and not allowed to discharge onto soil where they may be washed away during a rain event.

Equipment wash down (except for wheel washes) should take place within an area surrounded by a berm. The use of detergents is prohibited.

Hazardous Material Storage
Chemicals, paints, solvents, fertilizers, and other toxic or hazardous materials should be stored in their original containers (if original container is not resealable, store the products in clearly labeled, waterproof containers). Except during application, the containers should be kept in trucks or in bermed areas within covered storage facilities. Runoff containing such materials shall be collected, removed from the site, and disposed of in accordance with the federal, state, and local regulations.
As may be required by federal, state or local regulations, the Contractor should have a Hazardous Materials Management Plan and/or Hazardous Materials Spill and Prevention Program in place. A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper hazardous materials storage and handling procedures. The location of any hazardous material storage areas should be indicated on the stormwater pollution prevention plan by the operator following on-site location of the storage areas.

Material Handling and Spill Prevention
Discharge of hazardous substances or oil into stormwater is subject to reporting requirements. In the event of a spill of a hazardous substance, the operator is required to notify the National Response Center (1-800-424-8802) to properly report the spill. In addition, the operator shall submit a written description of the release (including the type and amount of material released, the date of the release, the circumstances of the release, and the steps to be taken to prevent future spills) to the local governing authority. The SWPPP must be revised within 14 calendar days after the release to reflect the release, stating the information above along with modifications to minimize the possibility of future occurrences. Each contractor and subcontractor is responsible for complying with these reporting requirements.

Concrete Washout
All concrete trucks waste material shall be completely contained and disposed in accordance with all local, state, and federal regulations. A pit or container is required when cleaning concrete chutes.

Spill Response Plan
Minor - Small spills that typically involve oil, gasoline, paint, hydraulic fluid, etc., can be controlled by the first responder at the discovery of the spill.

- Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- Use absorbent material to clean-up spill material and any subsequently contaminated soil and dispose of properly.

Semi-Significant Spills - Approximately ten gallons or less of pollutant with no contamination of ground or surface waters. Minor spills can be generally controlled by the first responder with help from other site personnel. This response may require other operations to stop to make sure the spill is quickly and safely addressed. At the discovery of the spill:

- Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- Use absorbent material to clean-up spills and dispose of properly. Spills on impervious surfaces should be disposed of as soon as possible to prevent migration deeper into the soil and groundwater. Dispose of contaminated soils or absorbents properly.
- Contact 911 if the spill could be a safety issue.
- Contact supervisors and designated site inspectors immediately.
- Contaminated solids are to be removed to an approved landfill.

Major or Hazardous Spills - More than ten gallons, there is the potential for death, injury or illness to humans or animals, or has the potential for surface or groundwater pollution.

- Control or contain the spill without risking bodily harm. Temporarily plug storm drains if possible to prevent migration of the spill into the stormwater system.
- Immediately contact the local Fire Department at 911 to report any hazardous material spill.
- Contact supervisors and designated site inspectors immediately. Governing authorities responsible for storm water facilities should be contacted as well. The contractor is responsible for having these contact numbers available at the job site. A written report should be submitted to the owner as soon as possible.
- As soon as possible but within 2 hours of discovery, contact the local agency responsible for spill management. The following information should be noted for future reports to the agency:
  - Name, address and phone number of person making the spill report
  - The location of the spill
  - The time of the spill
  - Identification of the spilled substance
  - Approximate quantity of the substance that has been spilled or may be further spilled
  - The duration and source of the spill
  - Name and location of the damaged waters
  - Name of spill response organization
  - What measures were taken in the spill response
  - Other information that may be significant

Additional regulations or requirements may be present. A spill response professional should be consulted to make sure all appropriate and required steps have been taken. Contaminated solids should only be removed from the site after approval is given by the appropriate agency.

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE

The proposed land use is a Institutional. The pollutants and sources of each pollutant normally expected from this type of land use are listed below:

Pollutant Source: Passenger vehicles, delivery vehicles.
Type of Pollutant: Oil, gasoline, diesel fuel, any hydrocarbon associated with vehicular fuels and lubricants, grease, antifreeze, windshield cleaner solution, brake fluid, brake dust, rubber, glass, metal and plastic fragments, grit, road de-icing materials.

Pollutant Source: Building
Type of Pollutant: Cleaning solutions or solvents, leaks from HVAC equipment, grit from roof drainage, aggregate or rubber fragments from roofing system.

Pollutant Source: Trash dumpster
Type of Pollutant: Cleaning solutions or solvents, litter (paper, plastic, general refuse associated with distribution operations), uneaten food products, bacteria.

Pollutant Source: Parking lot
Type of Pollutant: Any pollutant associated with vehicular sources, grit from asphalt wearing surface, bituminous compounds from periodic maintenance (sealing, resurfacing and patching), pavement de-icing materials, paint fragments from parking stall stripes, concrete fragments, wind-blown litter from off-site sources, elevated water temperatures from contact with impervious surfaces.

Pollutant Source: Lawn and landscape areas
Type of Pollutant: Fertilizers, soil, organic material (leaves, mulch, grass clippings)

C2 DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER QUALITY MEASURES

Vegetative Filter Strip
A vegetative filter strip are used to trap sediment from small, disturbed areas by reducing velocity of sheet flow. Vegetative filter strips capture sediment by filtering storm water runoff and allowing sediment to settle out.

Permanent Vegetation
Topsoil will be placed in lawn areas and seeded with grass, and graded not to exceed 3:1 slopes. Proposed landscape trees and shrubs will also be added. These Bio areas will act as a natural filter strip to help improve storm water quality. The vegetated areas will slow the velocities of storm water runoff, reduce sediment runoff, and reduce problems associated with mud or dust from bare soils.

Isolator Row (or similar)
The isolator row is a filter fabric media that filters out sediment and other contaminants as storm water exits through the fabric.

Proposed Detention Basin
Basins collect, temporarily hold, and gradually release excess storm water from storm events. Detention is achieved through the use of an outlet structure that regulates the rate of storm water outflow.

Mechanical BMP (Aqua-swirl, etc.)
A BMP structure will be installed at the downstream end of the storm sewer system, prior to the storm sewer outlet. The primary purpose of the BMP is to remove sediment, oils and floatable debris from the stormwater prior to discharging from the site.

Good Housekeeping Measures
Good Housekeeping measures such as regular street sweeping, installation of trash receptacles, and reduction in fertilizer overspray can be incorporated by the owner and/or occupant.

North Pre-construction 10-year discharge: 1.09 cfs
North Post-construction 10-year discharge: 1.08 cfs
North Pre-construction 100-year discharge: 2.42 cfs
North Post-construction 100-year discharge: 1.50 cfs
South Pre-construction 10-year discharge: 4.54 cfs
South Post-construction 10-year discharge: 0.92 cfs
South Pre-construction 100-year discharge: 9.93 cfs
South Post-construction 100-year discharge: 2.00 cfs

C3 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE

The following items are stormwater quality measures that will be installed during construction. These items will remain in place after construction is completed and are considered to serve an incidental function as post-construction stormwater quality BMPs.

Permanent vegetation, hydrodynamic separator water quality units and underground detention basin with isolator rows for additional water quality will be installed to improve the existing runoff conditions. See sheets C4.1-C4.2 for the locations of the water quality units and detention systems and sheets C5.1 and landscape plans for permanent vegetation.

C4 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION

The mechanical BMP and underground detention system will remain in place as permanent features after construction is completed. The purpose of the these measures is to restrict stormwater discharges and provide a sediment removal function.

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST-CONSTRUCTION STORMWATER QUALITY MEASURES

Maintenance requirements for the stormwater quality measures which will remain in place after construction is complete, are described below. Refer to the BMP Operations and Maintenance Manual for more detailed maintenance requirements.

Vegetated Swale
Vegetated swales require little maintenance if properly designed. Mow as needed during the growing season; inspect for erosion problems twice during the first year, annually thereafter; and remove sediment, trash and debris annually or more frequently if needed.

Vegetated Filter Strip
Filter strips require little maintenance once vegetation is established. Mow as needed during the growing season.

Detention Ponds (Wet or Dry)
Inspect periodically as needed or at least every six months. Sediment shall be disposed of off site in accordance with all applicable laws. Areas that show sign of erosion shall be stabilized with erosion control blanket and/or seed as necessary.

Mechanical BMP
Frequent inspection and cleanout is critical for proper operation. Recommended inspection and maintenance schedules vary with each manufacturer.

Detention Basins (Underground)
Inspect periodically as needed or at least every six months. Sediment shall be disposed of off site in accordance with all applicable laws.

C6 ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTION STORMWATER MEASURES

TBD

VERIDUS GROUP
6280 N. Shadeland Avenue, Suite A
Indianapolis, IN 46220
Phone: (317) 598-6647
www.theveridusgroup.com

SIGNATURE

SEAL
KELLY ANN CANTER
REGISTERED
No. PE11900367
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVAL PENDING
NOT FOR CONSTRUCTION
12/18/2024

DATE 12/18/2024
PROJECT NO. 2023.0212

REVISIONS

NUMB	DATE	DESCRIPTION

PROJECT TITLE
THE GODDARD SCHOOL
FOR EARLY CHILDHOOD DEVELOPMENT
DETAILED DEVELOPMENT PLAN
4903 CASTAMERE DRIVE
NOBLESVILLE, INDIANA
46062

SHEET TITLE
STORM WATER POLLUTION PROTECTION PLAN

SHEET NUMBER
C5.9

PRINT DATE: 12/17/24
PLOT SCALE: 1:1 EDIT DATE: 12/17/24 - 9:56 AM EDITED BY: KCANTER DRAWING FILE: \\10.0.0.12\CLIENT FILES\PROJECTS\2023\0212 - GODDARD SCHOOL NOBLESVILLE\2_DESIGN\CAD\C5.9 STORM WATER POLLUTION PROTECTION PLAN.DWG