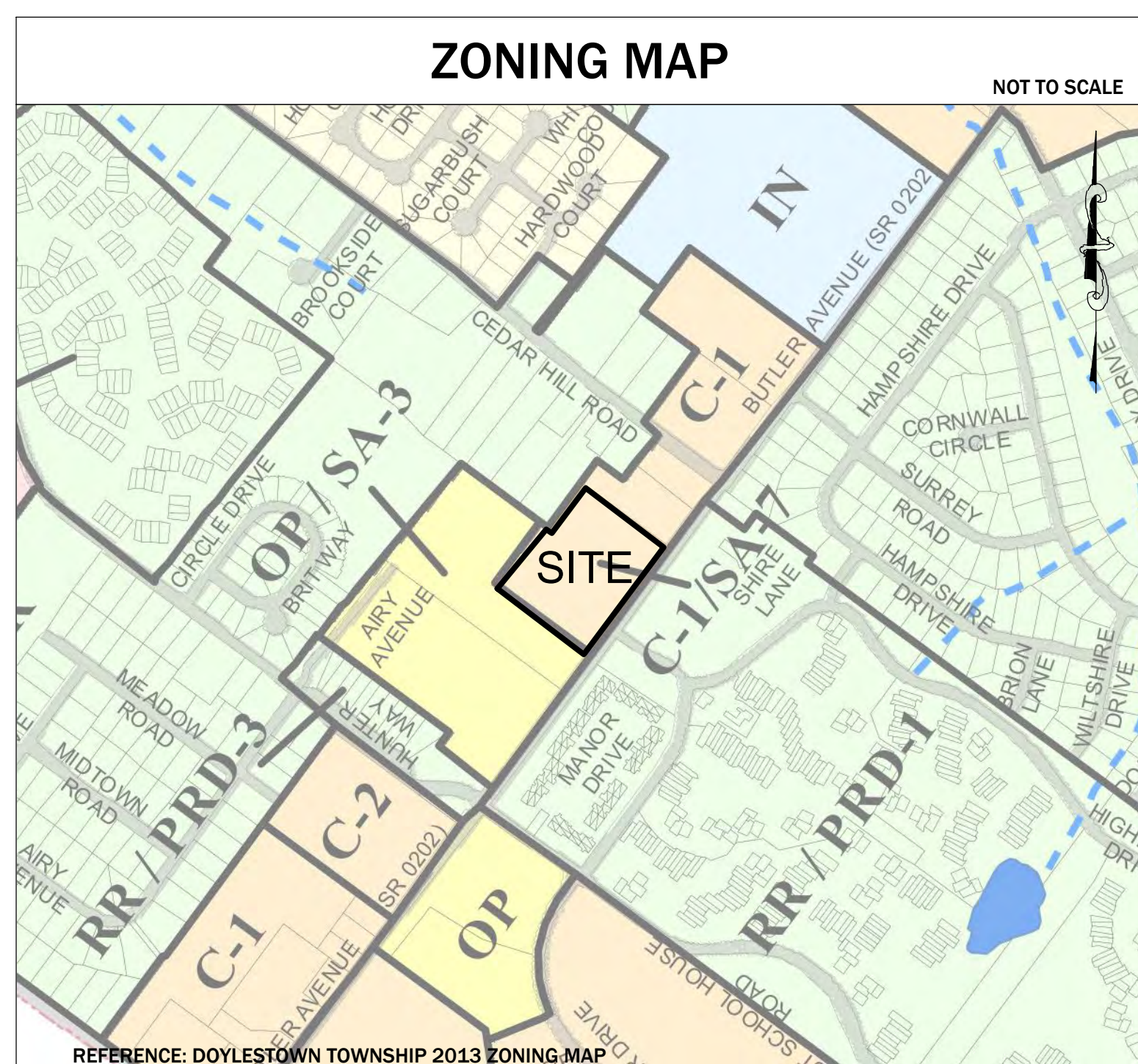
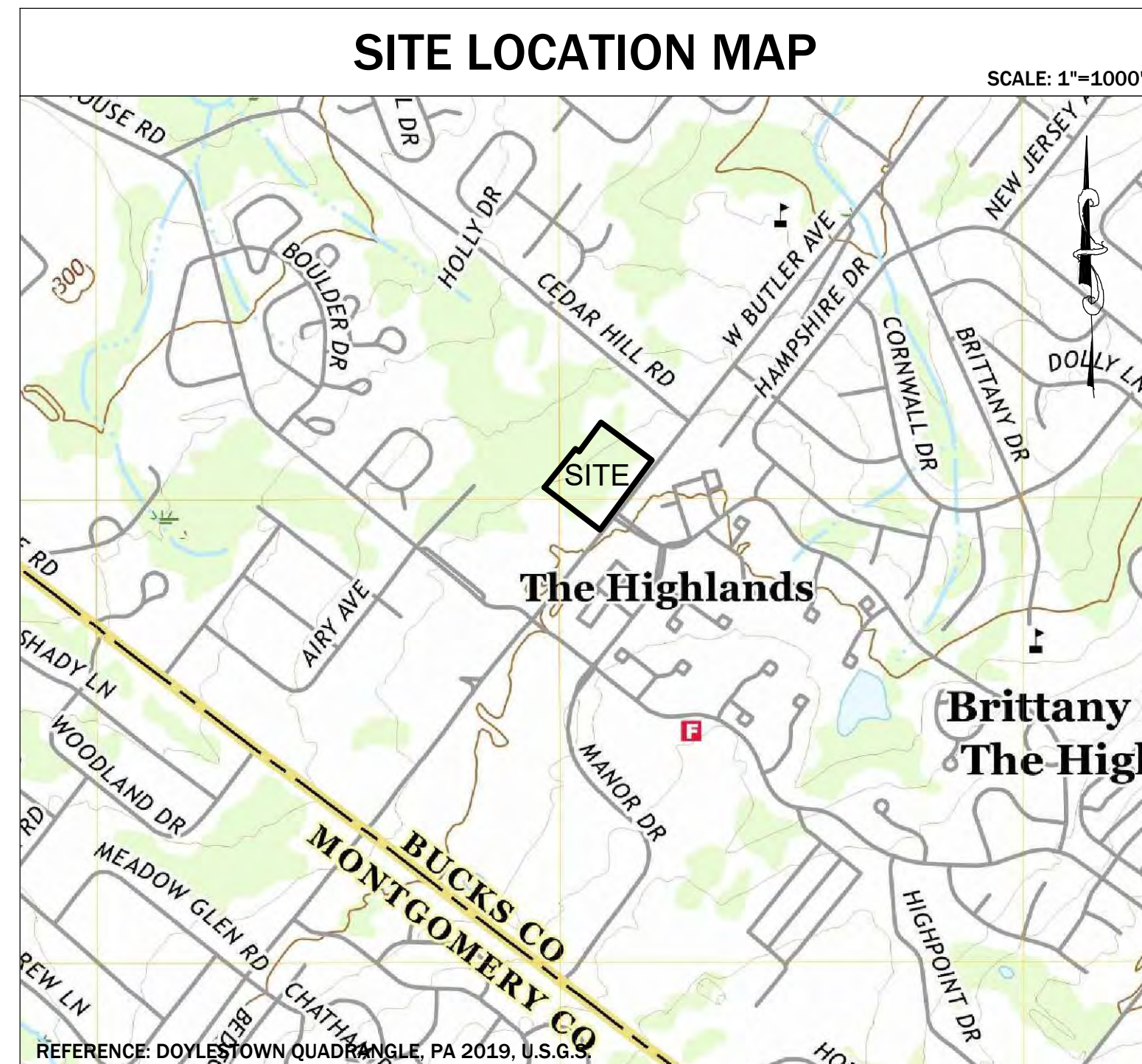


PRELIMINARY AND FINAL LAND DEVELOPMENT PLANS

FOR

BUTLER AVENUE PROPERTY

T.P. # 26-005-023
409 WEST BUTLER AVENUE
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA



DRAWING LIST			
SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE	LAST REVISED DATE
1	C0.0	COVER SHEET	3/17/2022
2	C0.1	EXISTING CONDITIONS PLAN	3/17/2022
3	C0.2	AERIAL MAP	3/17/2022
4	C1.0	RECORD SITE PLAN	3/17/2022
5	C1.1	SITE CONSTRUCTION DETAILS	3/17/2022
6	C1.2	SITE CONSTRUCTION DETAILS	3/17/2022
7	C1.3	SITE CONSTRUCTION DETAILS	3/17/2022
8	C2.0	GRADING PLAN	3/17/2022
9	C2.1	DETAILED GRADING PLAN	3/17/2022
10	C2.2	DRAINAGE PLAN	3/17/2022
11	C3.0	UTILITY PLAN	3/17/2022
12	C3.1	UTILITY CONSTRUCTION DETAILS	3/17/2022
13	C3.2	UTILITY CONSTRUCTION DETAILS	3/17/2022
14	C3.3	UTILITY CONSTRUCTION DETAILS	3/17/2022
15	C4.0	UTILITY PROFILES	3/17/2022
16	C4.1	UTILITY PROFILES	3/17/2022
17	C5.0	EROSION AND SEDIMENT CONTROL PLAN	3/17/2022
18	C5.1	EROSION AND SEDIMENT CONTROL DETAILS	3/17/2022
19	C5.2	EROSION AND SEDIMENT CONTROL DETAILS	3/17/2022
20	C5.3	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	3/17/2022
21	C5.4	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS	3/17/2022
22	C6.0	LANDSCAPE PLAN	3/17/2022
23	C6.1	LIGHTING PLAN	3/17/2022
24	C6.2	LANDSCAPE AND LIGHTING DETAILS	3/17/2022
25	C7.0	TRUCK TURN PLAN	3/17/2022

CONTACTS

NEW BRITAIN TOWNSHIP
207 PARK AVENUE
CHALFONT, Pa 18914
PHONE: (215)-822-1391

TOWNSHIP ENGINEER
GILMORE & ASSOCIATES, Inc
65 EAST BUTLER AVENUE, SUITE 100
NEW BRITAIN, PA 18901
PHONE 215 345 4330

TOWNSHIP PUBLIC WORKS DEPARTMENT
207 PARK AVENUE
CHALFONT, PA 18914
PHONE(215)-822-1391

BUCKS COUNTY PLANNING COMMISSION
THE ALMSHOUSE NESHAMINY MANOR CENTER
1260 ALMSHOUSE ROAD
DOYLESTOWN, PA 18901
215-345-3400
BUCKS COUNTY CONSERVATION DISTRICT

1456 FERRY ROAD, SUITE 704
DOYLESTOWN, PA 18901
215-345-7577

AQUA AMERICA
762 LANCASTER AVE
BRYN MAWR, PA 19010
PHONE: (610) 525 - 1400

BUCKS/MONT REGION CONTRACTOR AND BUILDER SERVICES
400 PARK AVENUE
WARMINSTER, PA 18974
PHONE: (215) 956-3270
FAX: (215) 956-3240

CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
1645 UPPER STATE ROAD
DOYLESTOWN, PA 18901
PHONE: (215) 345-1225

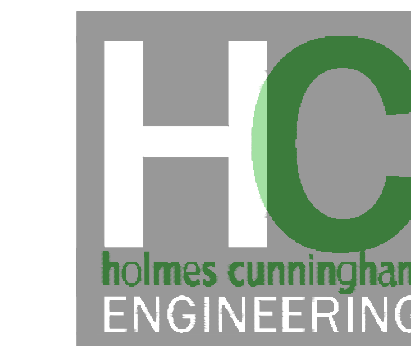
NORTH WALES WATER AUTHORITY
200 W WALNUT ST,
NORTH WALES, PA 19454
PHONE: (215) 699-4836

PECO
WARMINSTER SERVICE BUILDING
400 PARK AVE.,
WARMINSTER, PA 18974
ELECTRIC PHONE: (215) 956-3270
NEW ELECTRIC PHONE: (215) 956-3010
ELECTRIC EMERGENCY: (800) 841-4141
GAS PHONE: (800) 454-4100
NEW GAS PHONE: (800) 454-4100
GAS EMERGENCY: (800) 841-4141
GAS EMERGENCY(ALT): (844) 841-4151

APPLICANT/OWNER:

BUTLER PIKE PROPERTIES, LP.
76 GRIFFITHS MILES CIRCE
P.O. BOX 2579
WARMINSTER, PA 18974

PREPARED BY:

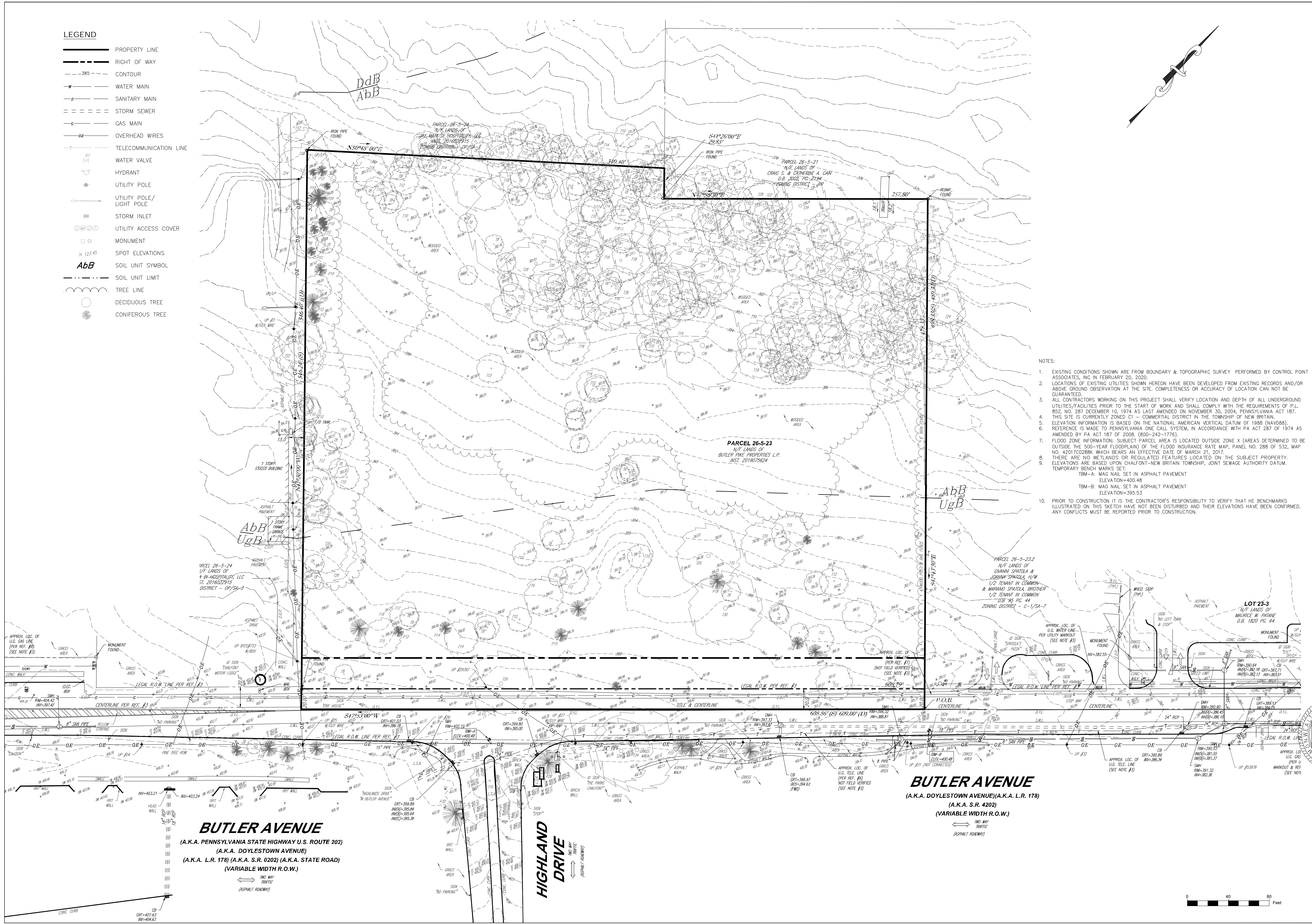


HOLMES CUNNINGHAM LLC
409 EAST BUTLER AVENUE
UNIT 5
DOYLESTOWN, PA 18901
(215) 586-3330

REVISED:	3/17/2022
DATE:	11/30/2021
PROJECT #	1482
DRAWING #	C0.0
SHEET	1 OF 25

LEGEND

- PROPERTY LINE
- RIGHT OF WAY
- CONTOUR
- WATER MAIN
- SANITARY MAIN
- STORM SEWER
- GAS MAIN
- OVERHEAD WIRES
- TELECOMMUNICATION LINE
- WATER VALVE
- HYDRANT
- UTILITY POLE
- UTILITY POLE/LIGHT POLE
- STORM INLET
- UTILITY ACCESS COVER
- MONUMENT
- SPOT ELEVATIONS
- SOIL UNIT SYMBOL
- SOIL UNIT LIMIT
- TREE LINE
- DECIDUOUS TREE
- CONIFEROUS TREE



- NOTES:**
1. EXISTING CONDITIONS SHOWN ARE FROM BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC. IN FEBRUARY 20, 2020.
 2. LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM EXISTING RECORDS AND/OR ABOVE GROUND OBSERVATION AT THE SITE. COMPLETENESS OR ACCURACY OF LOCATION CAN NOT BE GUARANTEED.
 3. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON NOVEMBER 30, 2004, PENNSYLVANIA ACT 187.
 4. THIS SITE IS CURRENTLY ZONED C1 - COMMERCIAL DISTRICT IN THE TOWNSHIP OF NEW BRITAIN.
 5. ELEVATION INFORMATION IS BASED ON THE NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVVD88).
 6. REFERENCE IS MADE TO PENNSYLVANIA ONE CALL SYSTEM, IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 187 OF 2008. (800-242-1776).
 7. FLOOD ZONE INFORMATION: SUBJECT PARCEL AREA IS LOCATED OUTSIDE ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 288 OF 532, MAP NO. 42017C0228K WHICH BEARS AN EFFECTIVE DATE OF MARCH 21, 2017.
 8. THERE ARE NO WETLANDS OR REGULATED FEATURES LOCATED ON THE SUBJECT PROPERTY.
 9. ELEVATIONS ARE BASED UPON CHALFOUNT-NEW BRITAIN TOWNSHIP, JOINT SEWAGE AUTHORITY DATUM. TEMPORARY BENCH MARKS SET:
 - TBM-A: MAG NAIL SET IN ASPHALT PAVEMENT ELEVATION=400.48
 - TBM-B: MAG NAIL SET IN ASPHALT PAVEMENT ELEVATION=395.53
 10. PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.

Holmes Cunningham LLC
 409 E. Butler Ave,
 Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS	Description	Date
10	CONSTRUCTION PHASE AND WORKING DAYS NOTICES - STOP & CALL	3-17-2022
9	REVISED FOR TWP/BCCD COMMENTS	

BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

EXISTING CONDITIONS PLAN

ROBERT T. CUNNINGHAM, P.E.
 PA PE07624

File No.	1482_C0.1 ExistCond.dwg		
HCE Job	1482	Scale	1"=40'
Date	11/30/2021	Designed	RC
		Sheet	2 of 25
Drawing No.	C0.1		



Holmes Cunningham LLC
 409 E. Butler Ave,
 Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS	Date	Description
	3-17-2022	REVISED FOR TWP/BCCD COMMENTS

CALL BEFORE YOU DIG !!
 THIS IS A PRELIMINARY DESIGN AND CONSTRUCTION PHASE AND NOT TO BE USED FOR PERMITS OR STOP & CALL EXCAVATION STAGE.
 Pennsylvania One Call System, Inc.
 1-800-955-1776

UTILITY LOCATIONS AS SHOWN ON THIS MAP ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES PRIOR TO ANY EXCAVATION.

BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

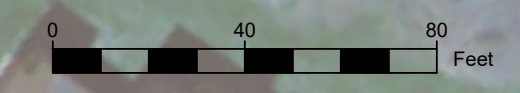
AERIAL MAP

File No.
1482_C0.2 Aerial.dwg

HCE Job 1482
 Date 11/30/2021
 Scale 1"=40'
 Designed RC
 Sheet 3 of 25

Drawing No.
C0.2

- NOTES:
- EXISTING CONDITIONS SHOWN ARE FROM BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC IN FEBRUARY 20, 2020.
 - AERIAL PHOTOGRAPHY TAKEN FROM PASDA AERIAL PHOTOGRAPHS 2018.



ORDINANCE MODIFICATIONS, WAIVERS, AND OTHER STIPULATIONS (APPROVED AS PART OF THE SETTLEMENT STIPULATION AND AGREEMENT, EXHIBIT 'A', ORDERED OCTOBER 20, 2021).

- THE SETTLEMENT PLAN SHALL BE DEEMED COMPLIANT WITH THE ZONING ORDINANCE, AND ALL THE ZONING RELIEF GRANTED BY THE ZHB IS HEREBY SPECIFICALLY CONFIRMED AND/OR MODIFIED AS FOLLOWS:
 - SECTION 27-300.a - TO PERMIT MORE THAN ONE PRINCIPAL USE AND MORE THAN ONE PRINCIPAL STRUCTURE ON THE PROPERTY.
 - SECTION 27-305.b.7 - TO PERMIT THE B7 APARTMENT USE TO BE DEVELOPED ON THE PROPERTY AS DEPICTED ON THE SETTLEMENT PLAN.
 - SECTION 27-1201 - TO PERMIT THE B7 APARTMENT USE AND THE D1 NURSERY SCHOOL/DAY CARE CENTER USE IN THE C-1 COMMERCIAL ZONING DISTRICT.
 - SECTION 27-2400.i.2 - TO PERMIT REPLACEMENT OF UP TO 70% OF WOODLANDS ON THE PROPERTY WITH THE ASSOCIATED PLANTING OF REPLACEMENT TREES IN ACCORDANCE WITH PARAGRAPH 15 IN THE AGREEMENT.
- SECTION 27-2904.g.5 - TO PERMIT THE PAVED AREA ADJACENT TO THE PROPOSED BUILDINGS TO BE TEN (10) FEET FROM THE ADJUTING EXTERIOR WALLS.
- THE PROPERTY SHALL NOT BE DEVELOPED AS FOR B5 SINGLE-FAMILY ATTACHED USE (TOWNHOUSES).
- THE BUILDING IDENTIFIED AS "BUILDING A" ON THE SETTLEMENT PLAN SHALL BE USED AS AND FOR THE A7 APARTMENT USE, TOGETHER WITH RESIDENTIAL AMENITIES CUSTOMARILY INCIDENTAL TO THE USE, INCLUDING, BUT NOT LIMITED TO, A FITNESS CENTER FACILITY, BUSINESS CENTER, AND COMMON AREAS.
- THE BUILDING IDENTIFIED AS "BUILDING B" ON THE SETTLEMENT PLAN SHALL BE USED SOLELY FOR THOSE COMMERCIAL USES PERMITTED BY RIGHT IN THE C-1 COMMERCIAL ZONING DISTRICT AS OF THE DATE OF THIS STIPULATED SETTLEMENT AGREEMENT, TOGETHER WITH THE POTENTIAL D1 NURSERY SCHOOL/DAY-CARE CENTER USE, SAID LIST OF ALLOWED USES IS IN APPENDIX 'B' OF THE STIPULATION AGREEMENT.
- PORTION OF THE GROUND FLOOR OF THE BUILDING IDENTIFIED AS "BUILDING A" ON THE SETTLEMENT PLAN MAY ALSO BE USED FOR THOSE COMMERCIAL USES PERMITTED BY RIGHT IN THE C-1 COMMERCIAL ZONING DISTRICT AS OF THE DATE OF THIS STIPULATED SETTLEMENT AGREEMENT AS LISTED IN APPENDIX 'B'.
- TOWNSHIP SHALL GRANT PRELIMINARY/FINAL LAND DEVELOPMENT APPROVAL OF THE SETTLEMENT PLAN WITHIN NINETY (90) DAYS OF THE DATE OF APPLICATION BY PROPERTY OWNER. TOWNSHIP AND PROPERTY OWNER AGREE THAT IN CONNECTION WITH THE LAND DEVELOPMENT APPROVAL, PROPERTY OWNER SHALL BE ENTITLED TO THE GRANT OF SUCH WAIVERS FROM THE PROVISIONS OF THE NEW BRITAIN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AS ARE NECESSARY TO FACILITATE THE DEVELOPMENT AS GENERALLY SHOWN ON THE SETTLEMENT PLAN, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
 - SECTION 22-505 - FROM PROVIDING A COMMUNITY IMPACT ASSESSMENT REPORT.
 - SECTION 22-705.3 - FROM UNDERTAKING ROADWAY WIDENING AND ASSOCIATED IMPROVEMENTS ALONG THE BUTLER AVENUE FRONTAGE, SUBJECT TO SUCH IMPROVEMENTS AS MAY BE REQUIRED UNDER THE JURISDICTION OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION.
 - SECTION 22-713.5.b(6) - FROM PROVIDING BERM AND SCREEN PLANTINGS FOR A B7 APARTMENT USE, AS TO THE BUTLER AVENUE FRONTAGE ONLY.
 - SECTION 22-715 - FROM PROVIDING PARK AND RECREATION LAND.
 - SECTION 22-722 - FROM COMPLIANCE WITH THE BUTLER AVENUE OVERLAY REQUIREMENTS OTHER THAN THOSE SPECIFICALLY REQUIRED UNDER [THE AGREEMENT] OR AS SHOWN ON THE SETTLEMENT PLAN.
 - SECTION 22-711.4(c) - TO PERMIT GRADING WITHIN FIVE (5) FEET OF THE PROPERTY LINE.
- PROPERTY OWNER SHALL BE REQUIRED TO PAY A FEE-IN-LIEU OF RECREATION IN THE MAXIMUM AMOUNT OF \$185,000.00, PURSUANT TO THE CURRENT RESIDENTIAL PER-UNIT AND COMMERCIAL SQUARE FOOTAGE REQUIREMENTS OF THE FEE SCHEDULE OF NEW BRITAIN TOWNSHIP, WHICH SHALL BE PAYABLE AS FOLLOWS: (a) FIFTY PERCENT (50%) OF THE TOTAL SUM, UP TO A MAXIMUM OF \$92,500.00 SHALL BE PAYABLE UPON THE RECORDING OF FINAL LAND DEVELOPMENT PLANS; AND (b) THE BALANCE SHALL BE PAYABLE UPON ISSUANCE OF THE FIRST OCCUPANCY PERMIT FOR EITHER BUILDING ON THE PROPERTY.

SITE PLAN NOTES:

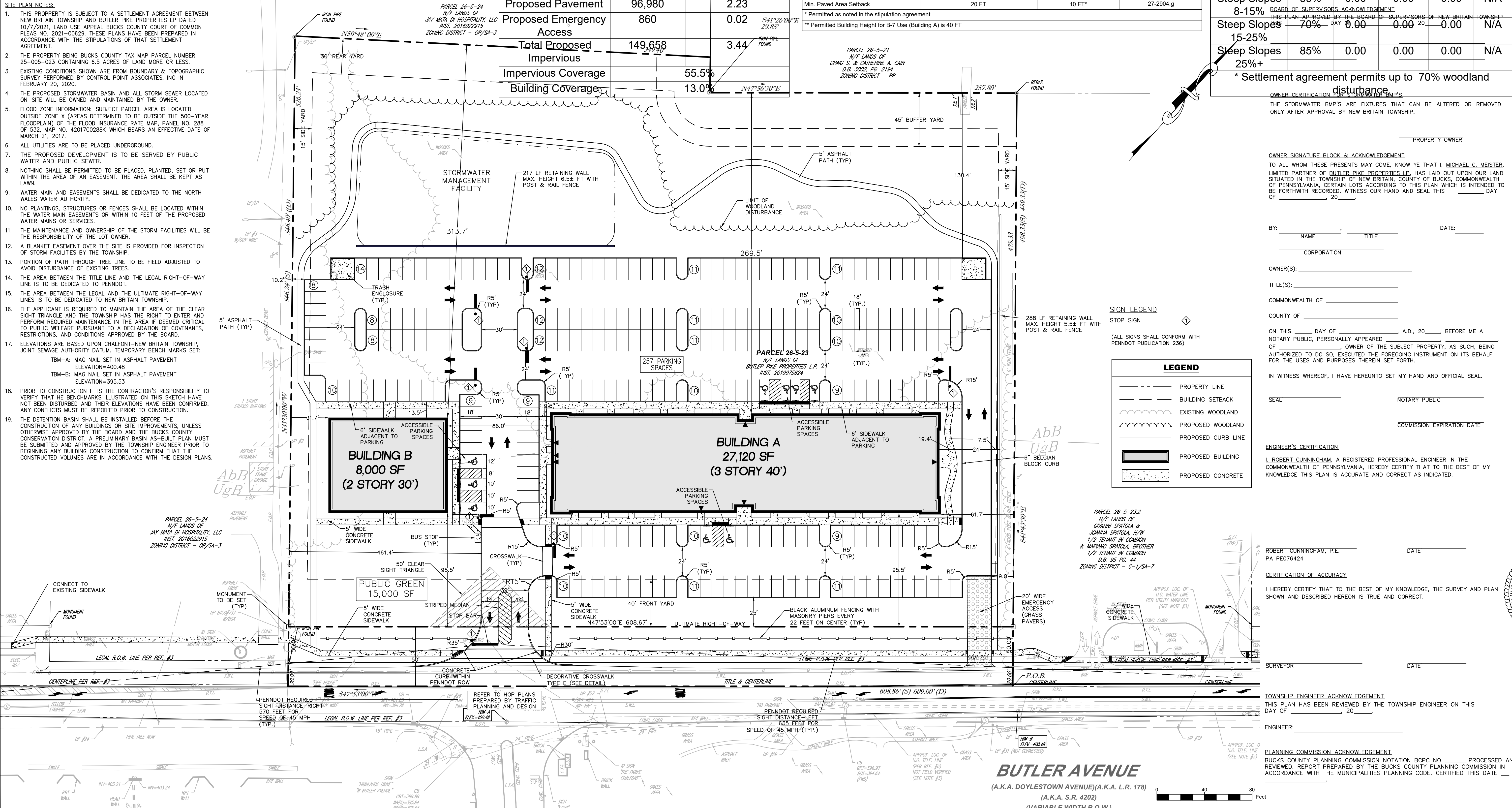
- THIS PROPERTY IS SUBJECT TO A SETTLEMENT AGREEMENT BETWEEN NEW BRITAIN TOWNSHIP AND BUTLER PIKE PROPERTIES LP DATED 10/17/2021. LAND USE APPEAL BUCKS COUNTY COURT OF COMMON PLEAS NO. 2021-00629. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE STIPULATIONS OF THAT SETTLEMENT AGREEMENT.
- THE PROPERTY BEING BUCKS COUNTY TAX MAP PARCEL NUMBER 25-005-023 CONTAINING 6.5 ACRES OF LAND MORE OR LESS.
- EXISTING CONDITIONS SHOWN ARE FROM BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC IN FEBRUARY 20, 2020.
- THE PROPOSED STORMWATER BASIN AND ALL STORM SEWER LOCATED ON-SITE WILL BE OWNED AND MAINTAINED BY THE OWNER.
- FLOOD ZONE INFORMATION: SUBJECT PARCEL AREA IS LOCATED OUTSIDE ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 288 OF 532, MAP NO. 420170028BK WHICH BEARS AN EFFECTIVE DATE OF MARCH 21, 2017.
- ALL UTILITIES ARE TO BE PLACED UNDERGROUND.
- THE PROPOSED DEVELOPMENT IS TO BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
- NOTHING SHALL BE PERMITTED TO BE PLACED, PLANTED, SET OR PUT WITHIN THE AREA OF AN EASEMENT. THE AREA SHALL BE KEPT AS LAWN.
- WATER MAIN AND EASEMENTS SHALL BE DEDICATED TO THE NORTH WALES WATER AUTHORITY.
- NO PLANTINGS, STRUCTURES OR FENCES SHALL BE LOCATED WITHIN THE WATER MAIN EASEMENTS OR WITHIN 10 FEET OF THE PROPOSED WATER MAINS OR SERVICES.
- THE MAINTENANCE AND OWNERSHIP OF THE STORM FACILITIES WILL BE THE RESPONSIBILITY OF THE LOT OWNER.
- A BLANKET EASEMENT OVER THE SITE IS PROVIDED FOR INSPECTION OF STORM FACILITIES BY THE TOWNSHIP.
- PORTION OF PATH THROUGH TREE LINE TO BE FIELD ADJUSTED TO AVOID DISTURBANCE OF EXISTING TREES.
- THE AREA BETWEEN THE TITLE LINE AND THE LEGAL RIGHT-OF-WAY LINE IS TO BE DEDICATED TO PENNDOT.
- THE AREA BETWEEN THE LEGAL AND THE ULTIMATE RIGHT-OF-WAY LINES IS TO BE DEDICATED TO NEW BRITAIN TOWNSHIP.
- THE APPLICANT IS REQUIRED TO MAINTAIN THE AREA OF THE CLEAR SIGHT TRIANGLE AND THE TOWNSHIP HAS THE RIGHT TO ENTER AND PERFORM REQUIRED MAINTENANCE IN THE AREA IF DEEMED CRITICAL TO PUBLIC WELFARE PURSUANT TO A DECLARATION OF COVENANTS, RESTRICTIONS, AND CONDITIONS APPROVED BY THE BOARD.
- ELEVATIONS ARE BASED UPON CHALFONT-NEW BRITAIN TOWNSHIP, JOINT SEWAGE AUTHORITY DATUM. TEMPORARY BENCH MARKS SET:
 - TBM-A: MAG NAIL SET IN ASPHALT PAVEMENT ELEVATION=400.48
 - TBM-B: MAG NAIL SET IN ASPHALT PAVEMENT ELEVATION=395.53
- PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.
- THE DETENTION BASIN SHALL BE INSTALLED BEFORE THE CONSTRUCTION OF ANY BUILDINGS OR SITE IMPROVEMENTS, UNLESS OTHERWISE APPROVED BY THE BOARD AND THE BUCKS COUNTY CONSERVATION DISTRICT. A PRELIMINARY BASIN AS-BUILT PLAN MUST BE SUBMITTED AND APPROVED BY THE TOWNSHIP ENGINEER PRIOR TO BEGINNING ANY BUILDING CONSTRUCTION TO CONFIRM THAT THE CONSTRUCTED VOLUMES ARE IN ACCORDANCE WITH THE DESIGN PLANS.

COVERAGE CALCULATIONS		
Lot Calculations	S.F.	AC
Gross Lot Area	316,570	7.27
Ultimate Right-of-Ways	30,438	0.70
Proposed Utility Easements	16,565	0.38
Resources with 100% Protection	0	0.00
Ratio Base Site Area	269,567	6.19
Proposed Areas	S.F.	AC
Proposed Building A	27,120	0.62
Proposed Building B	8,000	0.18
Proposed Sidewalks	8,128	0.19
Proposed Asphalt	6,679	0.15
Proposed Curb	1,891	0.04
Proposed Pavement	96,980	2.23
Proposed Emergency Access	860	0.02
Total Proposed Impervious	149,658	3.44
Impervious Coverage		55.5%
Building Coverage		13.0%

Zoning Table			
Zone: C-1 - Commercial District; Butler Avenue Corridor Overlay District			
ITEM	REQUIRED/PERMITTED	PROPOSED	ORDINANCE SECTION
Uses	Various Uses*		
C-1 District Regulations			
Min. Lot Area	1 Acre	6.5 Acres	27-1202.b
Min. Lot Width	250 FT	608 FT	27-1202.b
Min. Lot Depth	120 FT	448 FT	27-1202.b
Min. Front Yard Setback	40 FT	95 FT	27-1202.b
Min. Side Yard Setback	15 FT	31 FT	27-1202.b
Min. Rear Yard Setback	30 FT	313 FT	27-1202.b
Min. Front Yard Setback for B-7 Use	50 FT	95 FT	27-305.B7
Min. Side Yard Setback for B-7 Use	20 FT	51 FT	27-305.B7
Min. Rear Yard Setback for B-7 Use	50 FT	269 FT	27-305.B7
Max. Building Coverage	40%	13.0%	27-1202.b
Max. Building Height**	35 FT/40 FT	40 FT	27-1202.a & 27-305.B7.a
Max. Impervious Surface Coverage (Site)	70%	55.5%	27-1202.b
Max. Impervious Surface Coverage (Lot)	75%	55.5%	27-1202.b
Min. Required Buffer Yard	45 FT	50 FT	27-2801
Off-Street Parking Regulations			
B7 Apartments (1 - 3 Bedrooms)	2 Spaces/DU (70 Units) (140 Spaces)	148 Spaces	27-2901.B7.b
I1 Medical Office	1 Space/175 SF (16,000 SF) (92 Spaces)	100 Spaces	27-2901.I.11
J1 Retail Store	1 Space/200 SF (600 SF) (3 Spaces)	9 Spaces	27-2901.J.11
Min. Paved Area Setback	20 FT	10 FT*	27-2904.g

RESOURCE PROTECTION CALCULATIONS					
Natural Resource	Required Protection Ratio	Land in Resources	Required Protection Land	Proposed Protected Area	Proposed Protection Ratio
Watercourses	100%	0.00	0.00	0.00	N/A
Riparian Buffer	100%	0.00	0.00	0.00	N/A
Floodplain & Floodplain Soil	100%	0.00	0.00	0.00	N/A
Wetlands	100%	0.00	0.00	0.00	N/A
Lakes and Ponds	100%	0.00	0.00	0.00	N/A
Wetlands Margin	100%	0.00	0.00	0.00	N/A
Woodlands*	30%	3.78	1.13	1.17	30.9%
Steep Slopes 8-15%	60%	0.00	0.00	0.00	N/A
Steep Slopes 15-25%	70%	0.00	0.00	0.00	N/A
Steep Slopes 25%+	85%	0.00	0.00	0.00	N/A

* Settlement agreement permits up to 70% woodland disturbance



Hoimes Cunningham LLC
 409 E. Butler Ave., Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS	Description	Date
3-17-2022	REVISED FOR TWP/BCCD COMMENTS	

OWNER CERTIFICATION
 I, MICHAEL C. MEISTER, LIMITED PARTNER OF BUTLER PIKE PROPERTIES LP, HAS LAID OUT UPON OUR LAND SITUATED IN THE TOWNSHIP OF NEW BRITAIN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, CERTAIN LOTS ACCORDING TO THIS PLAN WHICH IS INTENDED TO BE FORTHWITH RECORDED, WITNESS OUR HAND AND SEAL THIS DAY OF 20__.

OWNER SIGNATURE BLOCK & ACKNOWLEDGEMENT
 BY: _____ NAME _____ TITLE _____ DATE: _____
 CORPORATION _____
 OWNER(S): _____
 TITLE(S): _____
 COMMONWEALTH OF _____
 COUNTY OF _____

ON THIS DAY OF _____ A.D., 20__ BEFORE ME A NOTARY PUBLIC, PERSONALLY APPEARED _____ OF _____ OWNER OF THE SUBJECT PROPERTY, AS SUCH, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT ON ITS BEHALF FOR THE USES AND PURPOSES THEREIN SET FORTH.

ENGINEER'S CERTIFICATION
 I, ROBERT CUNNINGHAM, A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS PLAN IS ACCURATE AND CORRECT AS INDICATED.

CERTIFICATION OF ACCURACY
 I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT.

FILE NO.
 1482_C1.0 Record.dwg

HCE Job
 1482

Date
 11/30/2021

Scale
 1" = 40'

Designed
 RC

Sheet
 4 of 25

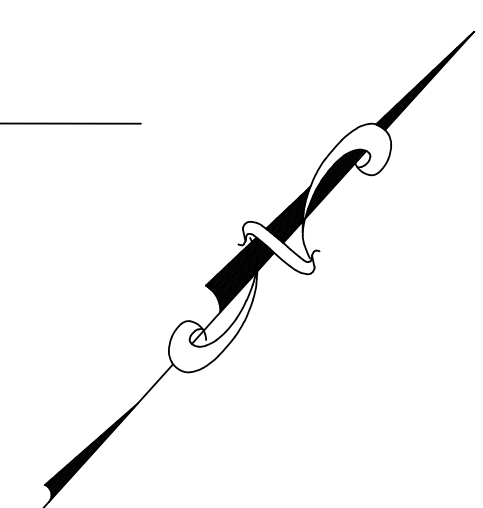
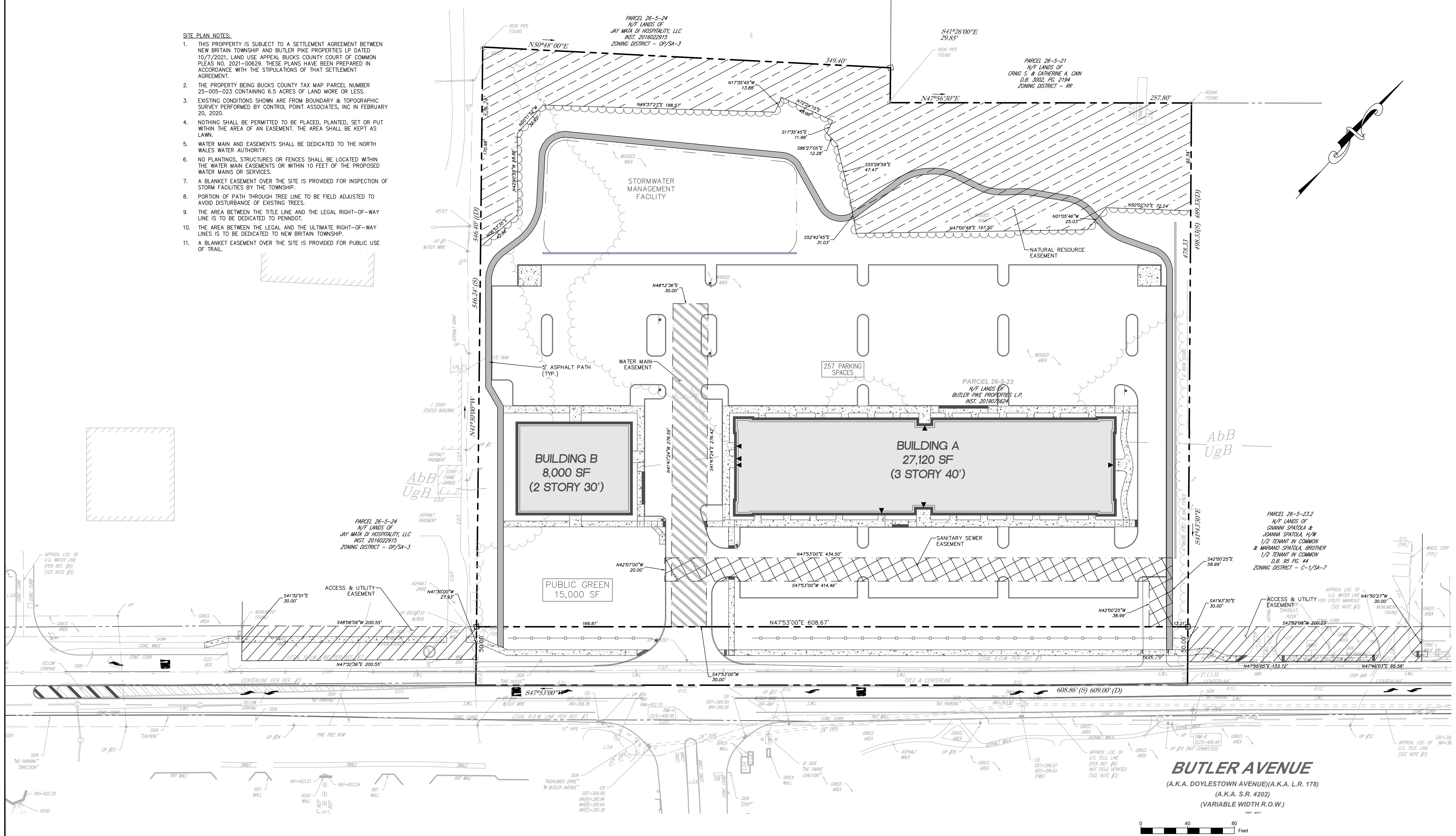
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SITE PLAN LEGEND

- NATURAL RESOURCE EASEMENT
- ACCESS AND UTILITY EASEMENT
- SANITARY SEWER EASEMENT
- WATER MAIN EASEMENT
- ASPHALT PATH
- PROPOSED MONUMENT
- PROPOSED IRON PIN

SITE PLAN NOTES:

1. THIS PROPERTY IS SUBJECT TO A SETTLEMENT AGREEMENT BETWEEN NEW BRITAIN TOWNSHIP AND BUTLER PIKE PROPERTIES LP DATED 10/7/2021, LAND USE APPEAL, BUCKS COUNTY COURT OF COMMON PLEAS NO. 2021-00629. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE STIPULATIONS OF THAT SETTLEMENT AGREEMENT.
2. THE PROPERTY BEING BUCKS COUNTY TAX MAP PARCEL NUMBER 25-005-023 CONTAINING 6.5 ACRES OF LAND MORE OR LESS.
3. EXISTING CONDITIONS SHOWN ARE FROM BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC IN FEBRUARY 20, 2020.
4. NOTHING SHALL BE PERMITTED TO BE PLACED, PLANTED, SET OR PUT WITHIN THE AREA OF AN EASEMENT. THE AREA SHALL BE KEPT AS LAWN.
5. WATER MAIN AND EASEMENTS SHALL BE DEDICATED TO THE NORTH WALES WATER AUTHORITY.
6. NO PLANTINGS, STRUCTURES OR FENCES SHALL BE LOCATED WITHIN THE WATER MAIN EASEMENTS OR WITHIN 10 FEET OF THE PROPOSED WATER MAINS OR SERVICES.
7. A BLANKET EASEMENT OVER THE SITE IS PROVIDED FOR INSPECTION OF STORM FACILITIES BY THE TOWNSHIP.
8. PORTION OF PATH THROUGH TREE LINE TO BE FIELD ADJUSTED TO AVOID DISTURBANCE OF EXISTING TREES.
9. THE AREA BETWEEN THE TITLE LINE AND THE LEGAL RIGHT-OF-WAY LINE IS TO BE DEDICATED TO PENNDOT.
10. THE AREA BETWEEN THE LEGAL AND THE ULTIMATE RIGHT-OF-WAY LINES IS TO BE DEDICATED TO NEW BRITAIN TOWNSHIP.
11. A BLANKET EASEMENT OVER THE SITE IS PROVIDED FOR PUBLIC USE OF TRAIL.



Holmes Cunningham LLC
 409 E. Butler Ave,
 Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS	Description	Date
10	REVISED FOR TWP/BCCD COMMENTS	3-17-2022

BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA
EASEMENT SITE PLAN

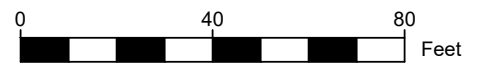
ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

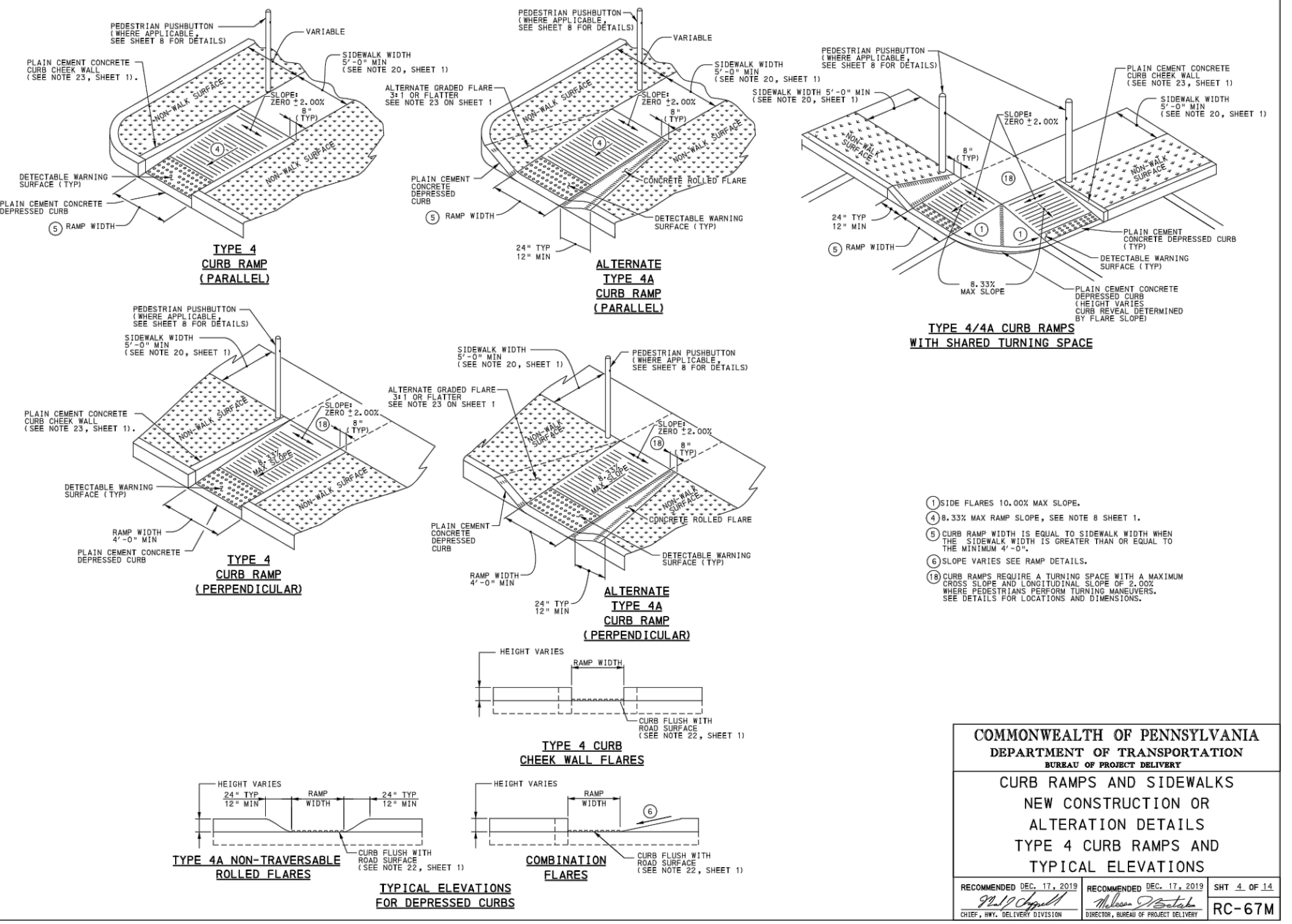
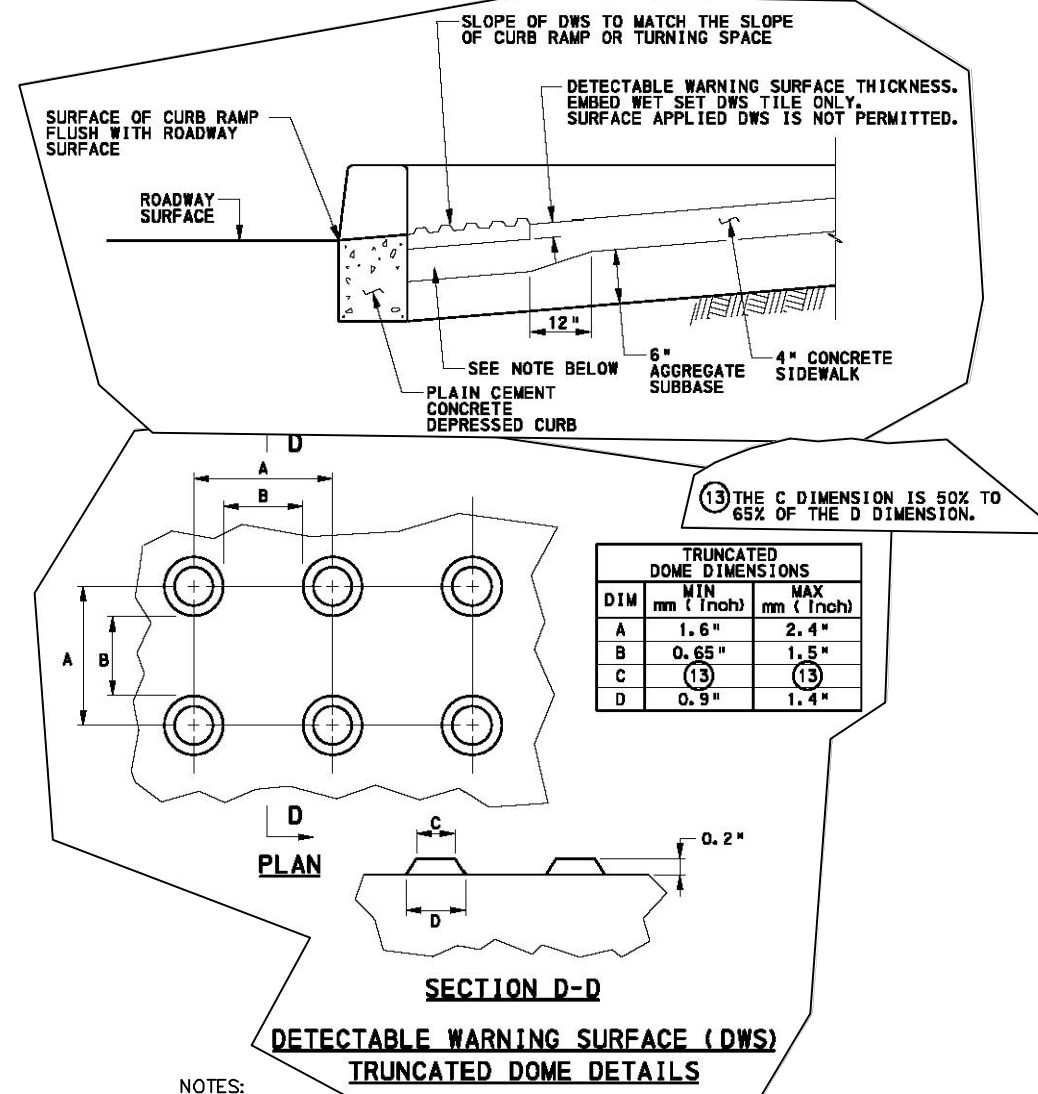
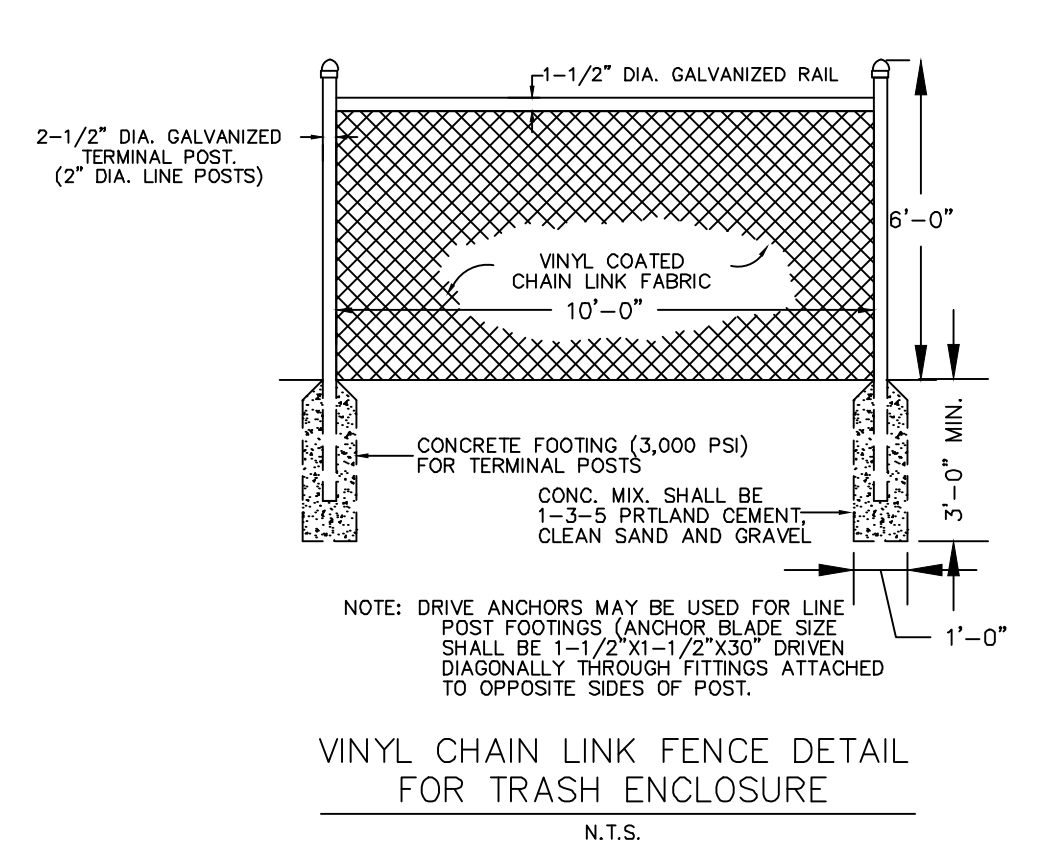
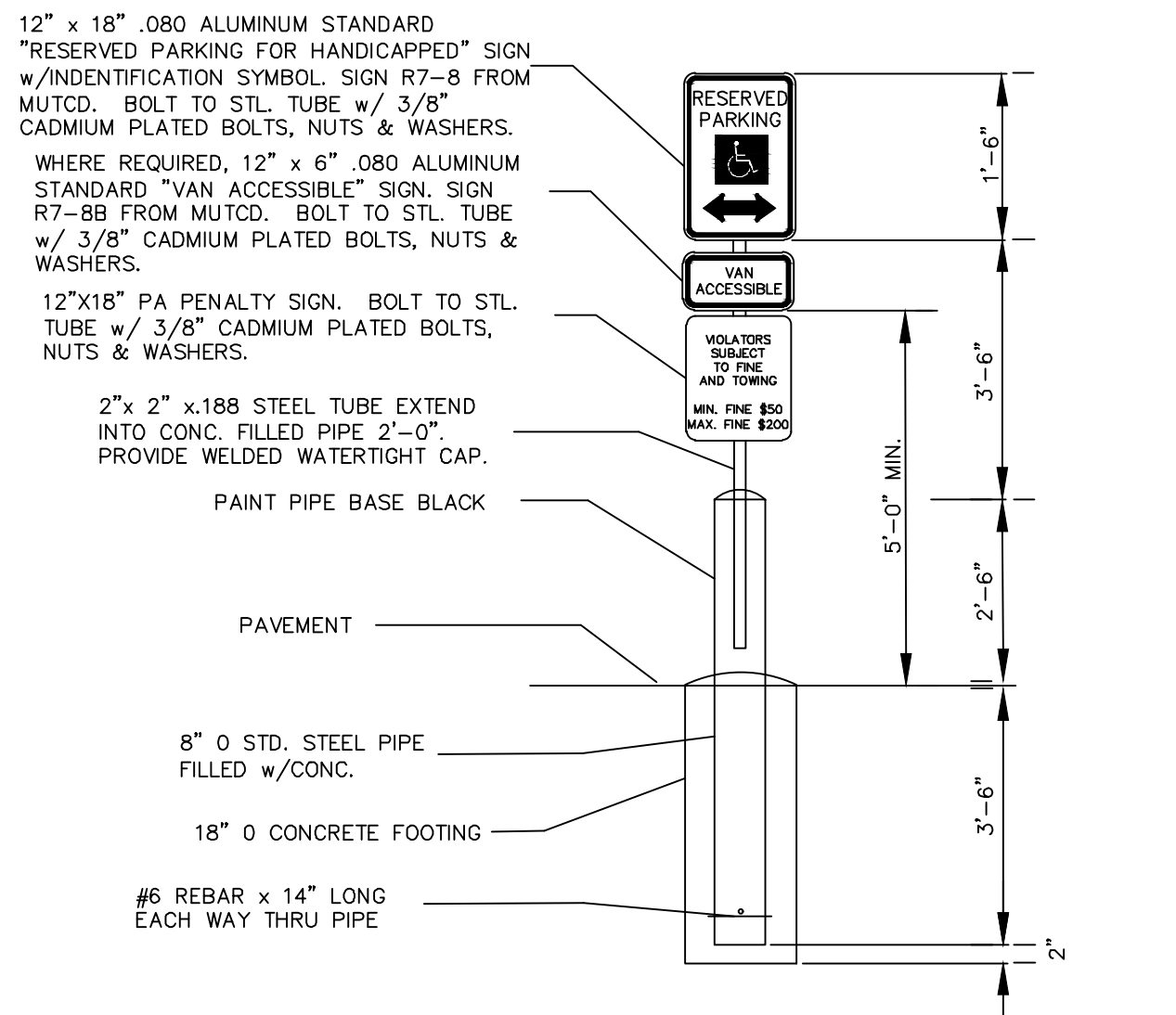
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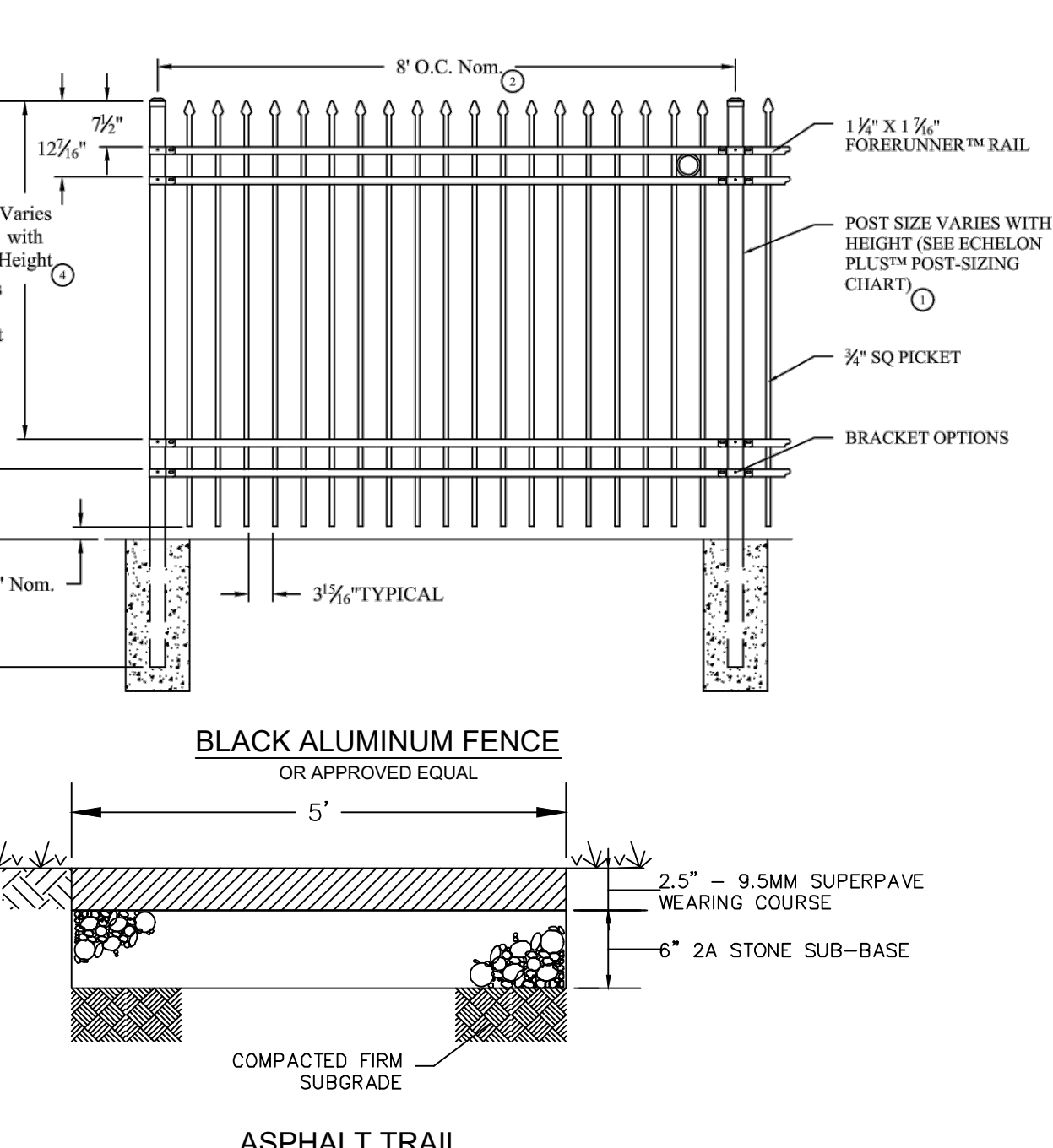
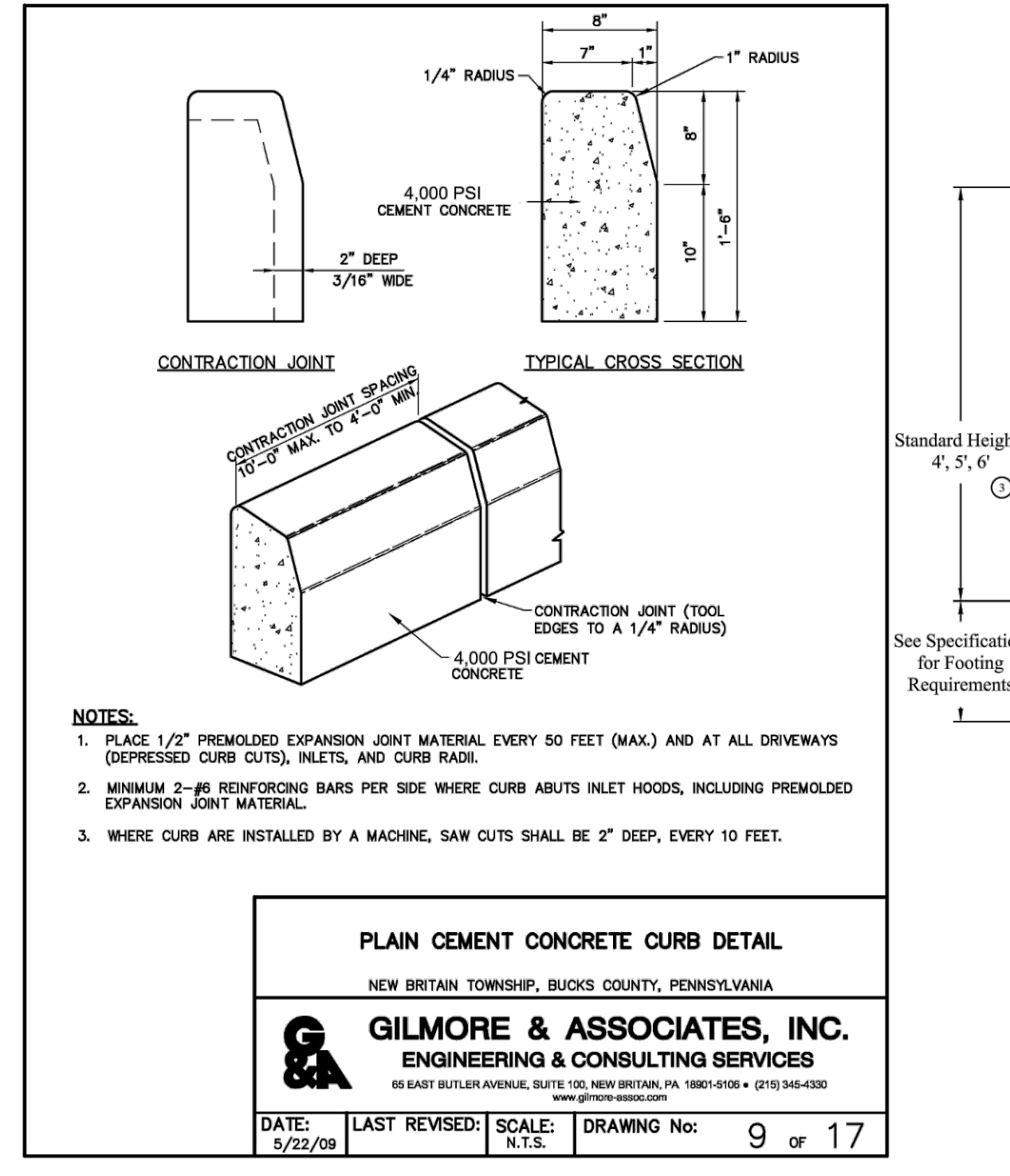
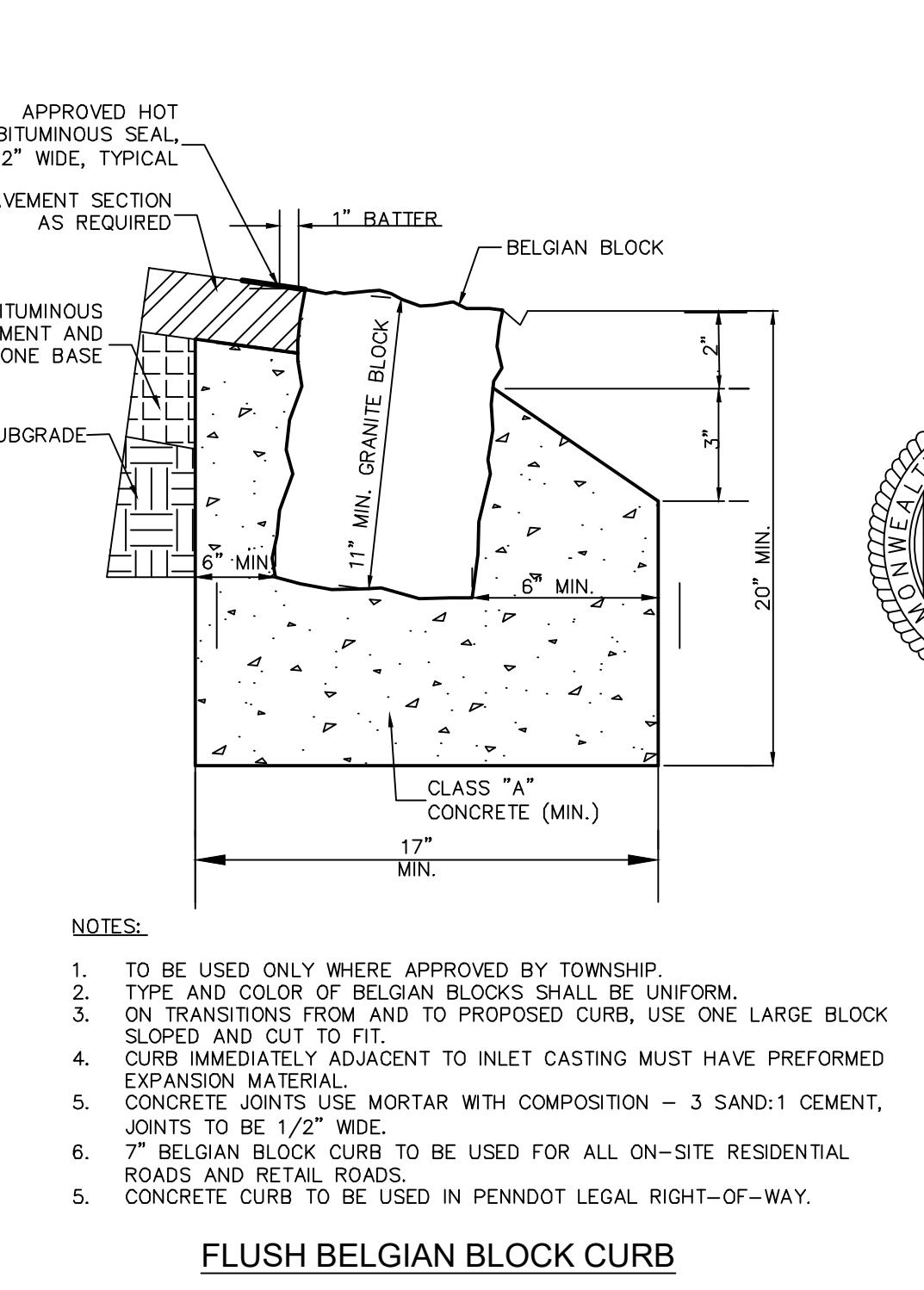
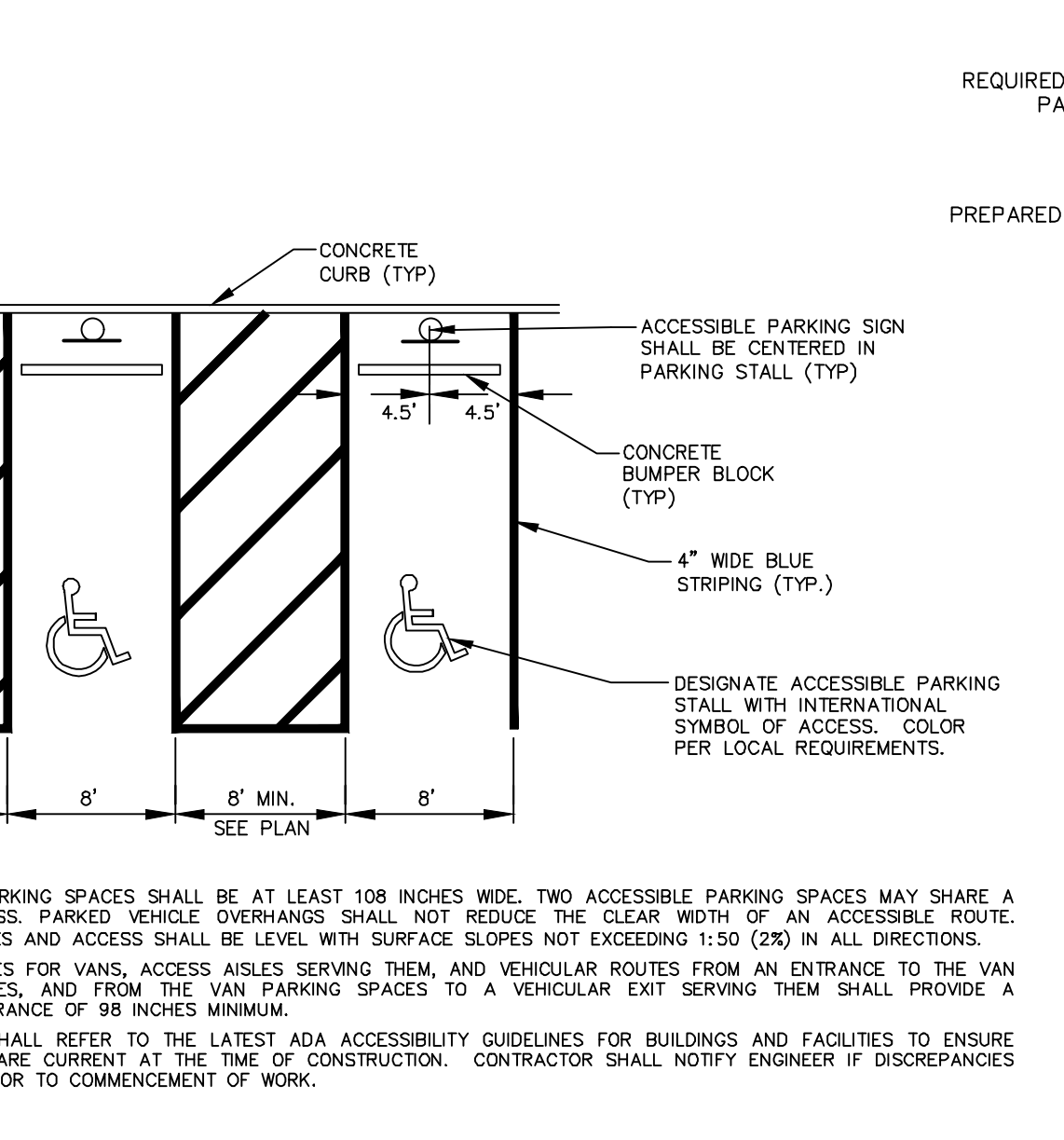
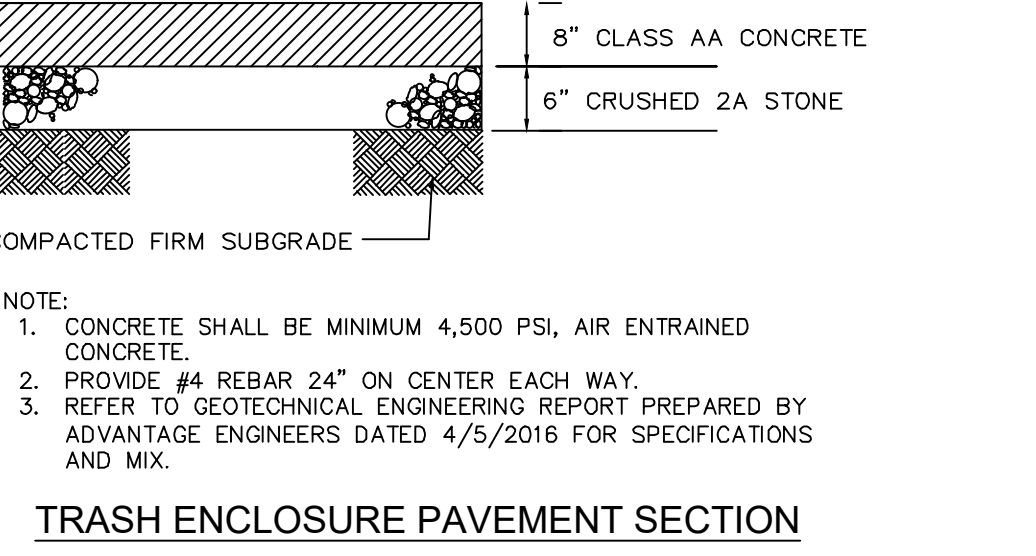
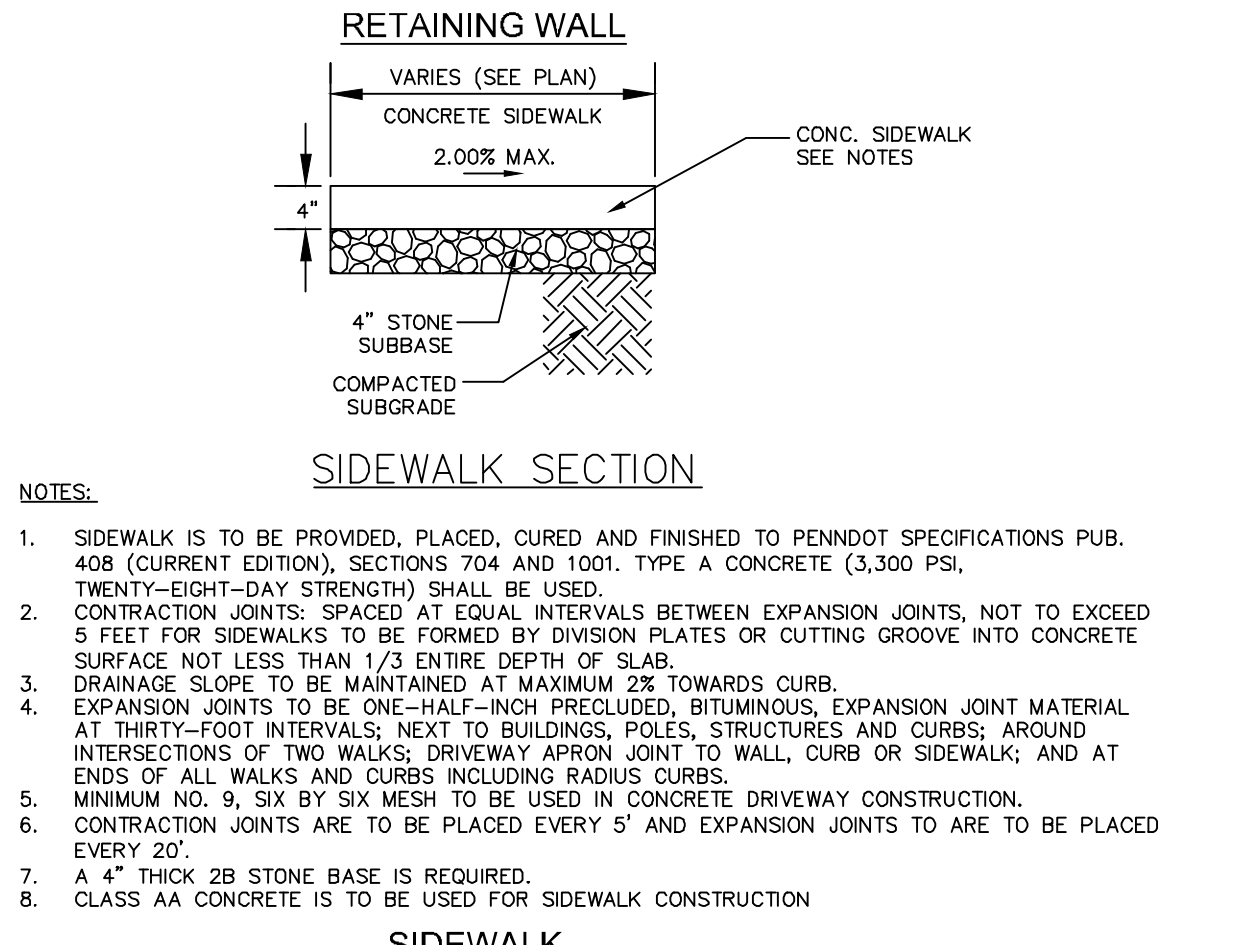
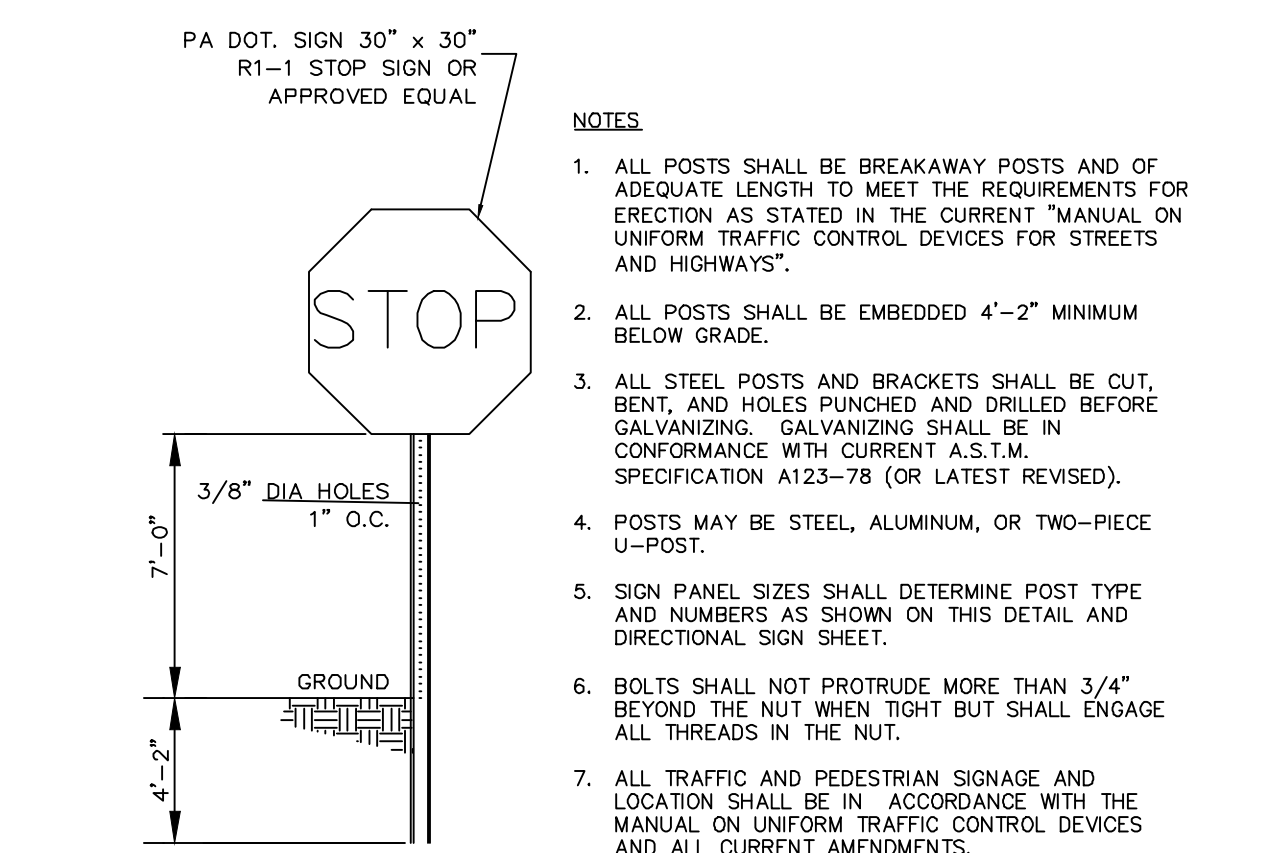
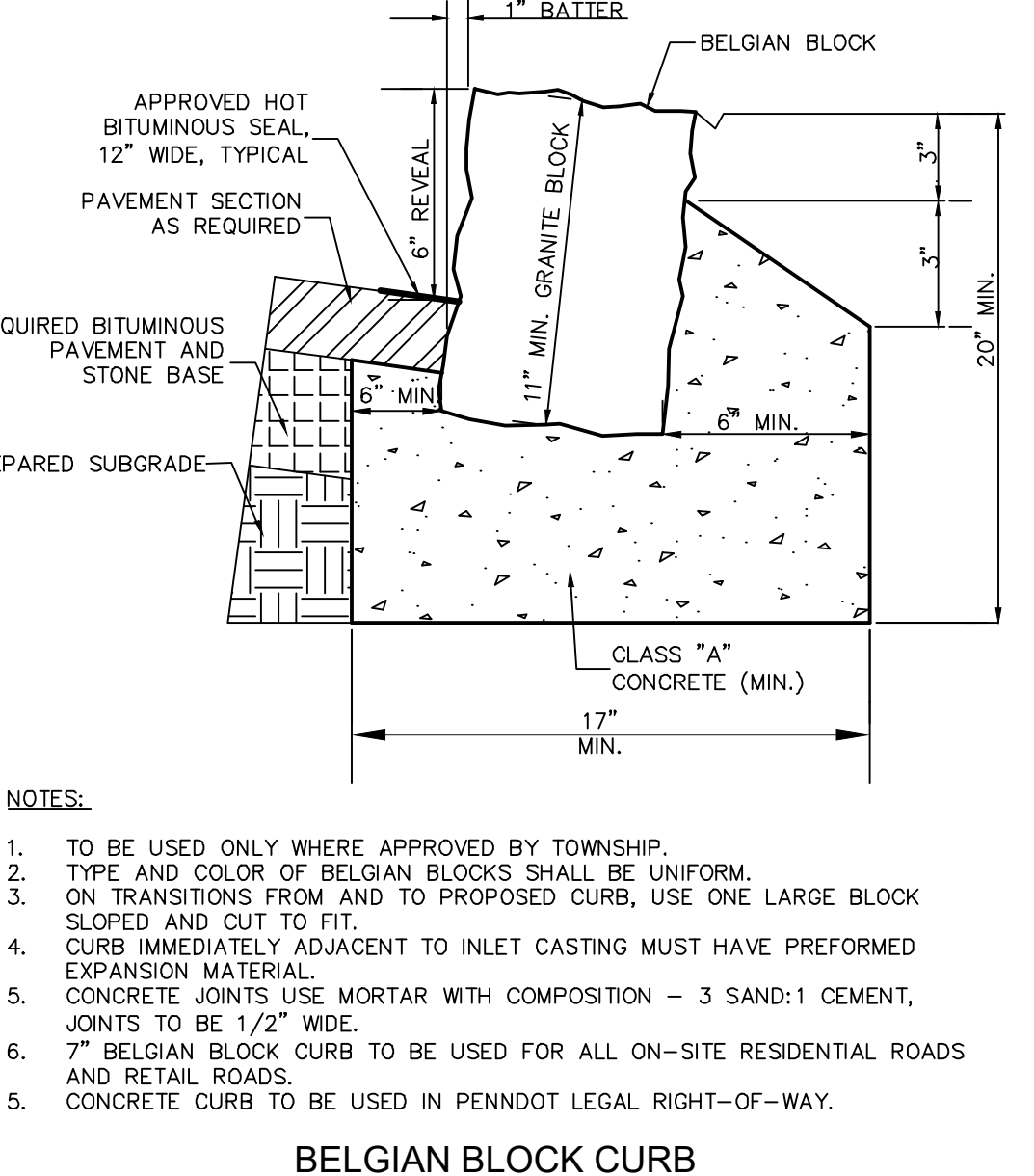
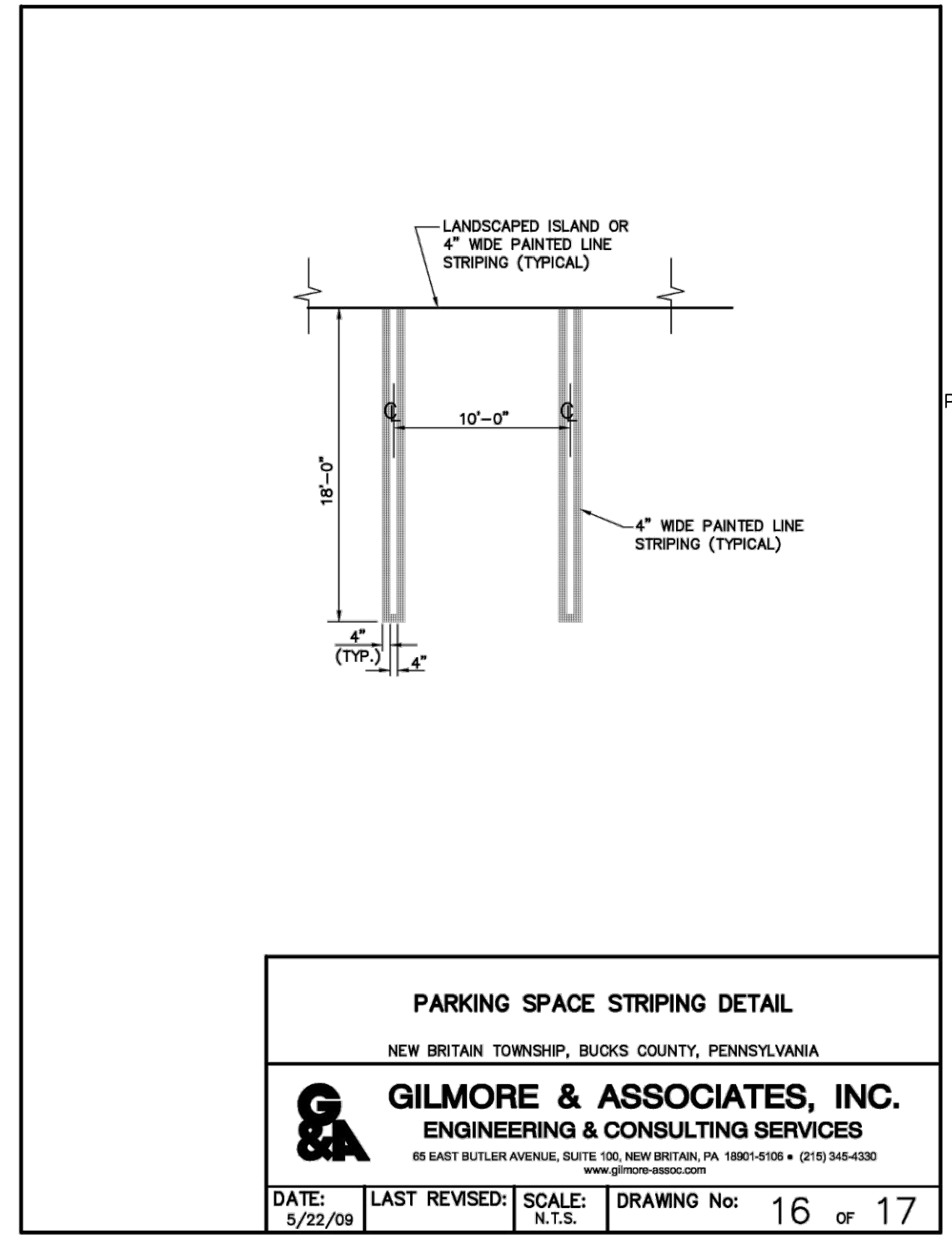
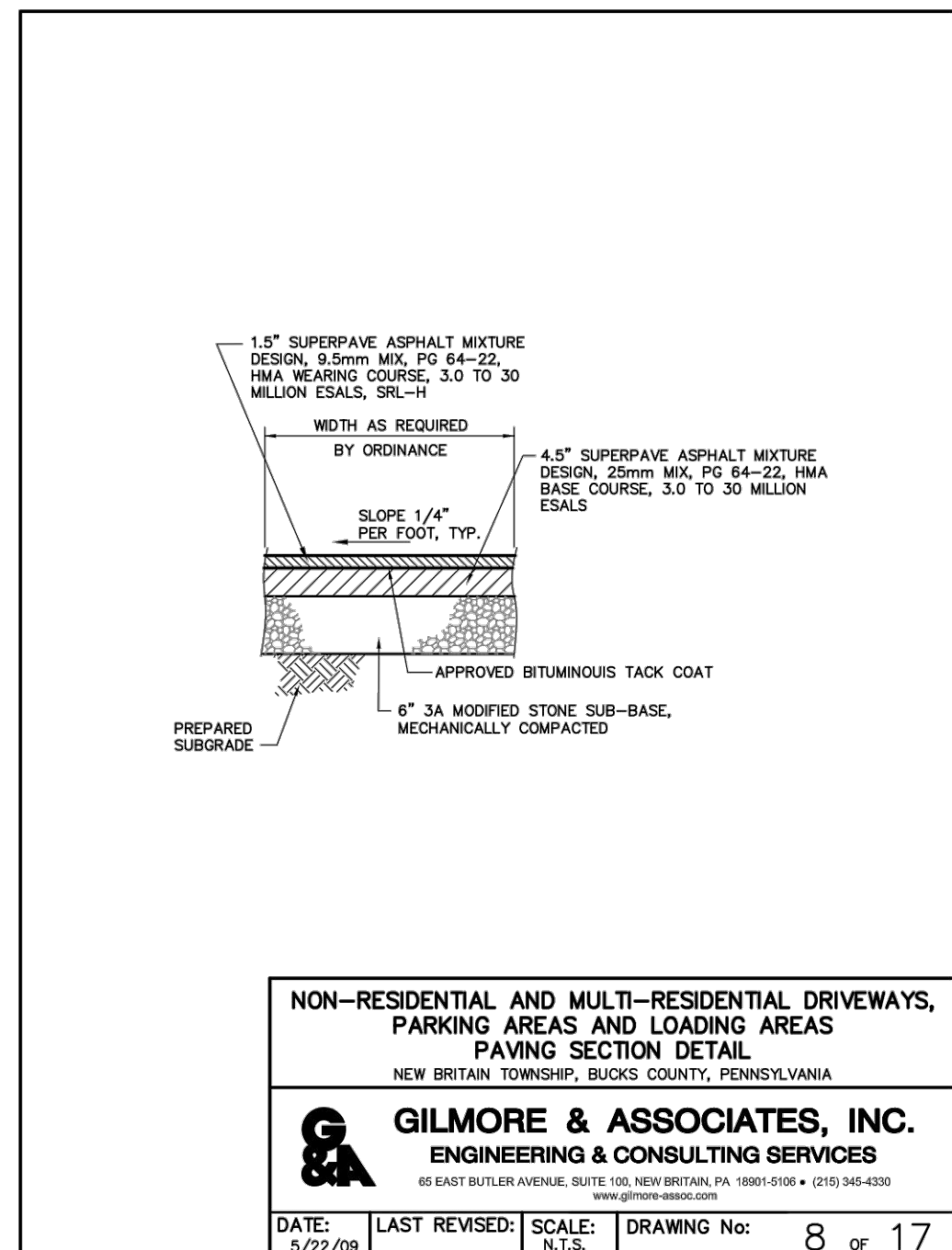
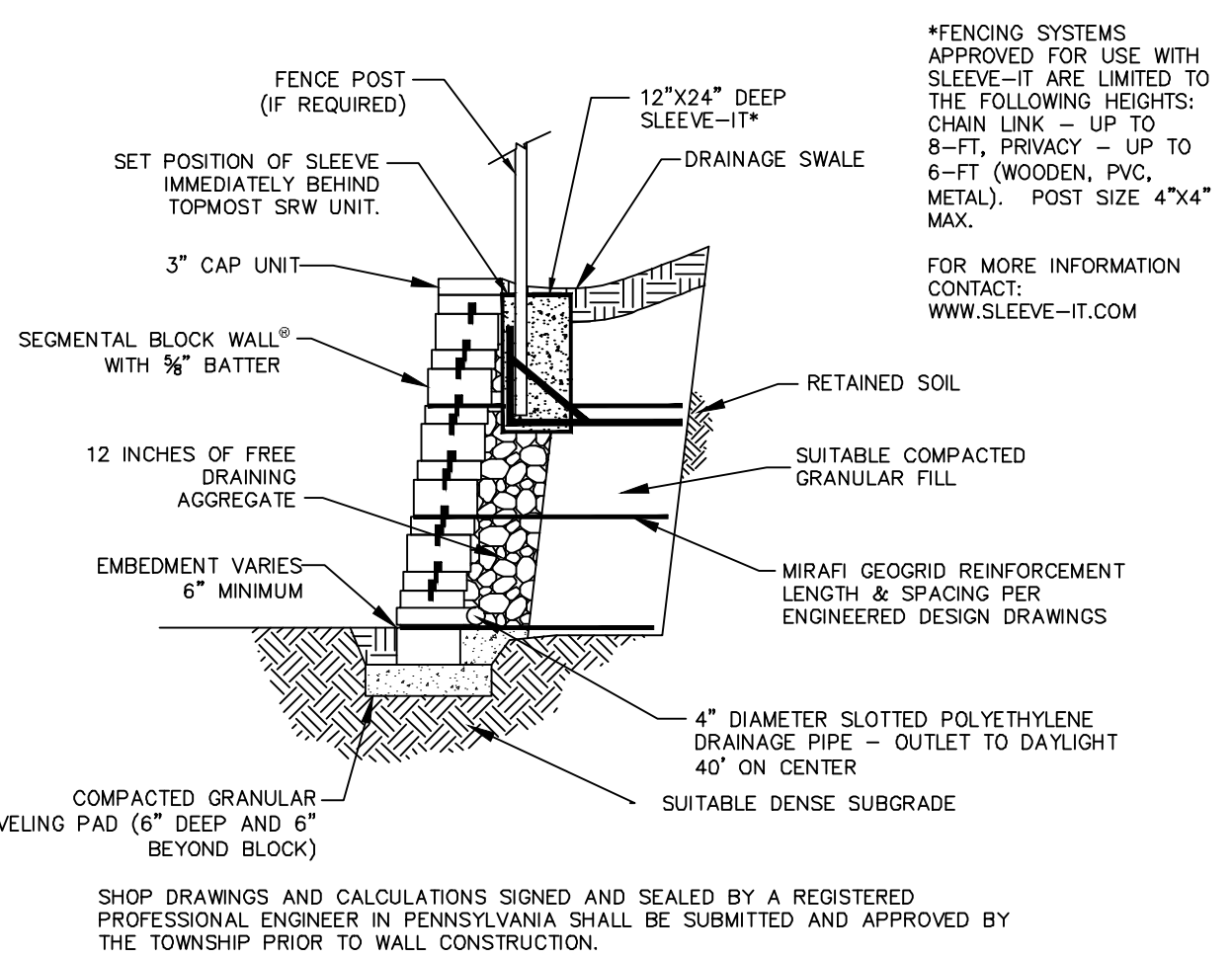
Drawing No. **C1.1**

BUTLER AVENUE
 (A.K.A. DOYLESTOWN AVENUE) (A.K.A. L.R. 178)
 (A.K.A. S.R. 4202)
 (VARIABLE WIDTH R.O.W.)





- NOTES:
- HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE & LOCAL CODES AND REGULATIONS.
 - THE BOTTOM OF R7-8 SIGN SHALL BE MOUNTED APPROXIMATELY 60 INCHES ABOVE THE PARKING LOT OR SIDEWALK SURFACE WHEN SIGN IS PARALLEL TO SIDEWALK AND APPROXIMATELY 72 INCHES ABOVE THE PARKING LOT OR SIDEWALK SURFACE WHEN SIGN IS PERPENDICULAR TO SIDEWALK.
 - THE R7-8 SIGN SHALL BE CENTERED AND MOUNTED AT THE HEAD OF EACH PARKING SPACE.
 - WHERE PARKING SPACES RESERVED FOR PERSONS WITH DISABILITIES ARE DESIGNATED TO ACCOMMODATE WHEEL CHAIR VANS, SIGN R7-8B SHOULD BE MOUNTED BELOW THE R7-8 SIGN.



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CALL BEFORE YOU DIG!!
UTILITY LOCATIONS AS SHOWN ON THIS DRAWING ARE THE RESPONSIBILITY OF THE CONTRACTOR. UTILITY COMPANIES PROVIDE ANY INFORMATION.

Butler Avenue Property
TWP # 26-005-023
New Britain Township, Bucks County, PA

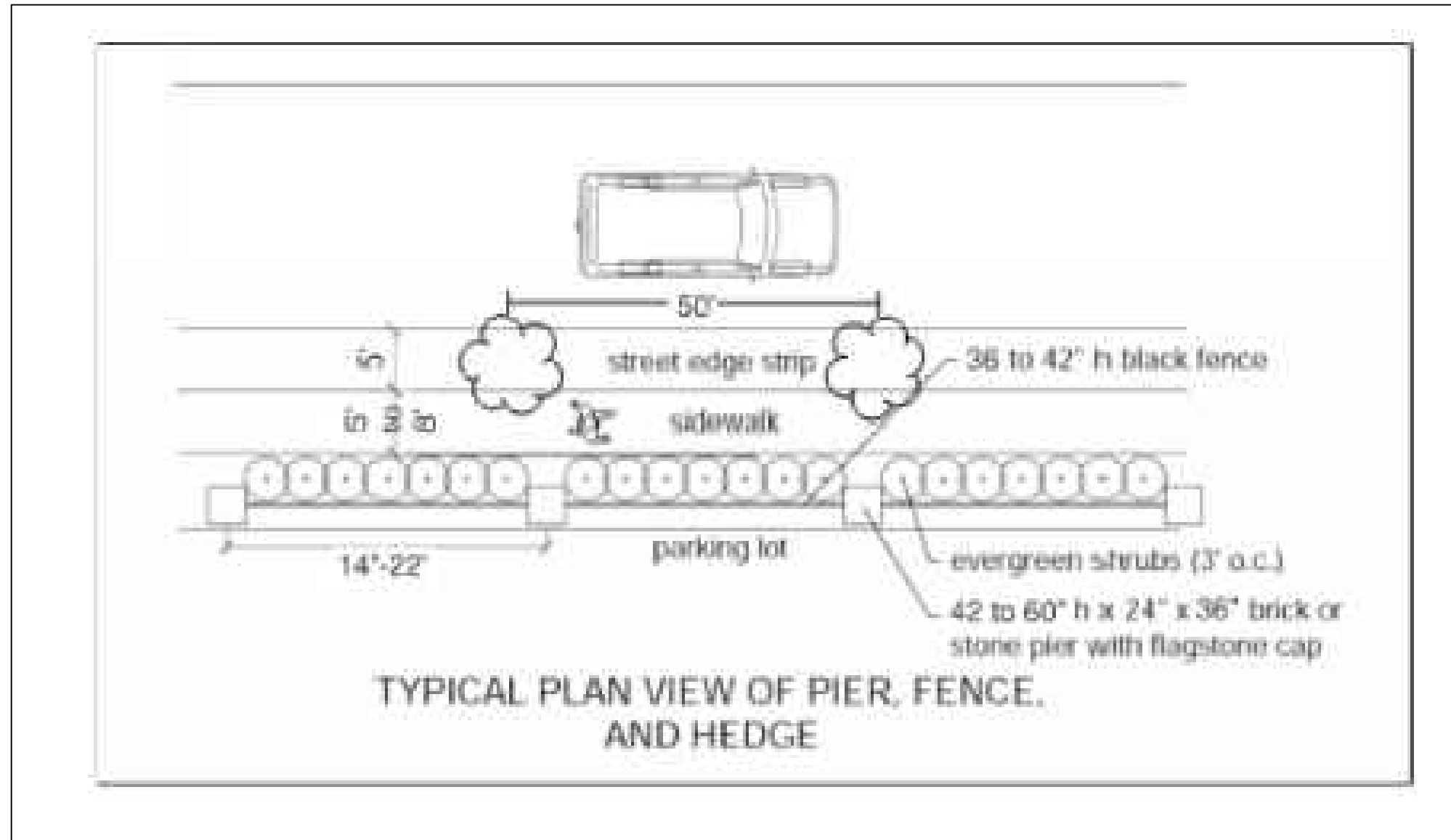
Site Construction Details

Robert T. Cunningham, P.E.
PA PE076424

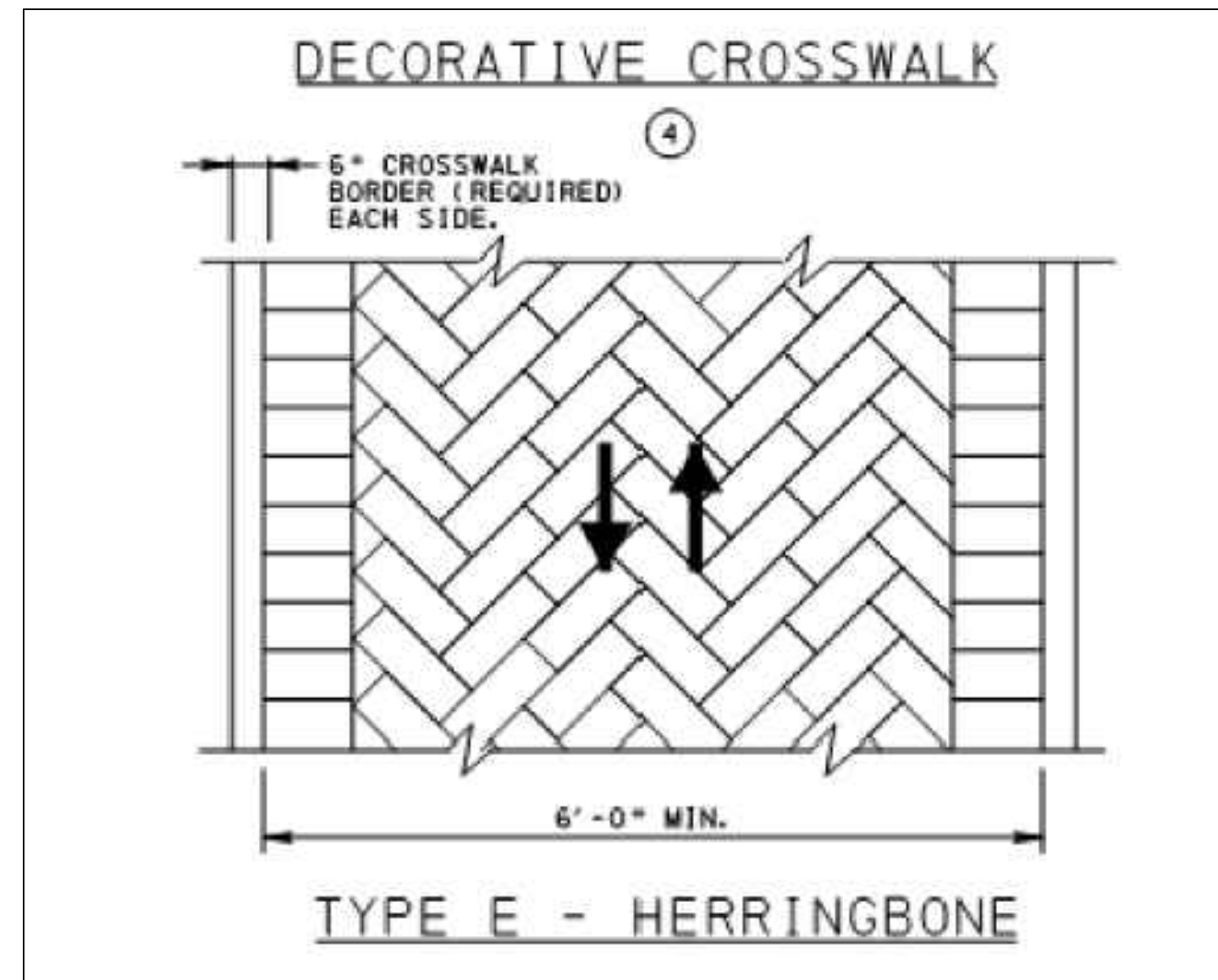
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HCE Job	Date	Scale	Designed	RC	Sheet
1482	11/30/2021	N.T.S.			6 of 25

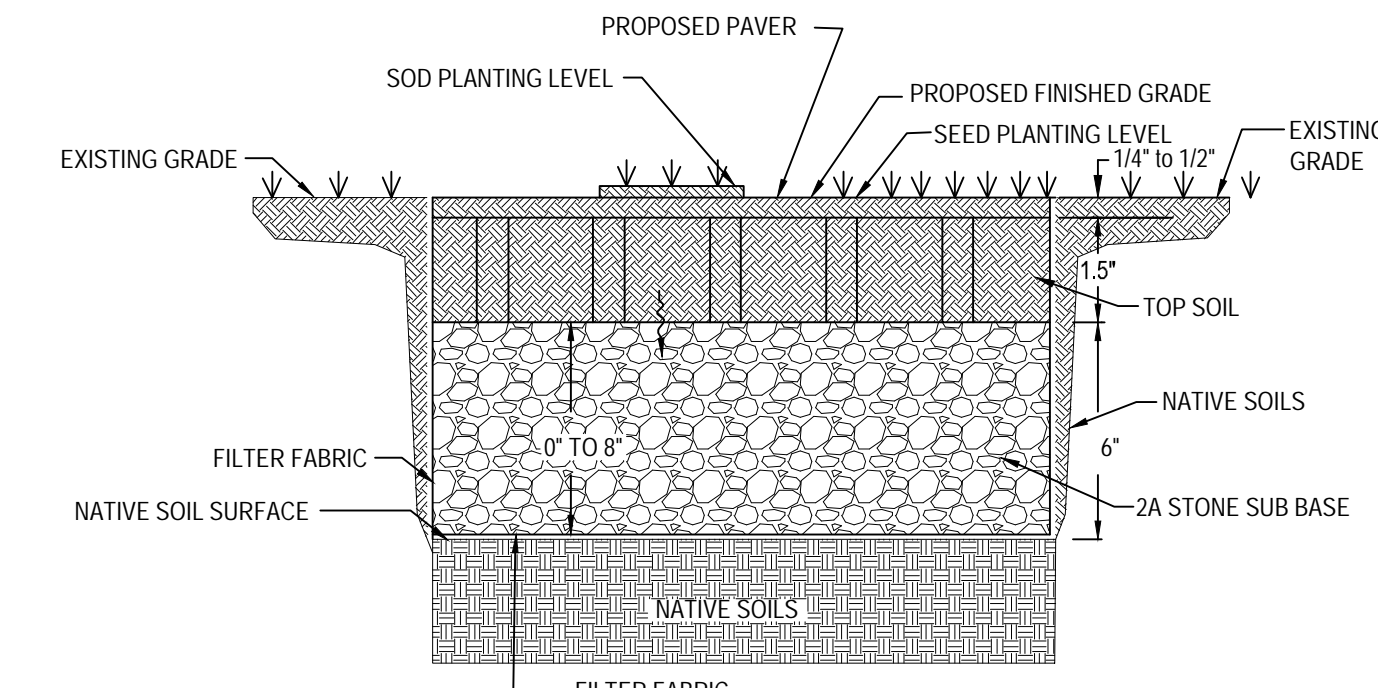
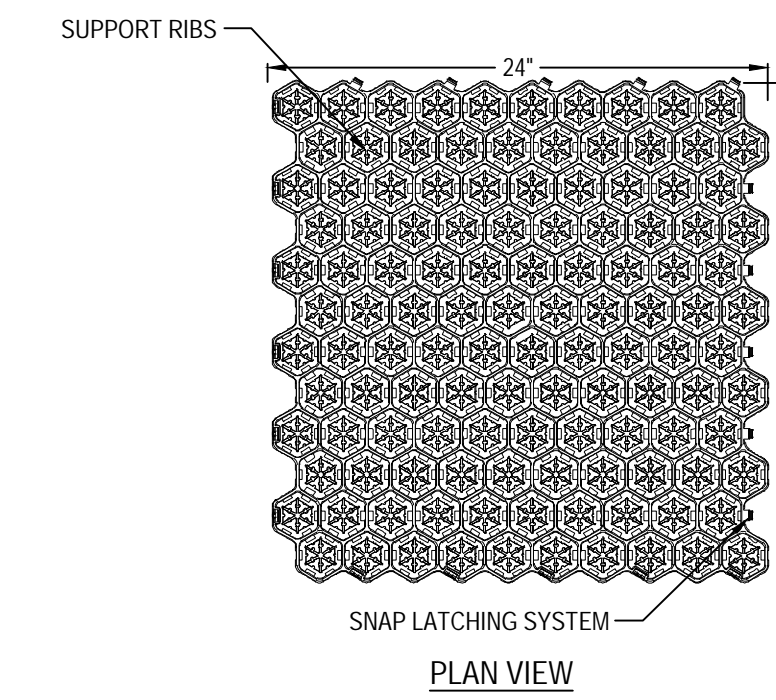
Drawing No. C1.2



TYPICAL PLAN VIEW OF PIER, FENCE, AND HEDGE



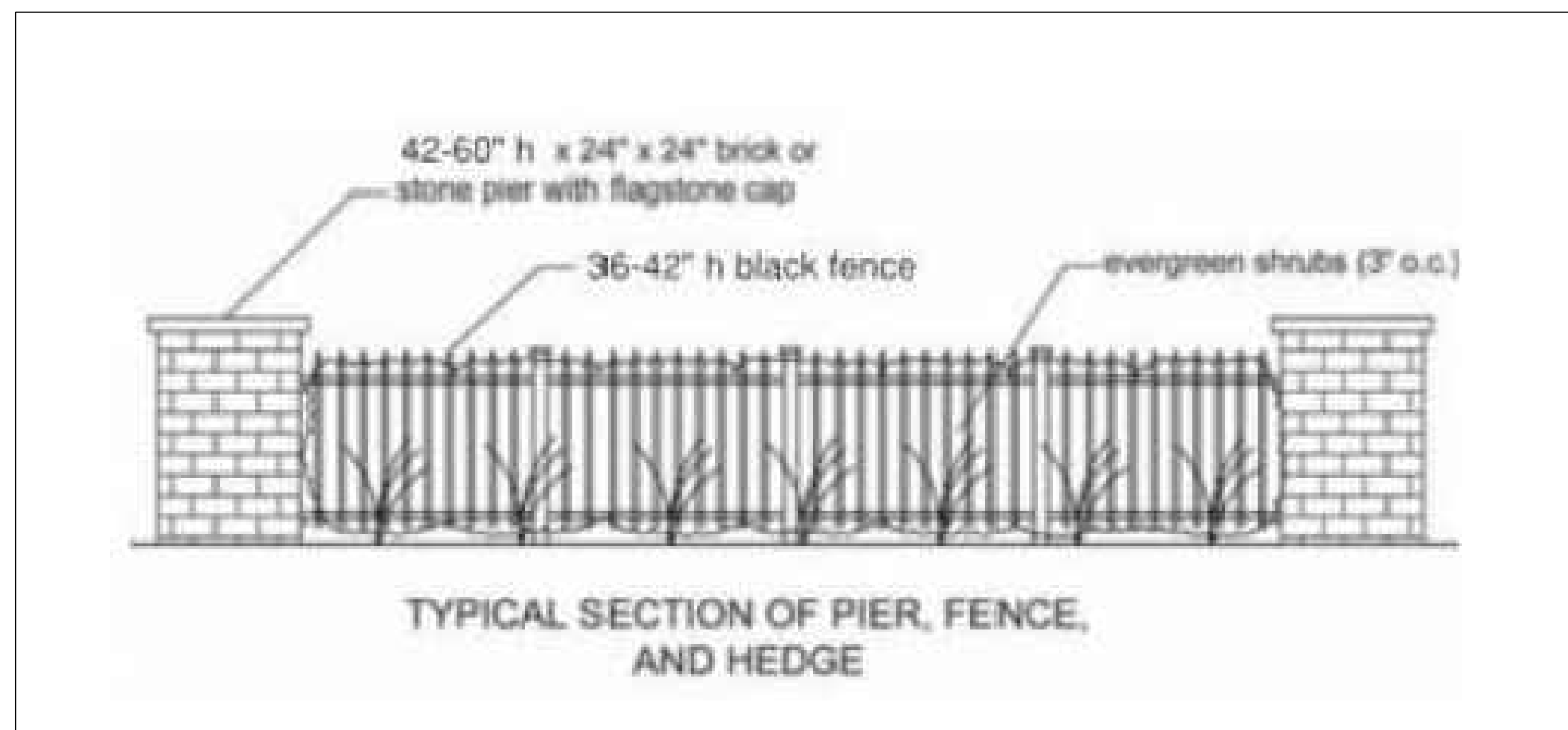
TYPE E - HERRINGBONE



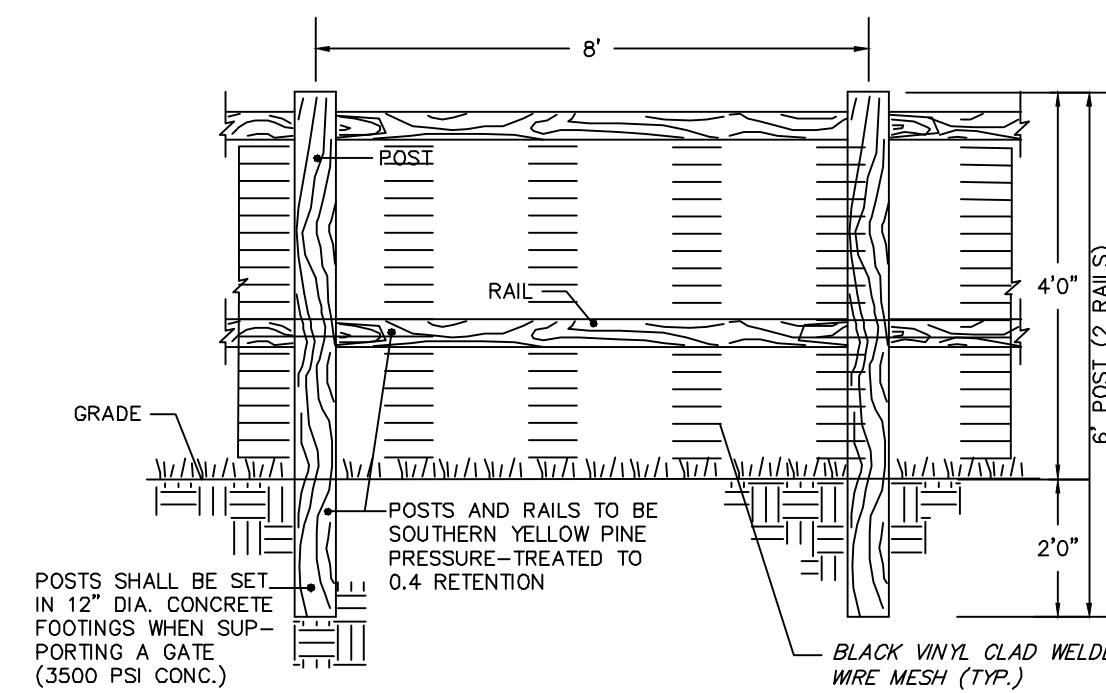
SECTION

THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER SPECIFICATIONS TO THE TOWNSHIP FIRE MARSHAL FOR APPROVAL PRIOR TO INSTALLATION OF THE GRASS PAVER SYSTEM.

GRASS PAVER DETAIL



TYPICAL SECTION OF PIER, FENCE, AND HEDGE



POSTS SHALL BE SET IN 12" DIA. CONCRETE FOOTINGS WHEN SUPPORTING A GATE (3500 PSI CONC.)

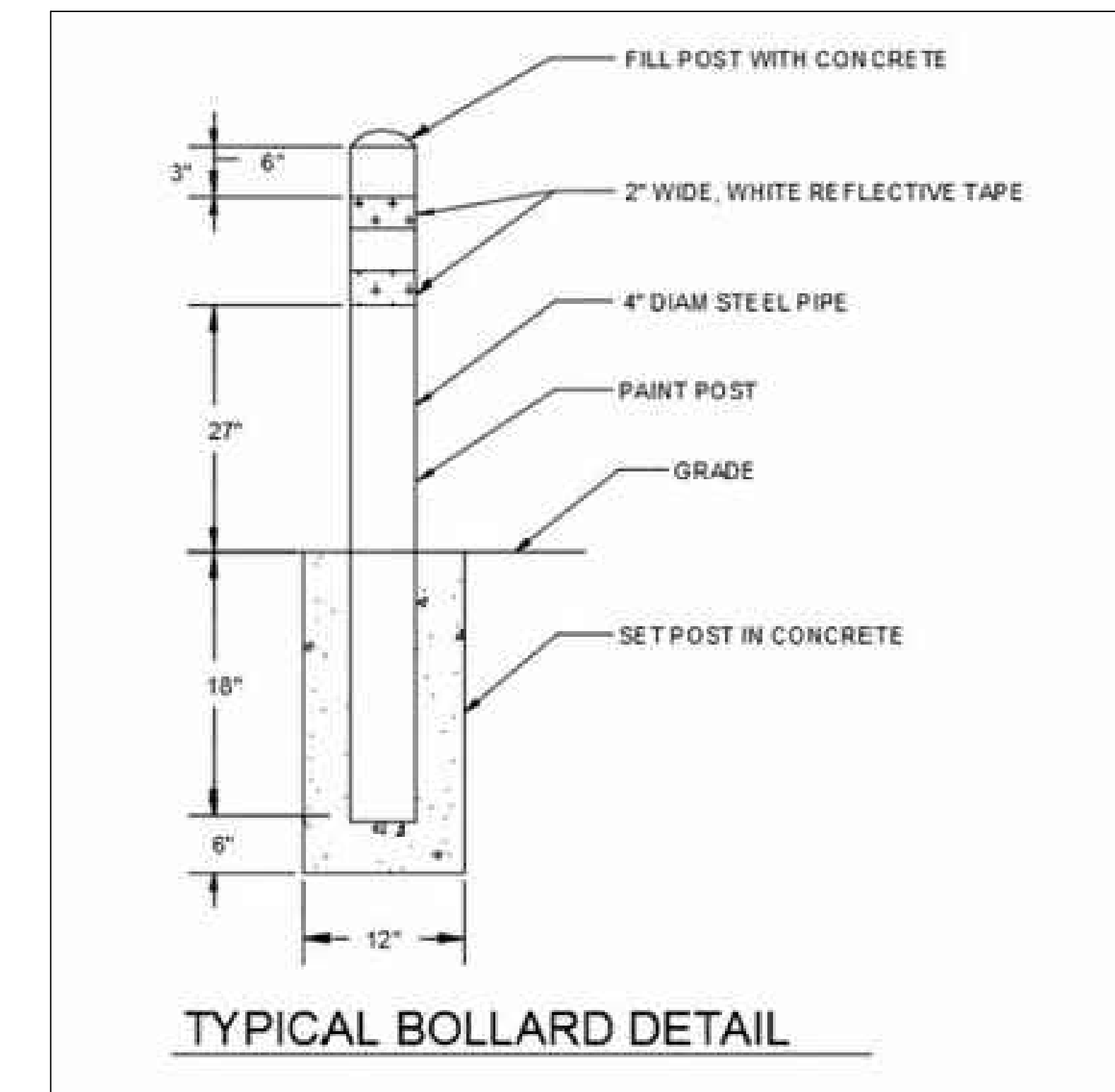
POSTS AND RAILS TO BE SOUTHERN YELLOW PINE PRESSURE-TREATED TO 0.4 RETENTION

BLACK VINYL CLAD WELDED WIRE MESH (TYP.)

- POSTS AND RAILS TO BE SOUTHERN YELLOW PINE WOOD OR SUITABLE EQUIVALENT MATERIAL.
- POSTS AND RAILS TO BE PRESSURE TREATED TO 0.4 RETENTION

HEIGHT	4'0"	HEIGHT OF POST OUT OF GROUND
DEPTH	2'0"	DEPTH SET INTO GROUND
LENGTH	8'	POST SPACING, CENTER TO CENTER
RAILS	3-1/4" sq x 16'	2 EACH, 0.11 WALL THICKNESS
SPACE	7-11/16"	BETWEEN RAILS
STEEL REINFORCEMENT	NO	
POST SIZE	5" SQUARE	0.16 WALL THICKNESS

POST AND RAIL FENCE



TYPICAL BOLLARD DETAIL

REVISIONS	Description	Date
1	REVISED FOR TWP/BCCD COMMENTS	3-17-2022

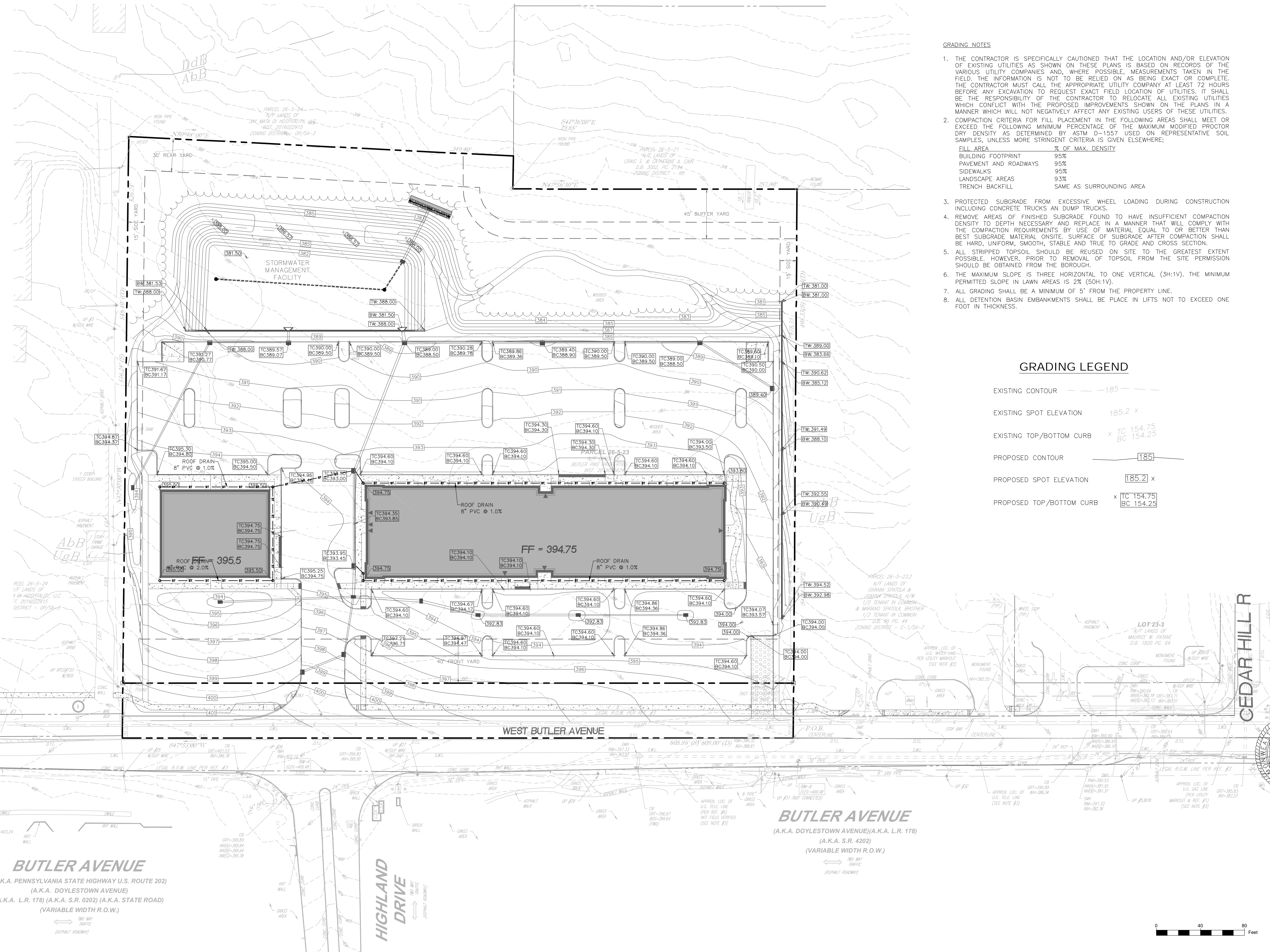
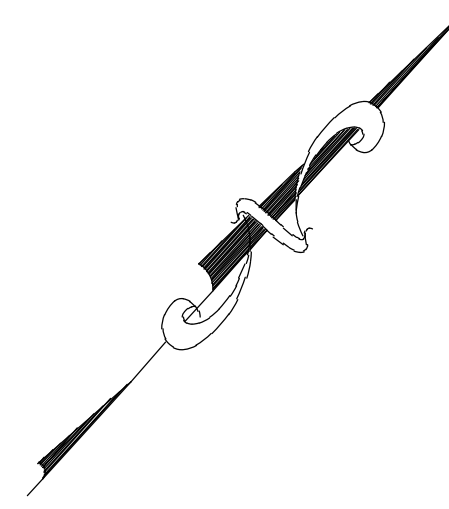
BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

SITE CONSTRUCTION DETAILS

PROFESSIONAL ENGINEER
ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.	1482_C1.0 Record.dwg
HCE Job	1482
Date	11/30/2021
Scale	N.T.S.
Designed	RC
Sheet	7 of 25

Drawing No.
C1.3



GRADING NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
2. COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA IS GIVEN ELSEWHERE:

FILL AREA	% OF MAX. DENSITY
BUILDING FOOTPRINT	95%
PAVEMENT AND ROADWAYS	95%
SIDEWALKS	95%
LANDSCAPE AREAS	93%
TRENCH BACKFILL	SAME AS SURROUNDING AREA
3. PROTECTED SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
4. REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH THE COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE AND TRUE TO GRADE AND CROSS SECTION.
5. ALL STRIPPED TOPSOIL SHOULD BE REUSED ON SITE TO THE GREATEST EXTENT POSSIBLE. HOWEVER, PRIOR TO REMOVAL OF TOPSOIL FROM THE SITE PERMISSION SHOULD BE OBTAINED FROM THE BOROUGH.
6. THE MAXIMUM SLOPE IS THREE HORIZONTAL TO ONE VERTICAL (3H:1V). THE MINIMUM PERMITTED SLOPE IN LAWN AREAS IS 2% (50H:1V).
7. ALL GRADING SHALL BE A MINIMUM OF 5' FROM THE PROPERTY LINE.
8. ALL DETENTION BASIN EMBANKMENTS SHALL BE PLACED IN LIFTS NOT TO EXCEED ONE FOOT IN THICKNESS.

GRADING LEGEND

- EXISTING CONTOUR --- 185 ---
- EXISTING SPOT ELEVATION 185.2 x
- EXISTING TOP/BOTTOM CURB x TC 154.75
BC 154.25
- PROPOSED CONTOUR --- 185 ---
- PROPOSED SPOT ELEVATION 185.2 x
- PROPOSED TOP/BOTTOM CURB x TC 154.75
BC 154.25

Holmes Cunningham LLC
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REVISIONS	Description	Date
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BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

GRADING PLAN

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

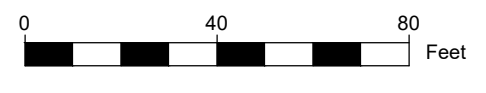
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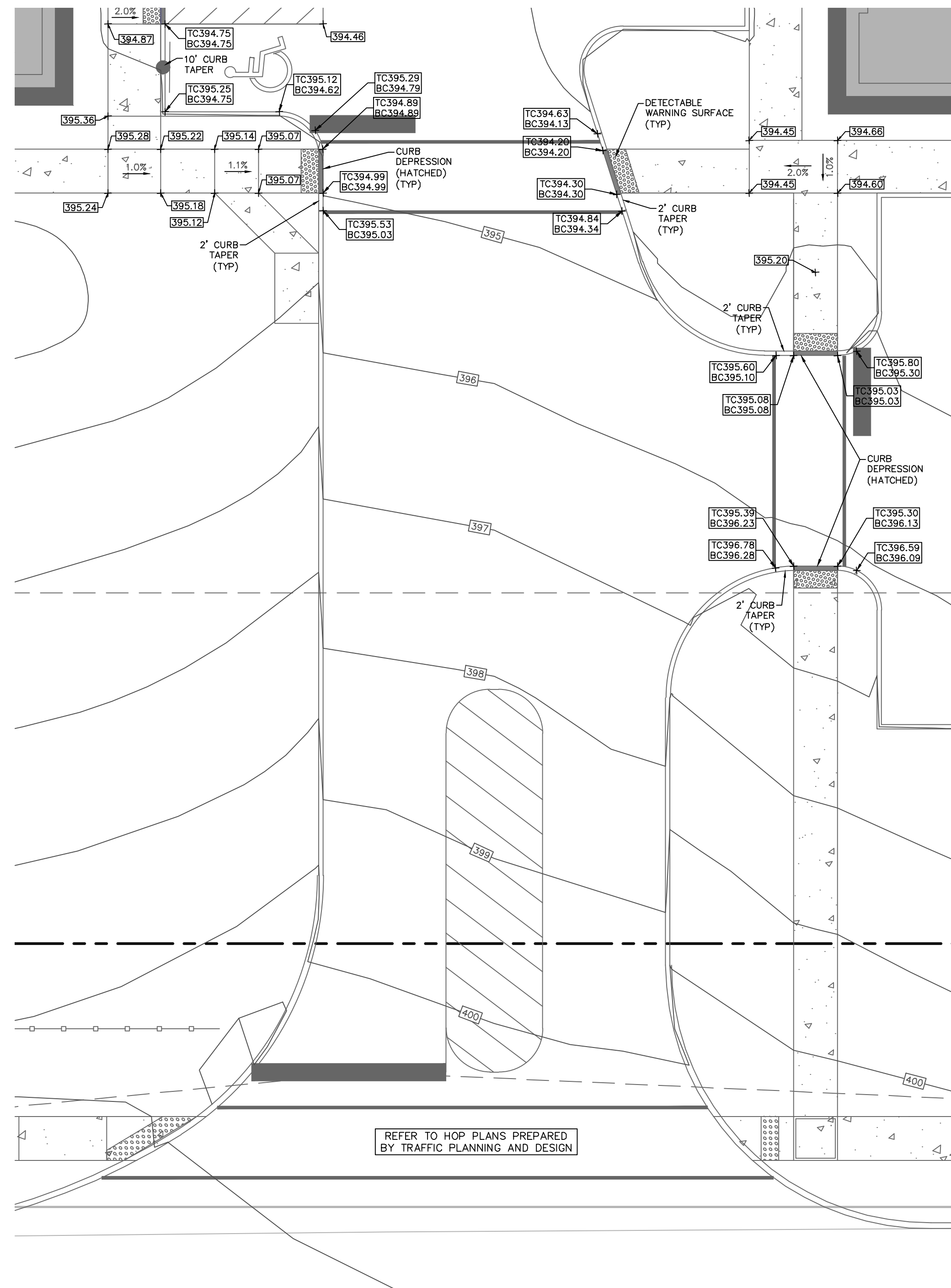
HCE Job **1482**
Date **11/30/2021**
Scale **1" = 40'**
Designed **RC**
Sheet **8 of 25**

Drawing No.
C2.0

BUTLER AVENUE
(A.K.A. PENNSYLVANIA STATE HIGHWAY U.S. ROUTE 202)
(A.K.A. DOYLESTOWN AVENUE)
(A.K.A. L.R. 178) (A.K.A. S.R. 0202) (A.K.A. STATE ROAD)
(VARIABLE WIDTH R.O.W.)

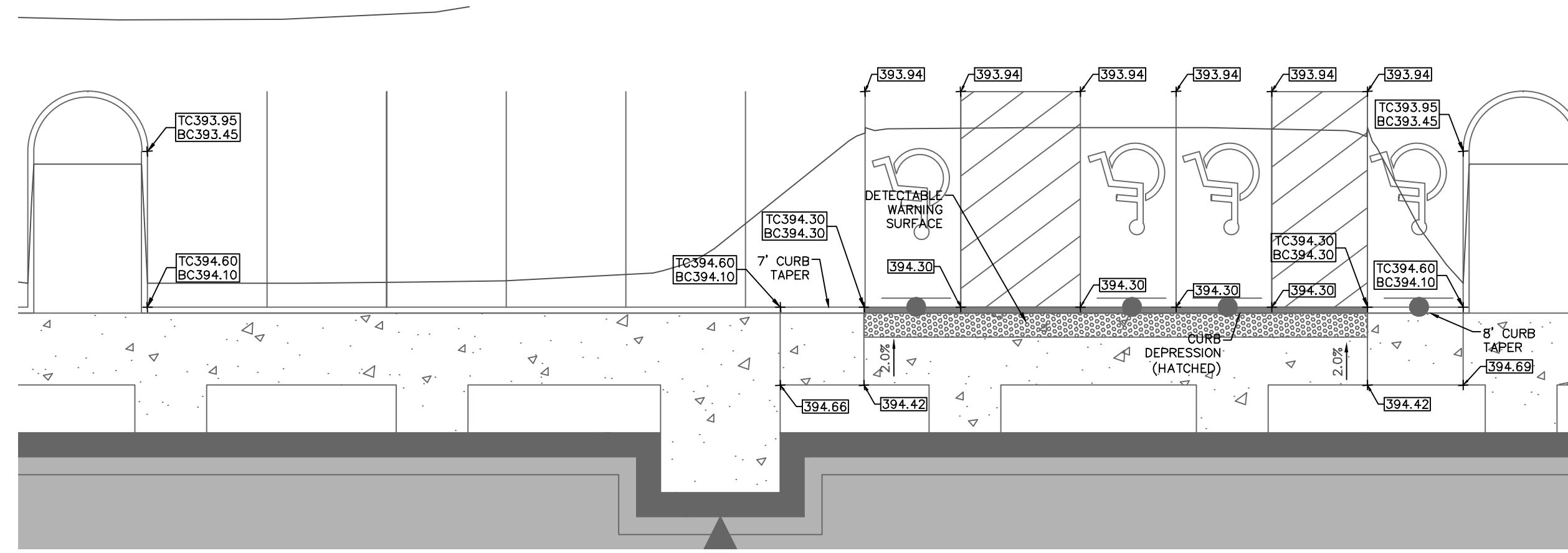
BUTLER AVENUE
(A.K.A. DOYLESTOWN AVENUE) (A.K.A. L.R. 178)
(A.K.A. S.R. 4202)
(VARIABLE WIDTH R.O.W.)



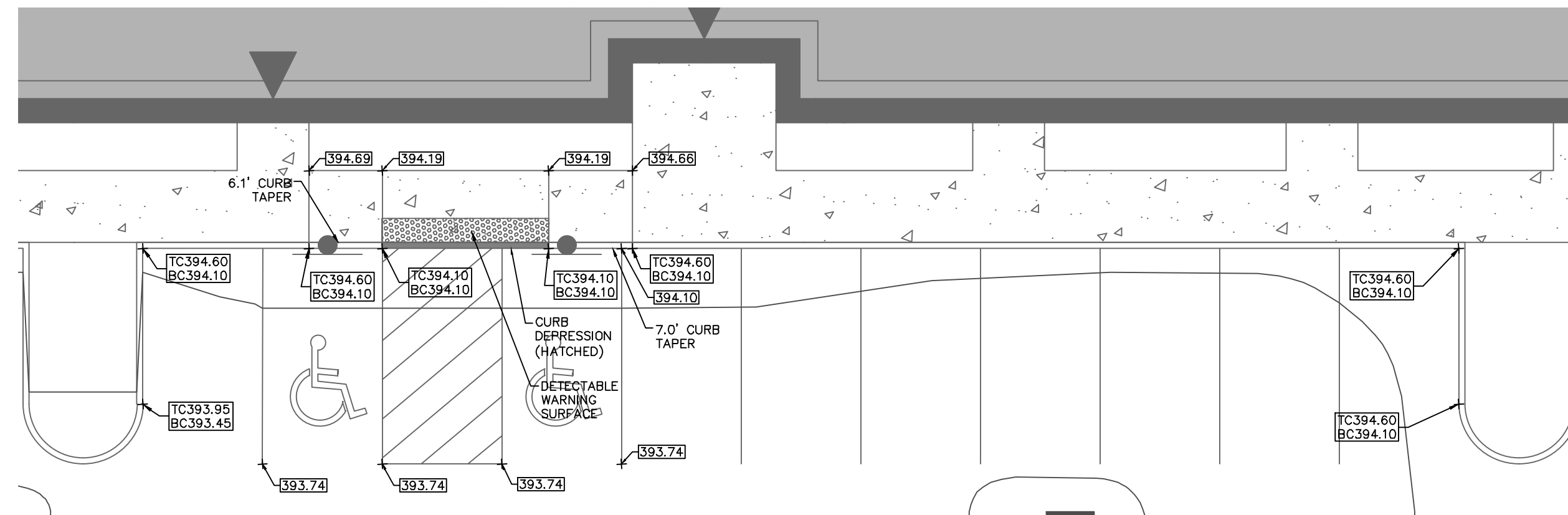


SITE CROSSWALKS

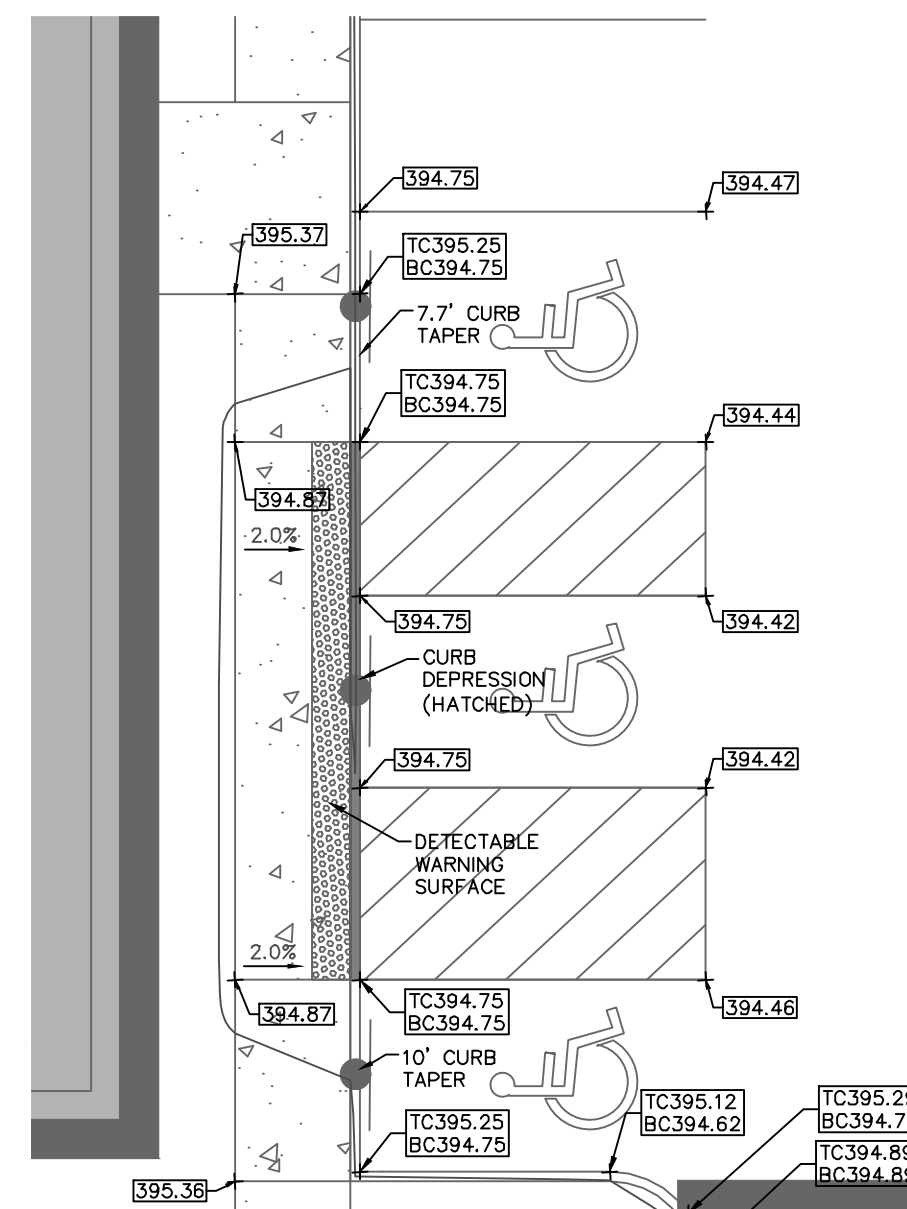
S.W.L.



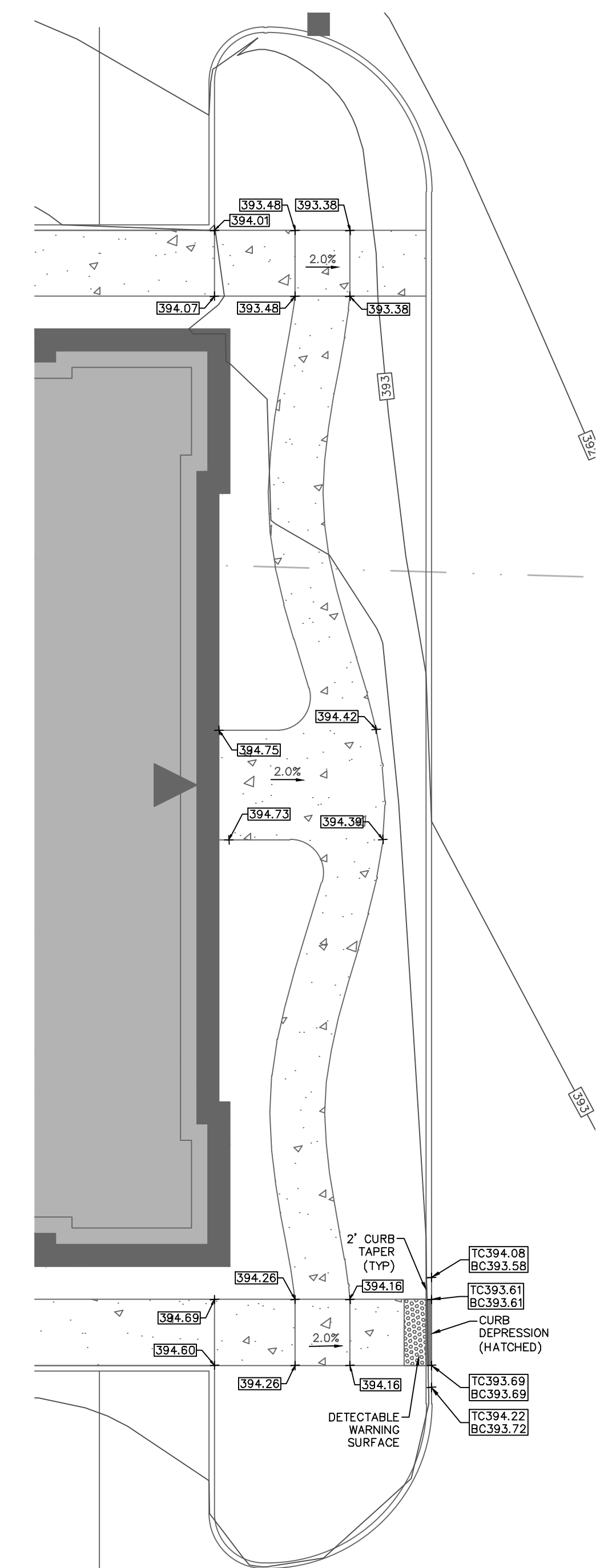
BUILDING A - ADA ACCESSIBLE ROUTE (NW - ENTRANCE)



BUILDING A - ADA ACCESSIBLE ROUTE (SE - ENTRANCE)



BUILDING B - ADA ACCESSIBLE ROUTE (NE - ENTRANCE)



BUILDING A - ADA ACCESSIBLE ROUTE (NE - ENTRANCE)

REVISIONS	Description	Date
1	REVISED FOR TWP/BCCD COMMENTS	3-17-2022

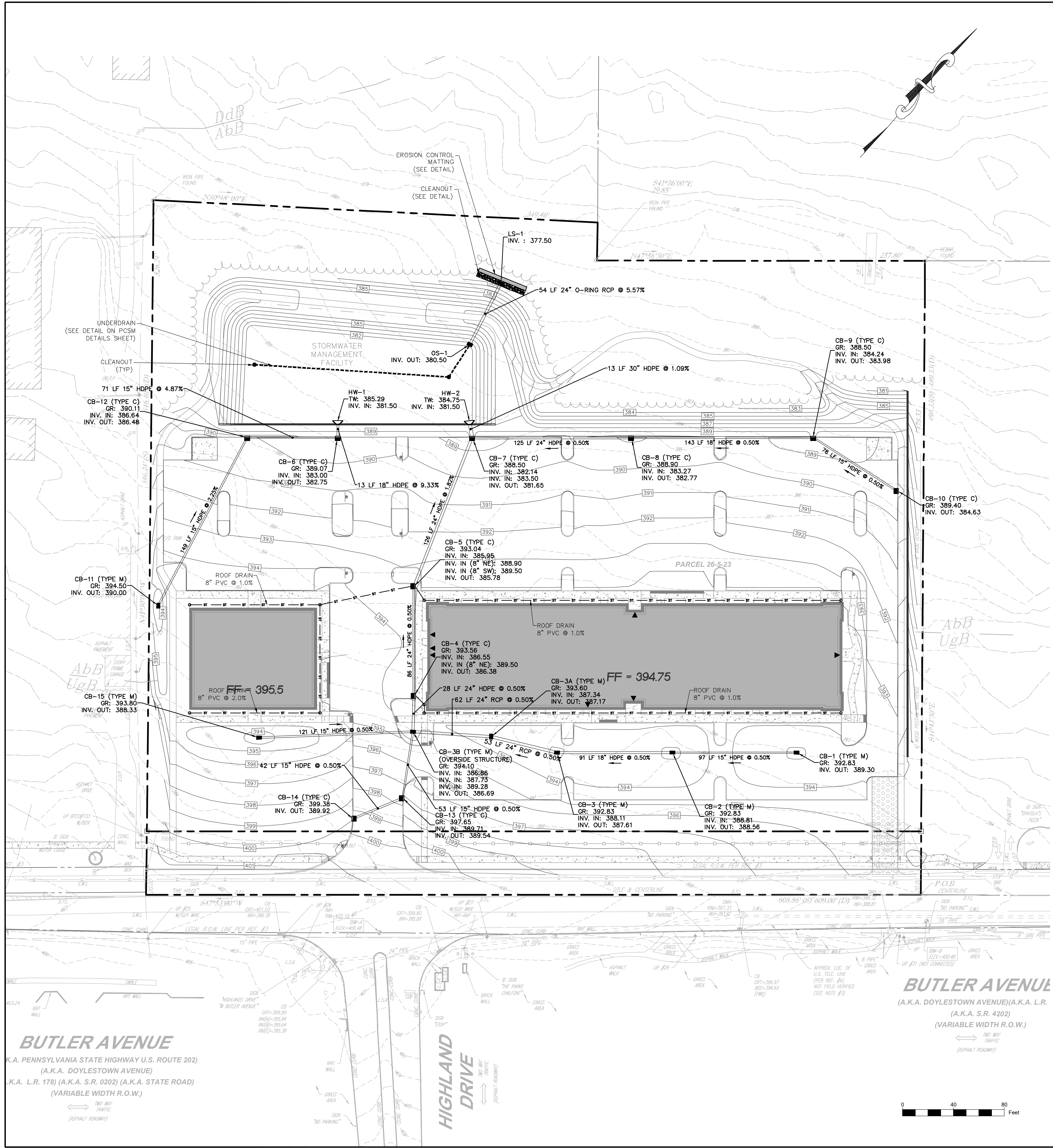
CALL BEFORE YOU DIG!!
 STOP & CALL
 1-800-942-1776
 Call System, Inc.

BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA
DETAILED GRADING PLAN

PROFESSIONAL
 ROBERT T. CUNNINGHAM
 PA 06076424
ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

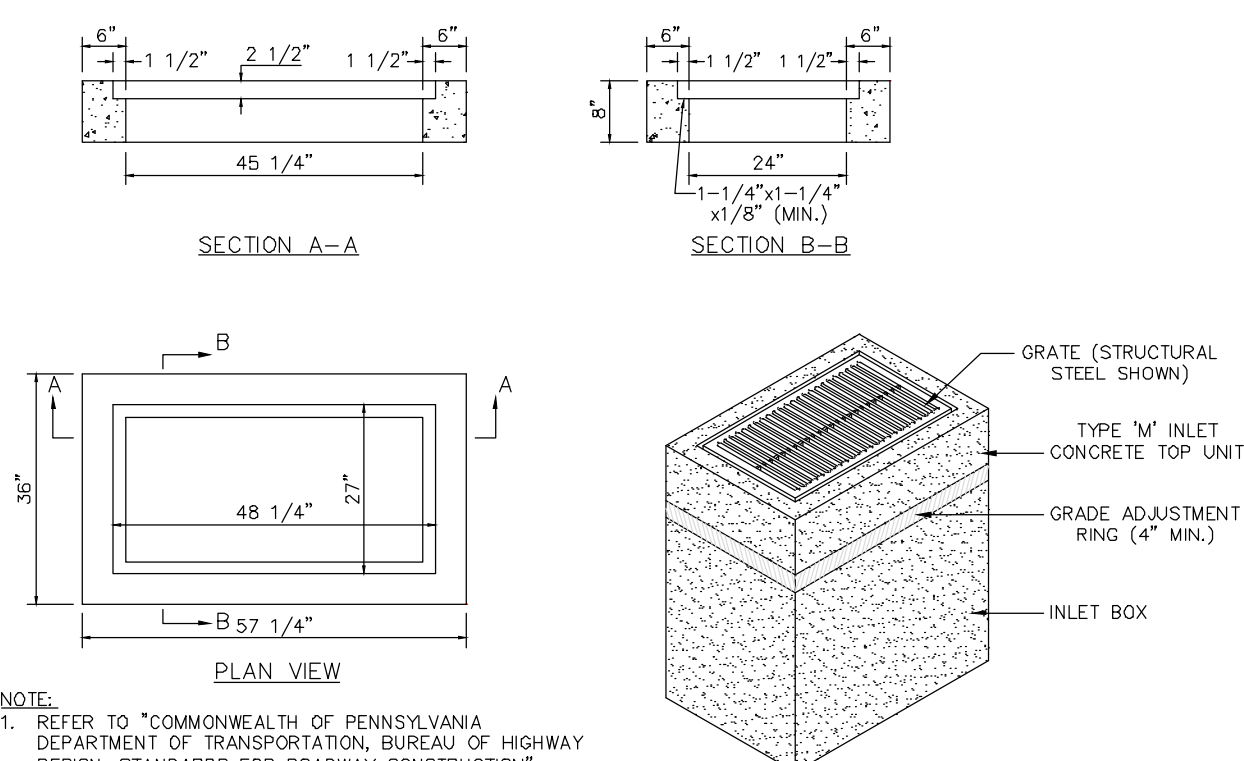
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HCE Job	1482
Date	11/30/2021
Scale	1" = 10'
Designed	RC
Sheet	9 of 25

Drawing No.
C2.1

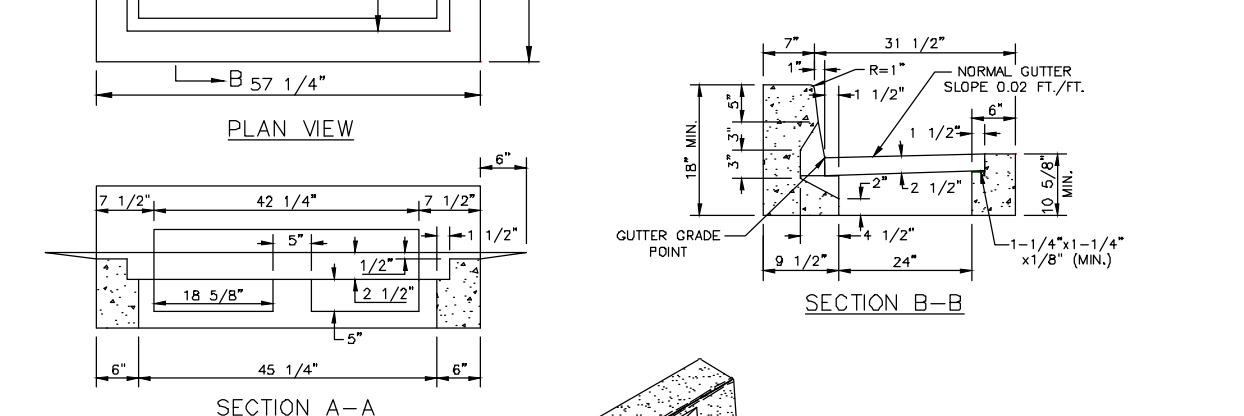
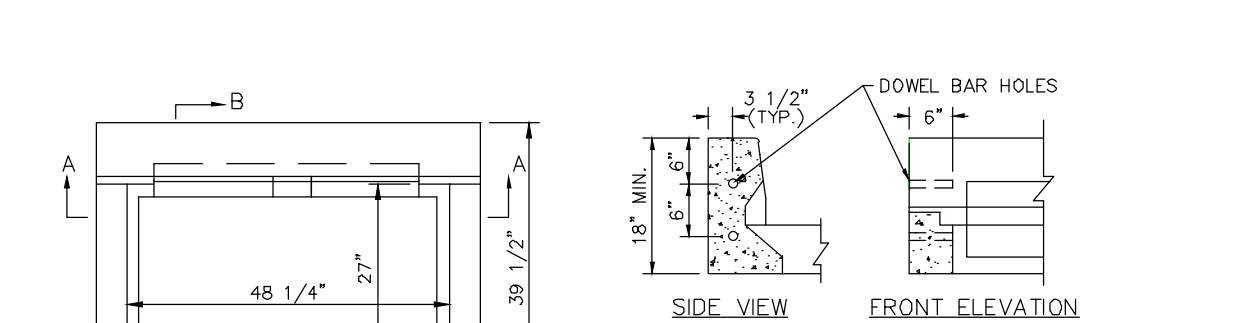


DRAINAGE NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING LOCATION AND/OR ELEVATION OF FEATURES AS SHOWN ON THESE PLANS IS BASED ON A SURVEY. THE INFORMATION IS NOT TO BE RELED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL STORM SEWERS AND STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW BRITAIN TOWNSHIP AND PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PENNDOT) STANDARDS.
- THE CONTRACTOR SHALL REVIEW THE STORM DRAINAGE CONNECTIONS TO INLETS, MANHOLES, ETC. AND PROVIDE THE APPROPRIATE BOX SIZE, MANHOLE SIZE, ETC. AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
- ALL CATCH BASINS AND INLETS ARE PROPOSED TO BE 2 FEET IN WIDTH AND 4 FEET IN LENGTH AS PER THE PLAN DETAILS UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE TOWNSHIP FOR BASIN PIPES, CONNECTIONS, OUTLET STRUCTURES, CATCH BASINS, MANHOLES AND OTHER STORM STRUCTURES.
- DOWNSPOUTS AND SLUMP PUMPS SHALL NOT DISCHARGE STORMWATER DIRECTLY ONTO A SIDEWALK.
- ALL STORMWATER AND DRAINAGE FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED, OR MODIFIED WITHOUT PRIOR APPROVAL FROM NEW BRITAIN TOWNSHIP.
- NEW BRITAIN TOWNSHIP SHALL HAVE THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT OR DRAINAGE FACILITY.
- THE STORMWATER MANAGEMENT BASINS WILL BE OWNED AND MAINTAINED BY THE OWNER.
- ALL STORM PIPES LOCATED OUTSIDE OF PAVED AREAS SHALL HAVE A MINIMUM OF TWO (2) FEET OF COVER.



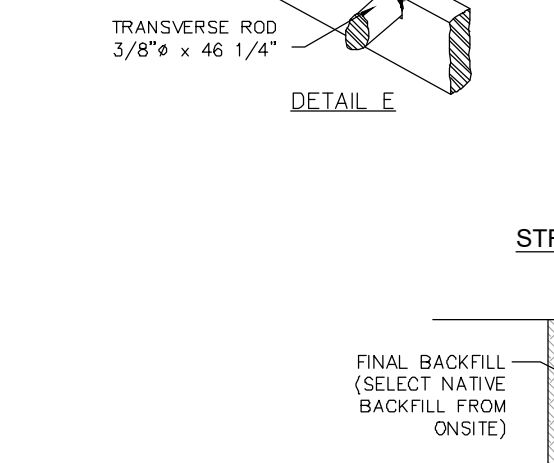
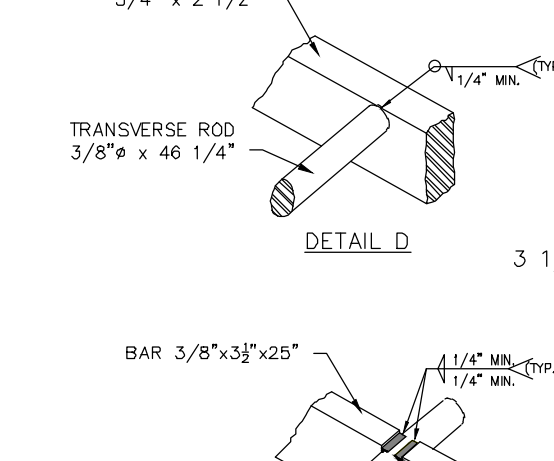
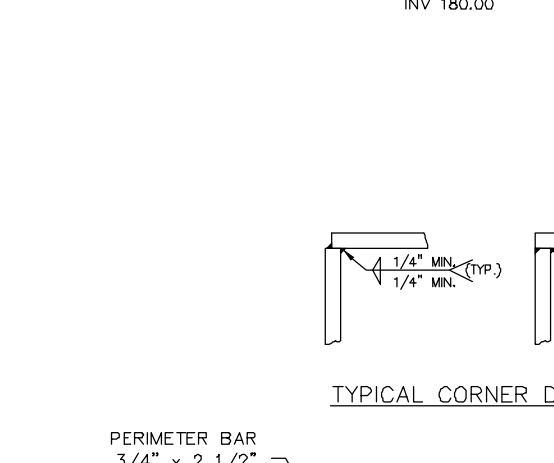
NOTE:
 1. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-34, SHEETS 1 and 2 of 8, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.
 2. ALL INLET TOPS SHALL BE THE ENVIRONMENT TYPE.
 3. ALL INLETS IN AREAS TO BE PAVED ARE TO BE BACKFILLED WITH 2A MATERIAL.



NOTE:
 1. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-34, SHEETS 1 and 2 of 8, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.
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DRAINAGE LEGEND

- EXISTING STORM PIPE
- EXISTING INLET
- EXISTING MANHOLE
- PROPOSED STORM PIPE
- PROPOSED YARD PIPE
- PROPOSED CURB INLET
- PROPOSED MANHOLE



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAMETER	TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

- NOTES:**
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING: SUITABLE MATERIAL SHALL BE CLASS II, OR III, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
 - INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS II, OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 - MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE, AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

Holmes Cunningham LLC
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BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

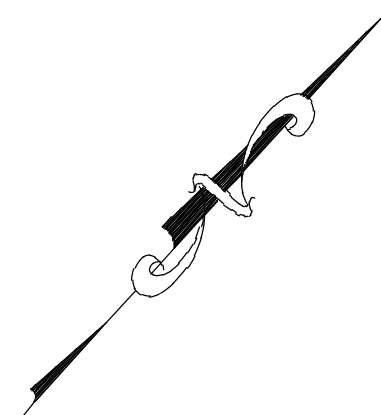
DRAINAGE PLAN

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No. 1482.C2.2 DRAINAGE.DWG

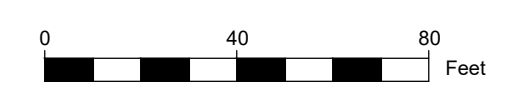
HCE Job 1482
 Date 11/30/2021
 Scale 1" = 40'
 Designed RC
 Sheet 10 of 25

Drawing No. **C2.2**



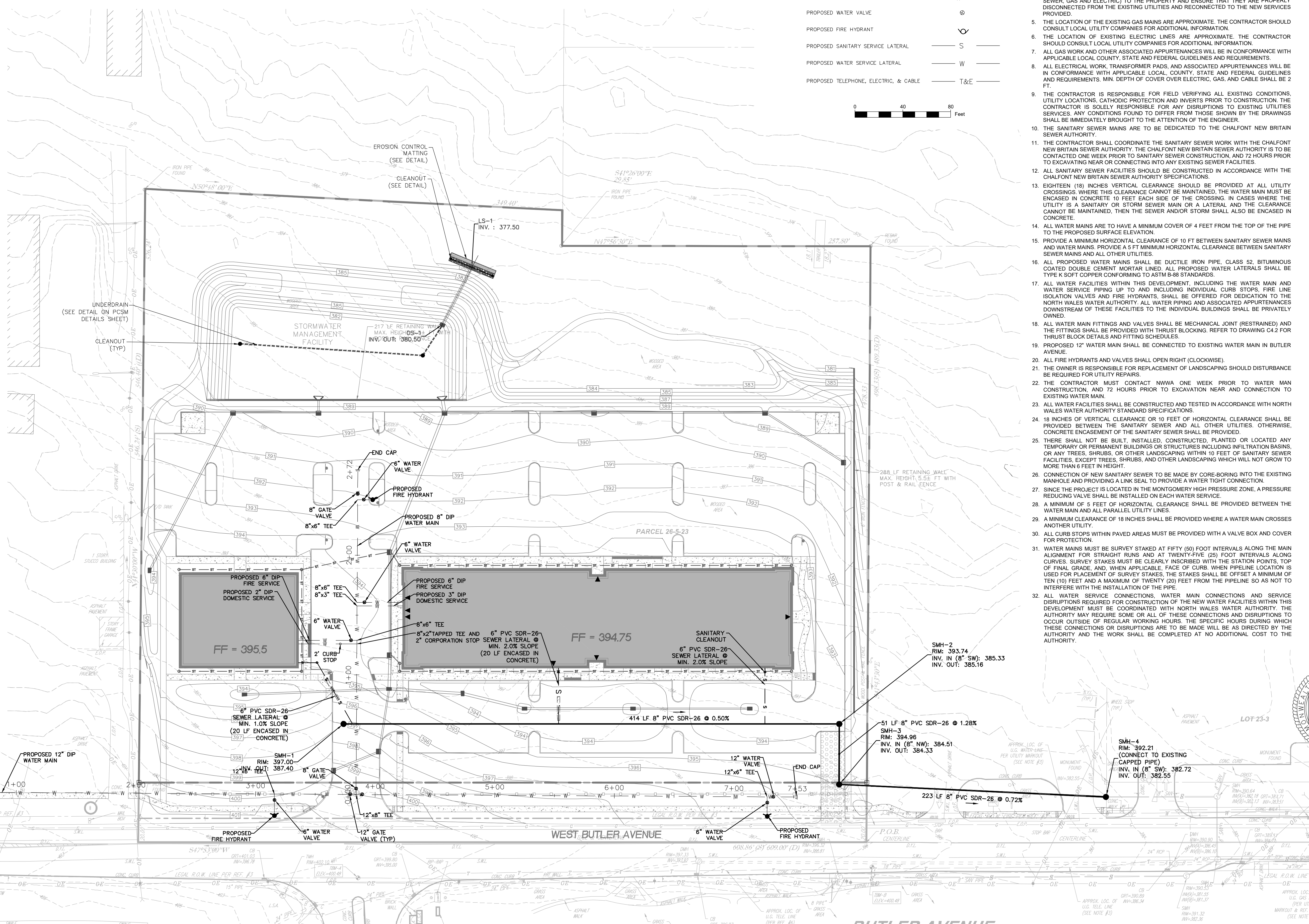
UTILITY LEGEND

EXISTING SANITARY SEWER MAIN	
EXISTING SANITARY SEWER MANHOLE	
EXISTING WATER MAIN AND VALVE	
EXISTING FIRE HYDRANT	
PROPOSED SANITARY SEWER MAIN	
PROPOSED SANITARY SEWER MANHOLE	
PROPOSED WATER MAIN	
PROPOSED WATER VALVE	
PROPOSED FIRE HYDRANT	
PROPOSED SANITARY SERVICE LATERAL	
PROPOSED WATER SERVICE LATERAL	
PROPOSED TELEPHONE, ELECTRIC, & CABLE	



UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER, LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- ANY EXISTING FEATURES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE OWNER AT NO COST TO THE TOWNSHIP.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING THE EXISTING UTILITY SERVICE (WATER, SEWER, GAS AND ELECTRIC) TO THE PROPERTY AND ENSURE THAT THEY ARE PROPERLY DISCONNECTED FROM THE EXISTING UTILITIES AND RECONNECTED TO THE NEW SERVICES PROVIDED.
- THE LOCATION OF THE EXISTING GAS MAINS ARE APPROXIMATE. THE CONTRACTOR SHOULD CONSULT LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
- THE LOCATION OF EXISTING ELECTRIC LINES ARE APPROXIMATE. THE CONTRACTOR SHOULD CONSULT LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
- ALL GAS WORK AND OTHER ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
- ALL ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS. MIN. DEPTH OF COVER OVER ELECTRIC, GAS, AND CABLE SHALL BE 2 FT.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS. UTILITY LOCATIONS, CATHODIC PROTECTION AND INVERTS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DISRUPTIONS TO EXISTING UTILITIES SERVICES. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE SANITARY SEWER MAINS ARE TO BE DEDICATED TO THE CHALFONT NEW BRITAIN SEWER AUTHORITY.
- THE CONTRACTOR SHALL COORDINATE THE SANITARY SEWER WORK WITH THE CHALFONT NEW BRITAIN SEWER AUTHORITY. THE CHALFONT NEW BRITAIN SEWER AUTHORITY IS TO BE CONTACTED ONE WEEK PRIOR TO SANITARY SEWER CONSTRUCTION AND 72 HOURS PRIOR TO EXCAVATING NEAR OR CONNECTING INTO ANY EXISTING SEWER FACILITIES.
- ALL SANITARY SEWER FACILITIES SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE CHALFONT NEW BRITAIN SEWER AUTHORITY SPECIFICATIONS.
- EIGHTEEN (18) INCHES VERTICAL CLEARANCE SHOULD BE PROVIDED AT ALL UTILITY CROSSINGS, WHERE THIS CLEARANCE CANNOT BE MAINTAINED, THE WATER MAIN MUST BE ENCASED IN CONCRETE 10 FEET EACH SIDE OF THE CROSSING. IN CASES WHERE THE UTILITY IS A SANITARY OR STORM SEWER MAIN OR A LATERAL AND THE CLEARANCE CANNOT BE MAINTAINED, THEN THE SEWER AND/OR STORM SHALL ALSO BE ENCASED IN CONCRETE.
- ALL WATER MAINS ARE TO HAVE A MINIMUM COVER OF 4 FEET FROM THE TOP OF THE PIPE TO THE PROPOSED SURFACE ELEVATION.
- PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 10 FT BETWEEN SANITARY SEWER MAINS AND WATER MAINS. PROVIDE A 5 FT MINIMUM HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER MAINS AND ALL OTHER UTILITIES.
- ALL PROPOSED WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52, BITUMINOUS COATED DOUBLE CEMENT MORTAR LINED. ALL PROPOSED WATER LATERALS SHALL BE TYPE K SOFT COPPER CONFORMING TO ASTM B-88 STANDARDS.
- ALL WATER FACILITIES WITHIN THIS DEVELOPMENT, INCLUDING THE WATER MAIN AND WATER SERVICE PIPING UP TO AND INCLUDING INDIVIDUAL CURB STOPS, FIRE LINE ISOLATION VALVES AND FIRE HYDRANTS, SHALL BE OFFERED FOR DEDICATION TO THE NORTH WALES WATER AUTHORITY. ALL WATER PIPING AND ASSOCIATED APPURTENANCES DOWNSTREAM OF THESE FACILITIES TO THE INDIVIDUAL BUILDINGS SHALL BE PRIVATELY OWNED.
- ALL WATER MAIN FITTINGS AND VALVES SHALL BE MECHANICAL JOINT (RESTRAINED) AND THE FITTINGS SHALL BE PROVIDED WITH THRUST BLOCKING. REFER TO DRAWING C4.2 FOR THRUST BLOCK DETAILS AND FITTING REQUIREMENTS.
- PROPOSED 12" WATER MAIN SHALL BE CONNECTED TO EXISTING WATER MAIN IN BUTLER AVENUE.
- ALL FIRE HYDRANTS AND VALVES SHALL OPEN RIGHT (CLOCKWISE).
- THE OWNER IS RESPONSIBLE FOR REPLACEMENT OF LANDSCAPING SHOULD DISTURBANCE BE REQUIRED FOR UTILITY REPAIRS.
- THE CONTRACTOR MUST CONTACT NWWA ONE WEEK PRIOR TO WATER MAIN CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATION NEAR AND CONNECTION TO EXISTING WATER MAIN.
- ALL WATER FACILITIES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH NORTH WALES WATER AUTHORITY STANDARD SPECIFICATIONS.
- 18 INCHES OF VERTICAL CLEARANCE OR 10 FEET OF HORIZONTAL CLEARANCE SHALL BE PROVIDED BETWEEN THE SANITARY SEWER AND ALL OTHER UTILITIES. OTHERWISE, CONCRETE ENCASEMENT OF THE SANITARY SEWER SHALL BE PROVIDED.
- THERE SHALL NOT BE BUILT, INSTALLED, CONSTRUCTED, PLANTED OR LOCATED ANY TEMPORARY OR PERMANENT BUILDINGS OR STRUCTURES INCLUDING INFILTRATION BASINS, OR ANY TREES, SHRUBS OR OTHER LANDSCAPING WITHIN 10 FEET OF SANITARY SEWER FACILITIES, EXCEPT TREES, SHRUBS, AND OTHER LANDSCAPING WHICH WILL NOT GROW TO MORE THAN 6 FEET IN HEIGHT.
- CONNECTION OF NEW SANITARY SEWER TO BE MADE BY CORE-BORING INTO THE EXISTING MANHOLE AND PROVIDING A LINK SEAL TO PROVIDE A WATER TIGHT CONNECTION.
- SINCE THE PROJECT IS LOCATED IN THE MONTGOMERY HIGH PRESSURE ZONE, A PRESSURE REDUCING VALVE SHALL BE INSTALLED ON EACH WATER SERVICE.
- A MINIMUM OF 5 FEET OF HORIZONTAL CLEARANCE SHALL BE PROVIDED BETWEEN THE WATER MAIN AND ALL PARALLEL UTILITY LINES.
- A MINIMUM CLEARANCE OF 18 INCHES SHALL BE PROVIDED WHERE A WATER MAIN CROSSES ANOTHER UTILITY.
- ALL CURB STOPS WITHIN PAVED AREAS MUST BE PROVIDED WITH A VALVE BOX AND COVER FOR PROTECTION.
- WATER MAINS MUST BE SURVEY STAKED AT FIFTY (50) FOOT INTERVALS ALONG THE MAIN ALIGNMENT FOR STRAIGHT RUNS AND AT TWENTY-FIVE (25) FOOT INTERVALS ALONG CURVES. SURVEY STAKES MUST BE CLEARLY INSCRIBED WITH THE STATION POINTS, TOP OF FINAL GRADE AND, WHEN APPLICABLE, FACE OF CURB. WHEN PIPELINE LOCATION IS USED FOR PLACEMENT OF SURVEY STAKES, THE STAKES SHALL BE OFFSET A MINIMUM OF TEN (10) FEET AND A MAXIMUM OF TWENTY (20) FEET FROM THE PIPELINE SO AS NOT TO INTERFERE WITH THE INSTALLATION OF THE PIPE.
- ALL WATER SERVICE CONNECTIONS, WATER MAIN CONNECTIONS AND SERVICE DISRUPTIONS DURING CONSTRUCTION OF THE NEW WATER FACILITIES WITHIN THIS DEVELOPMENT MUST BE COORDINATED WITH NORTH WALES WATER AUTHORITY. THE AUTHORITY MAY REQUIRE SOME OR ALL OF THESE CONNECTIONS AND DISRUPTIONS TO OCCUR OUTSIDE OF REGULAR WORKING HOURS. THE SPECIFIC HOURS DURING WHICH THESE CONNECTIONS OR DISRUPTIONS ARE TO BE MADE WILL AS BE DIRECTED BY THE AUTHORITY AND THE WORK SHALL BE COMPLETED AT NO ADDITIONAL COST TO THE AUTHORITY.



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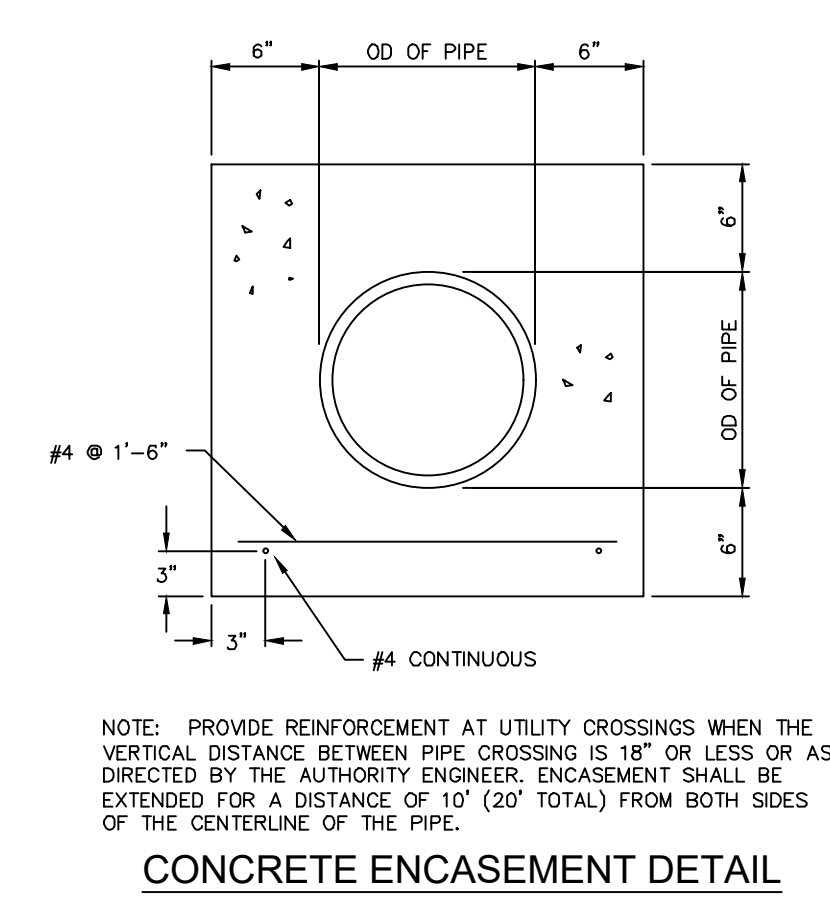
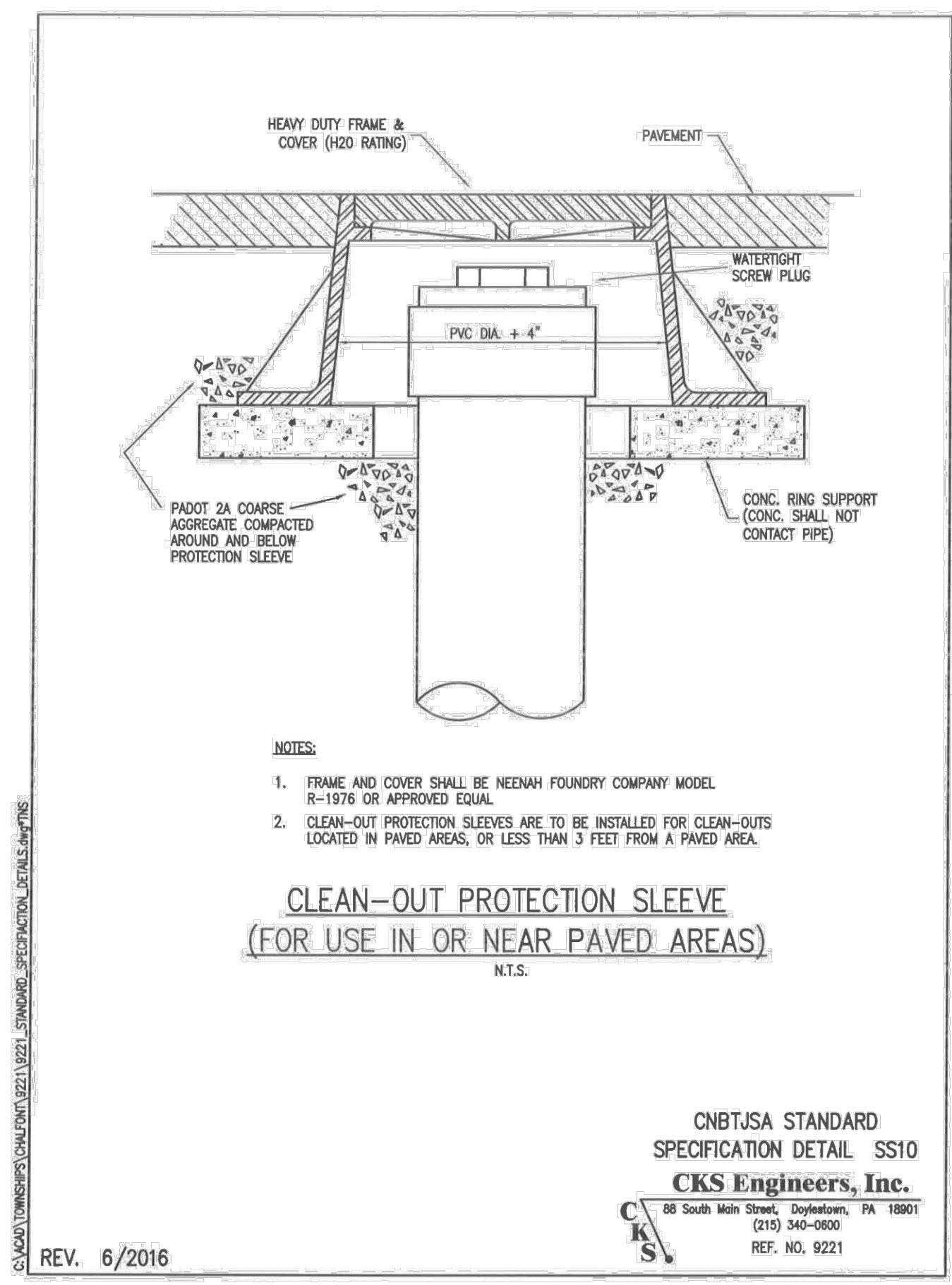
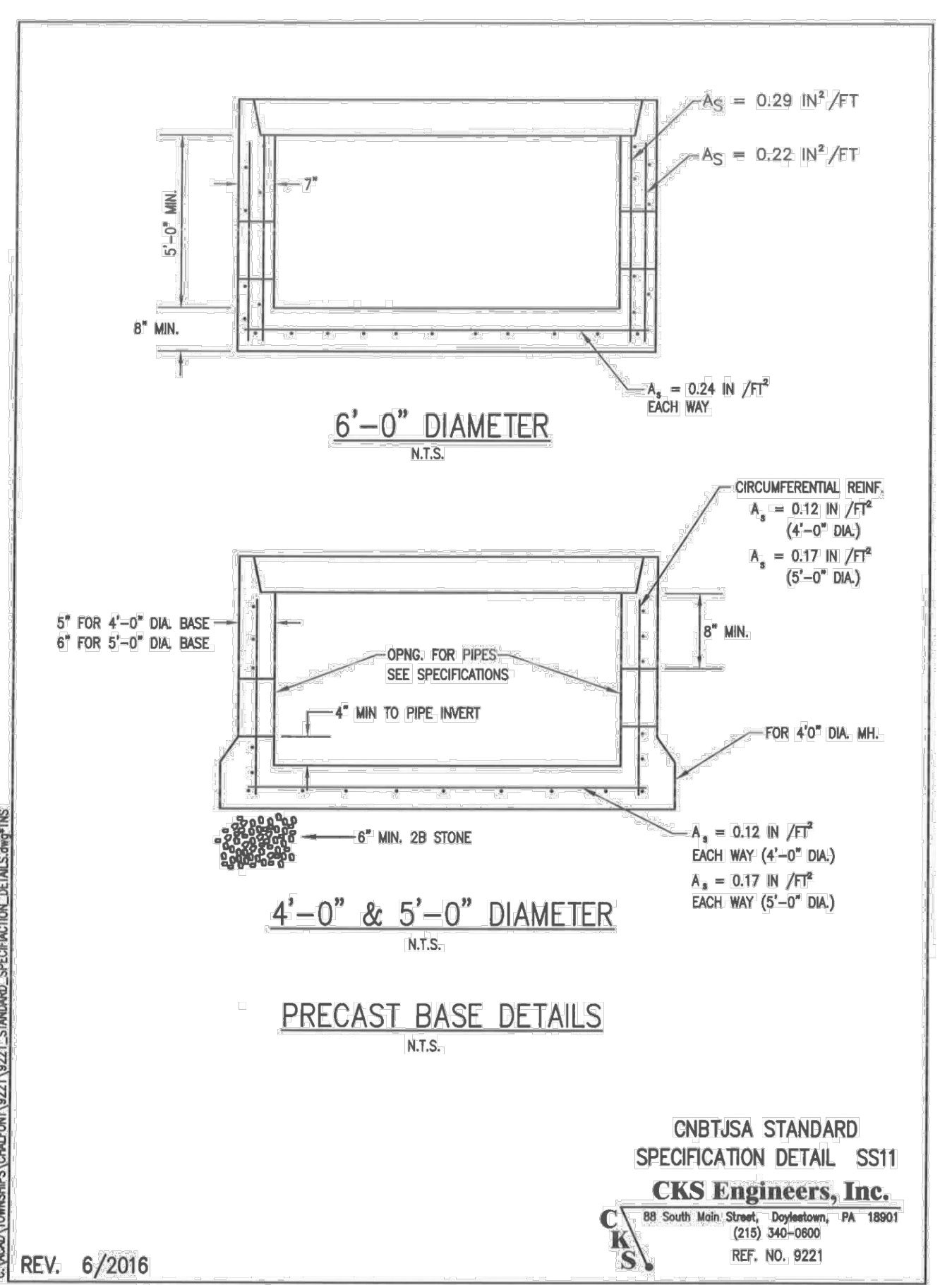
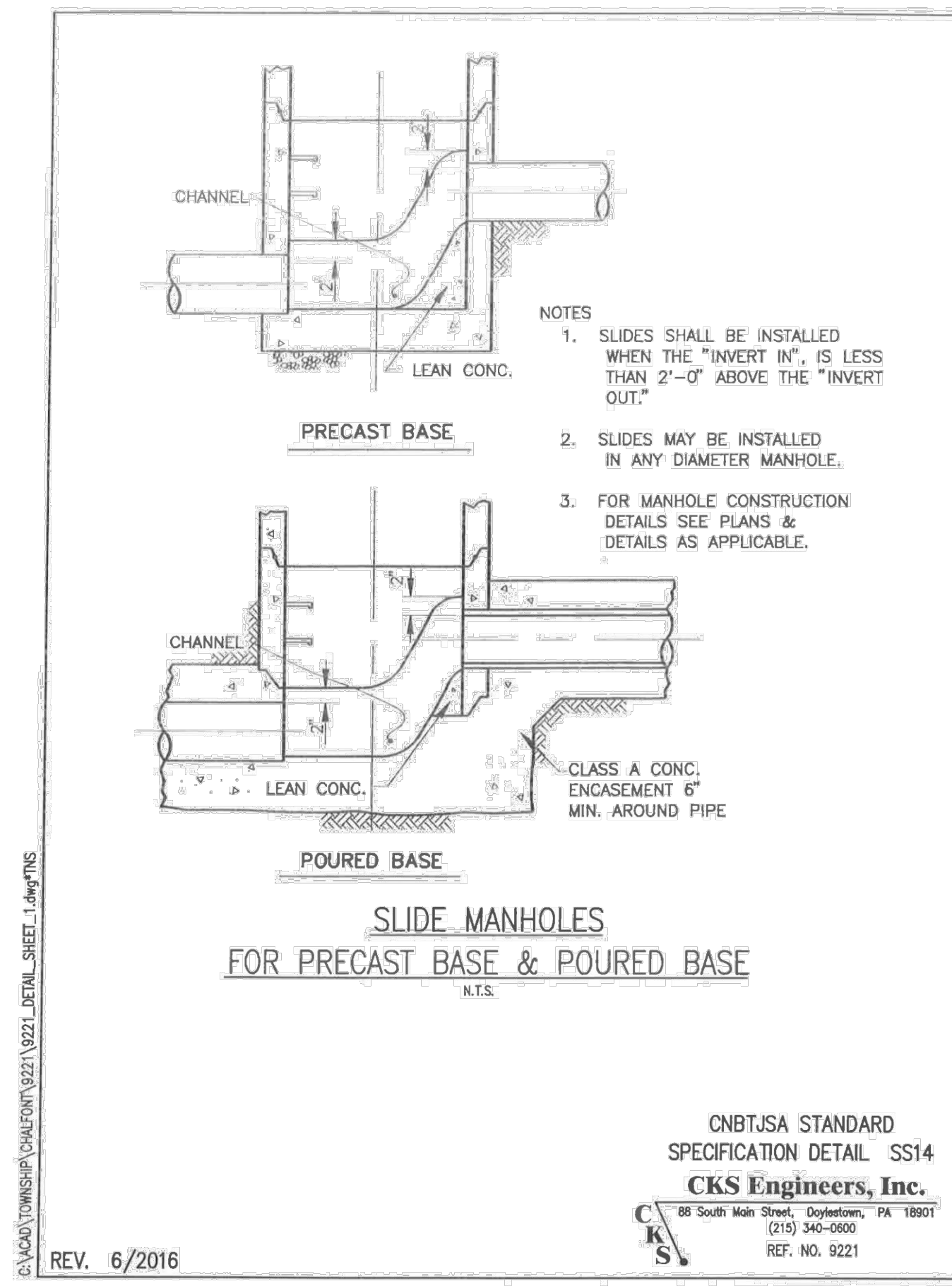
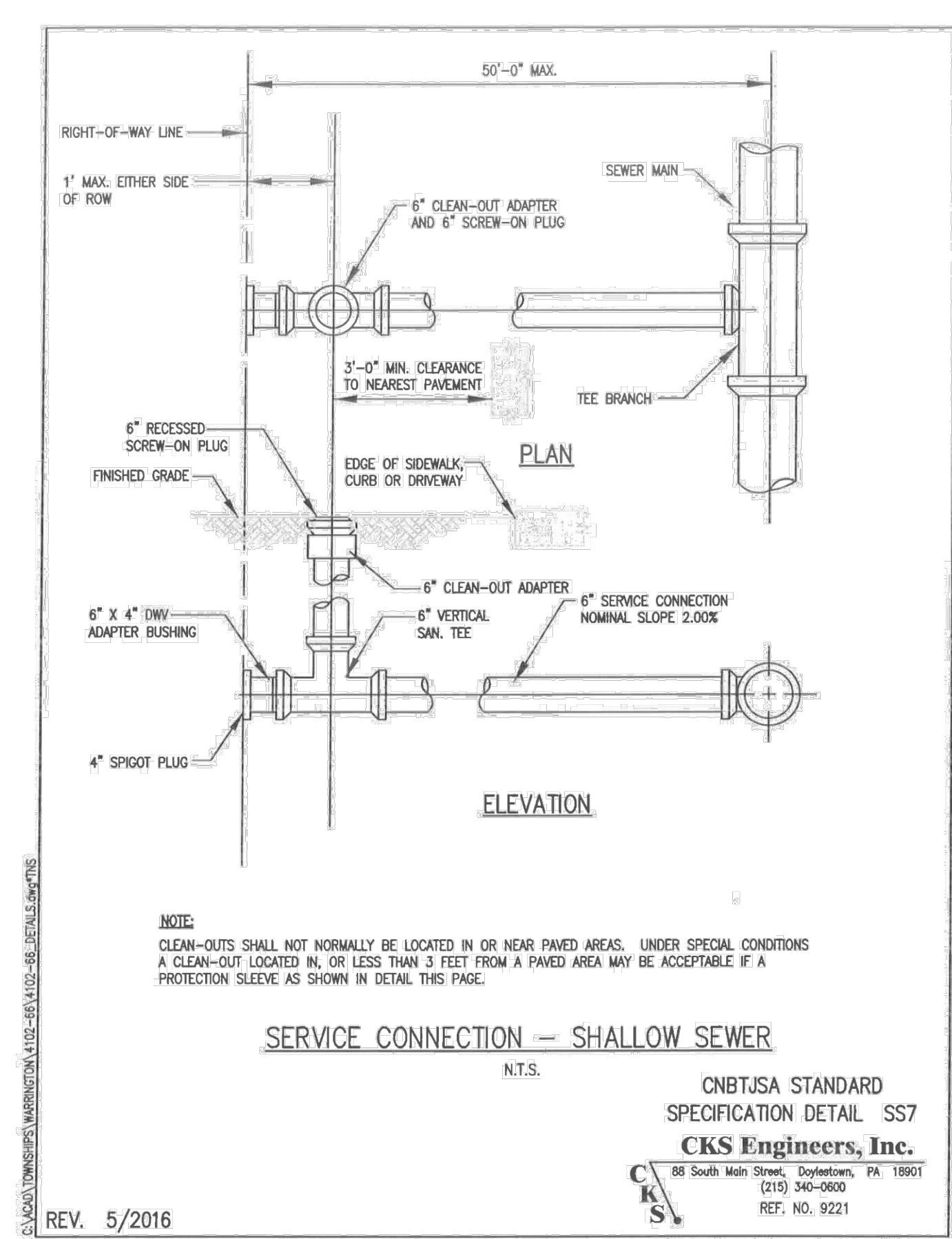
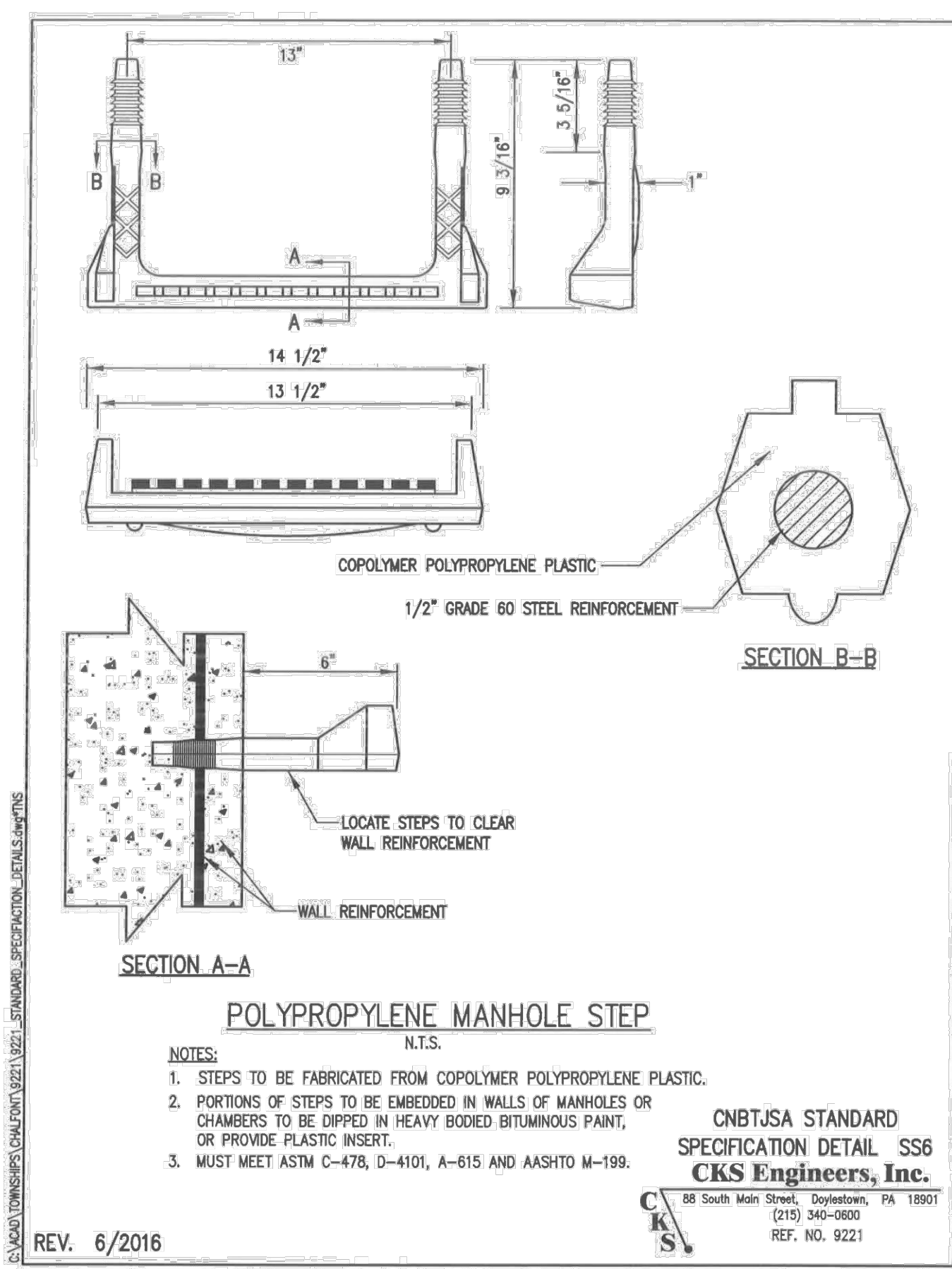
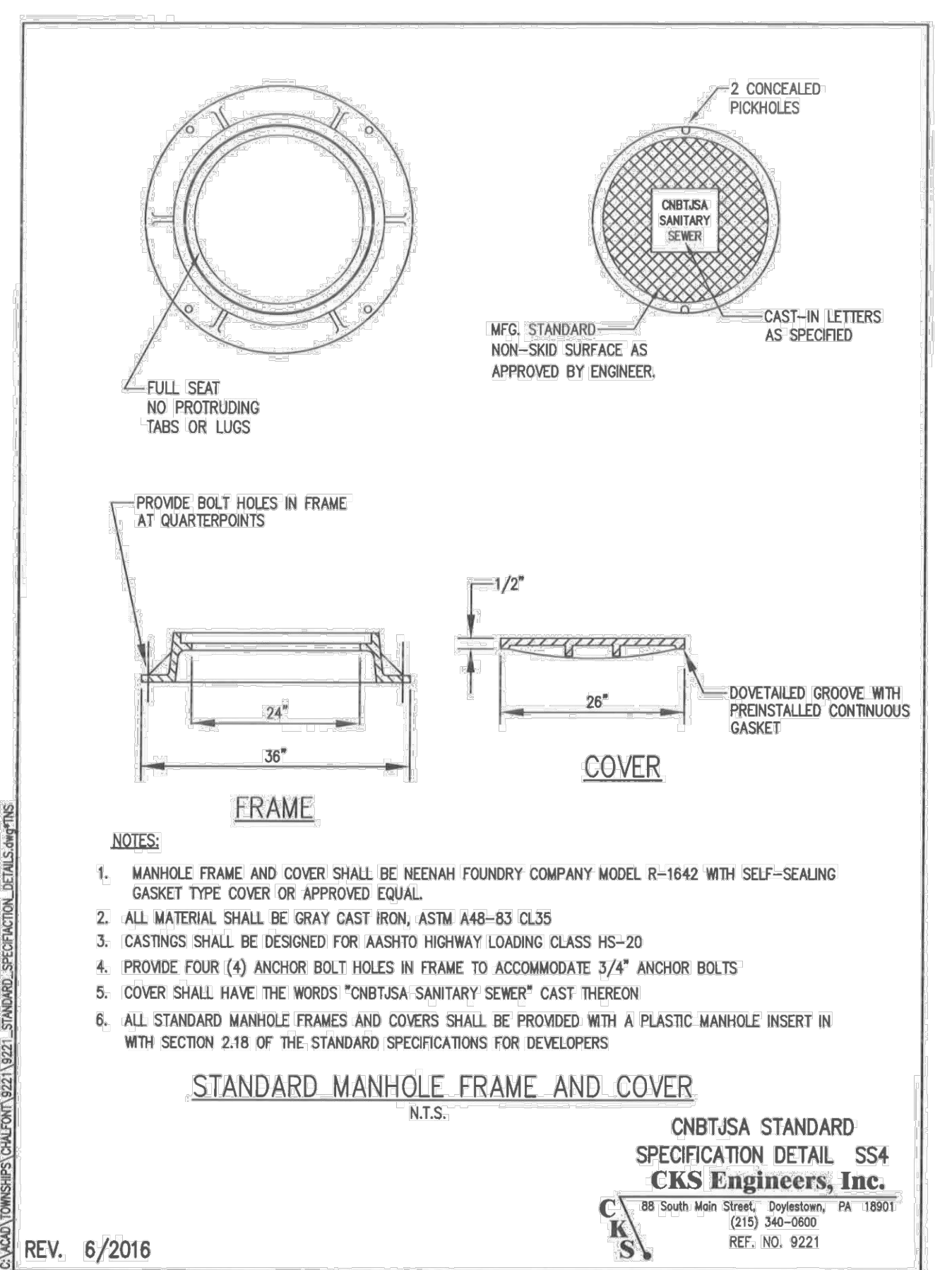
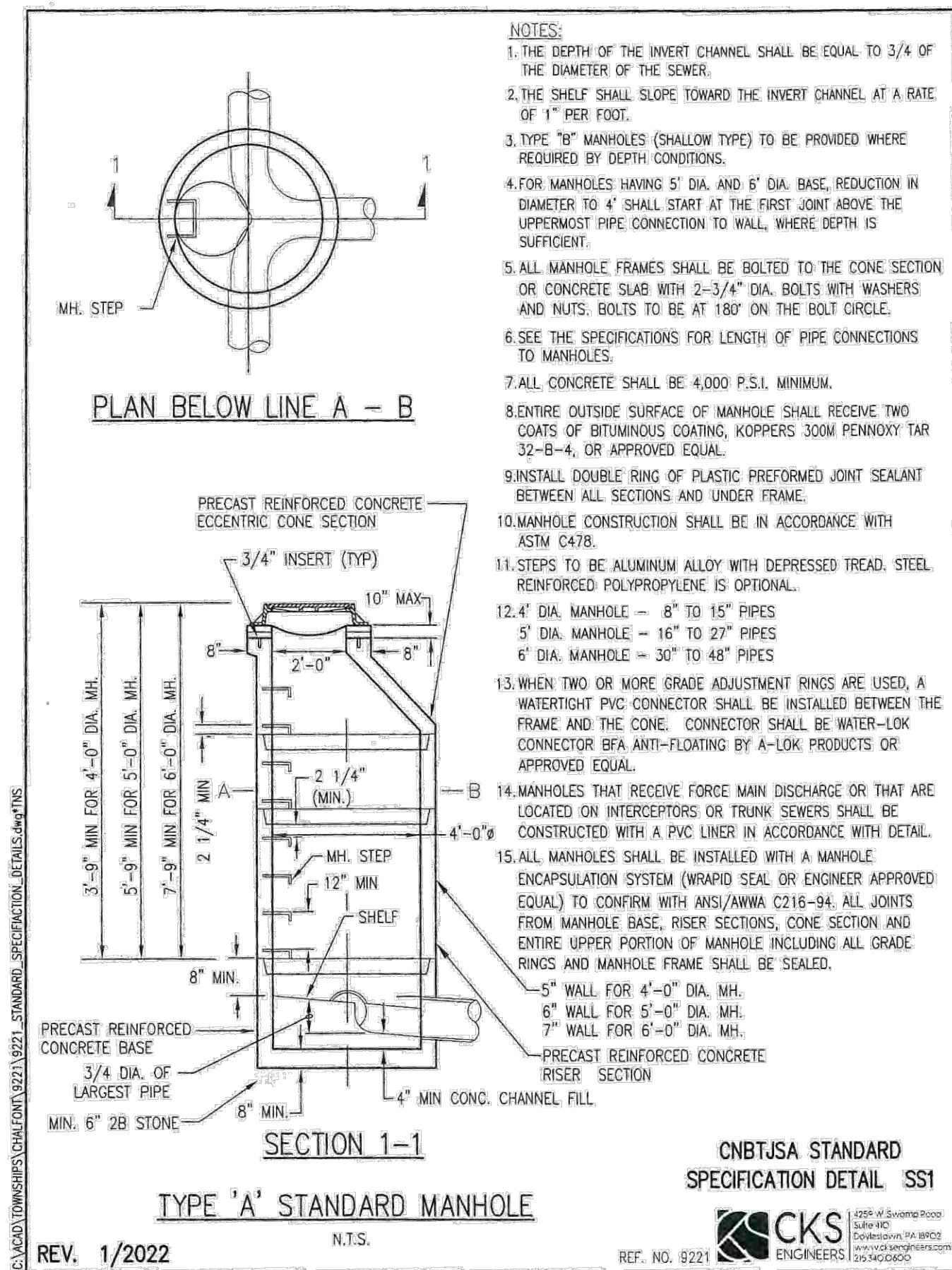
REVISIONS	Date	Description
1	3-17-2022	REVISED FOR TWP/BCCD COMMENTS

BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

UTILITY PLAN

File No. 1482 C3.0 Utility.dwg
 HCE Job 1482
 Date 11/30/2021
 Scale 1"=40'
 Designed RC
 Sheet 11 of 25
 Drawing No. C3.0

ROBERT T. CUNNINGHAM, P.E.
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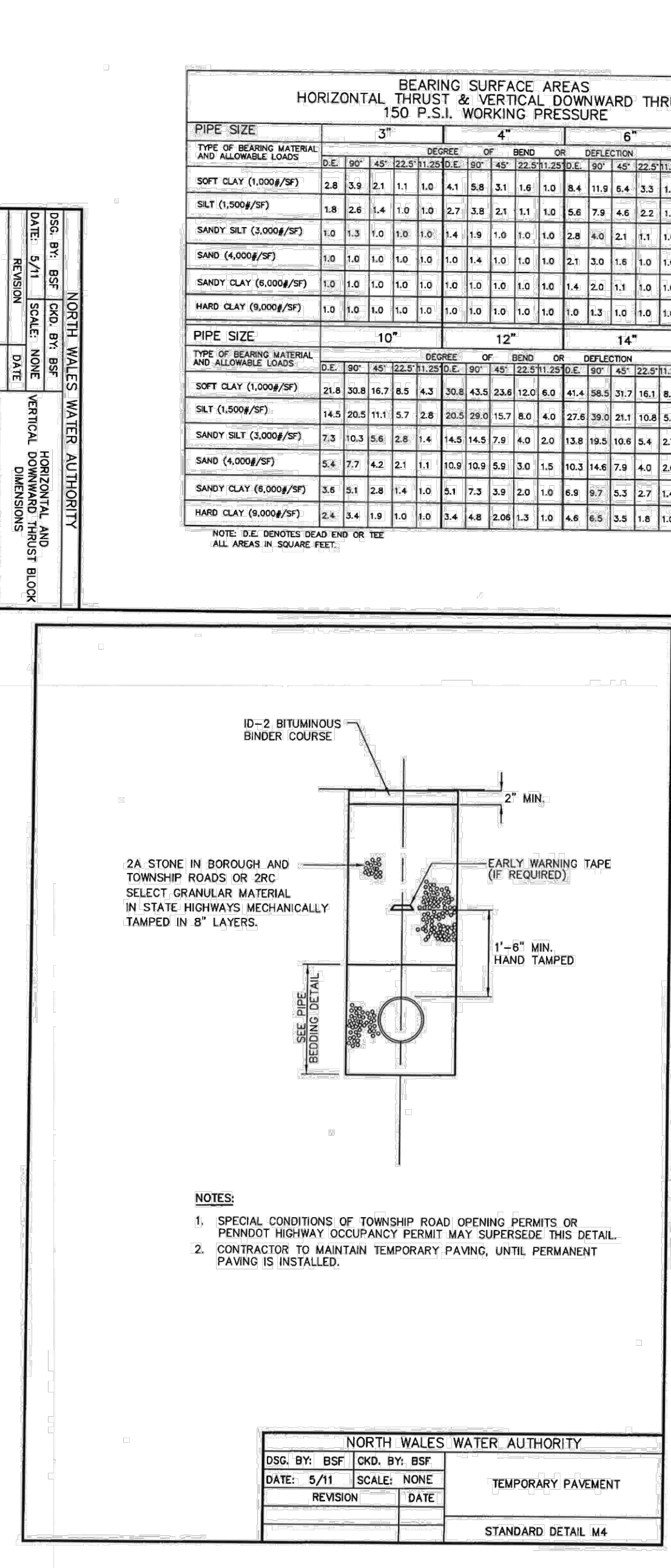
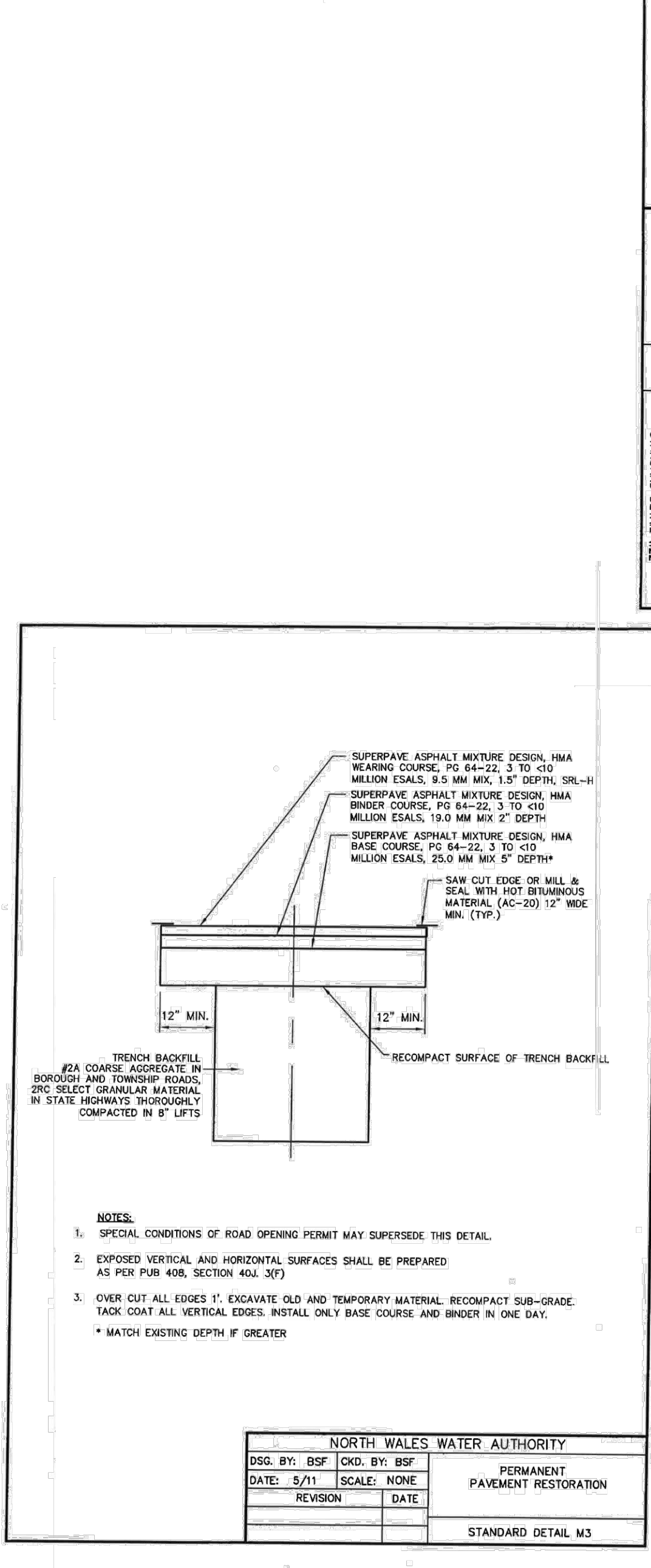
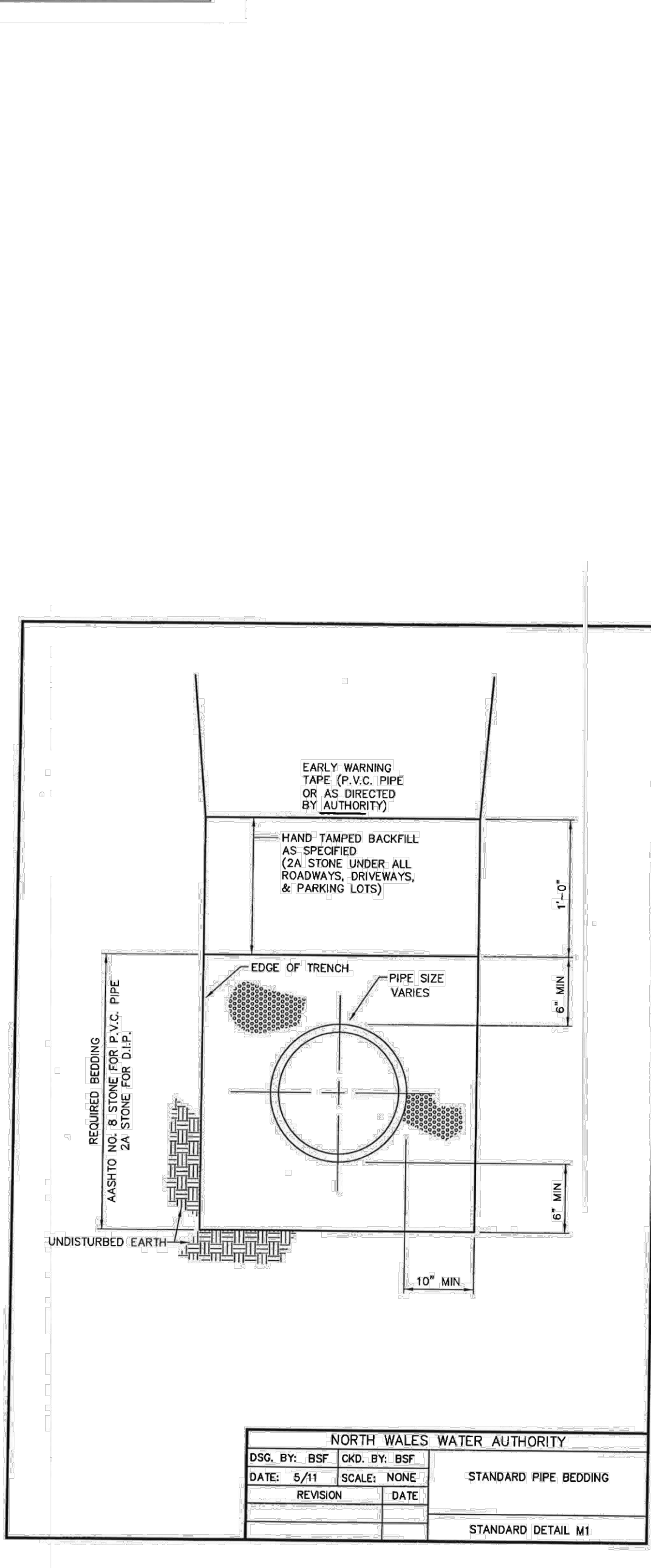
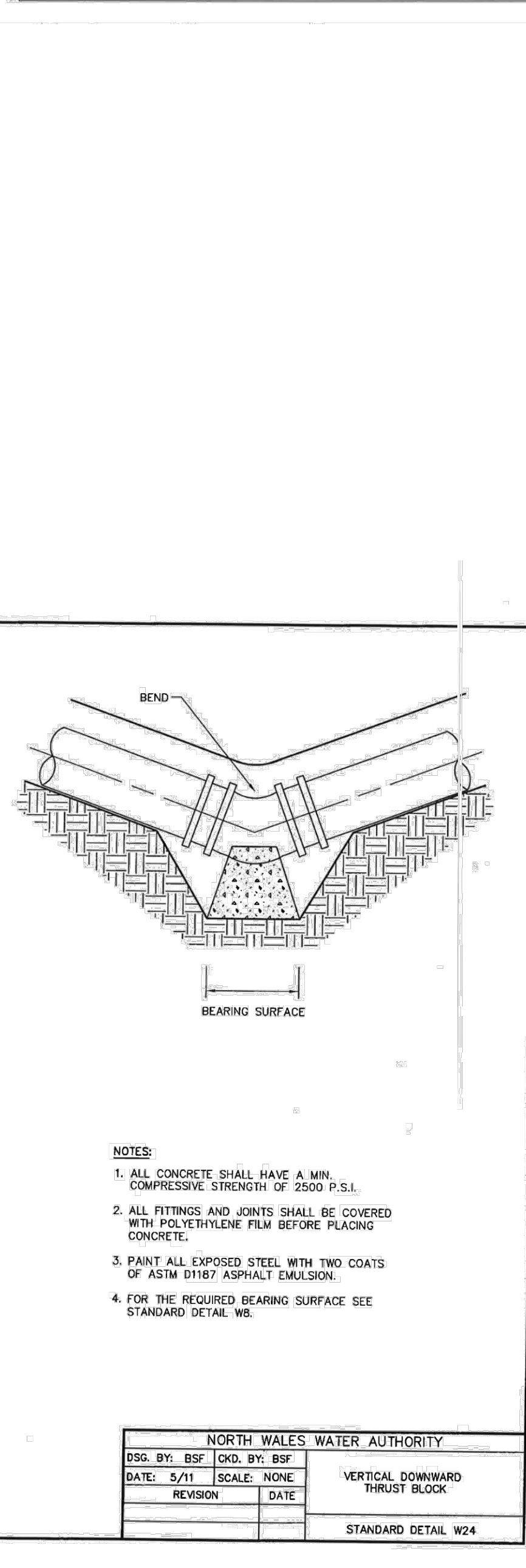
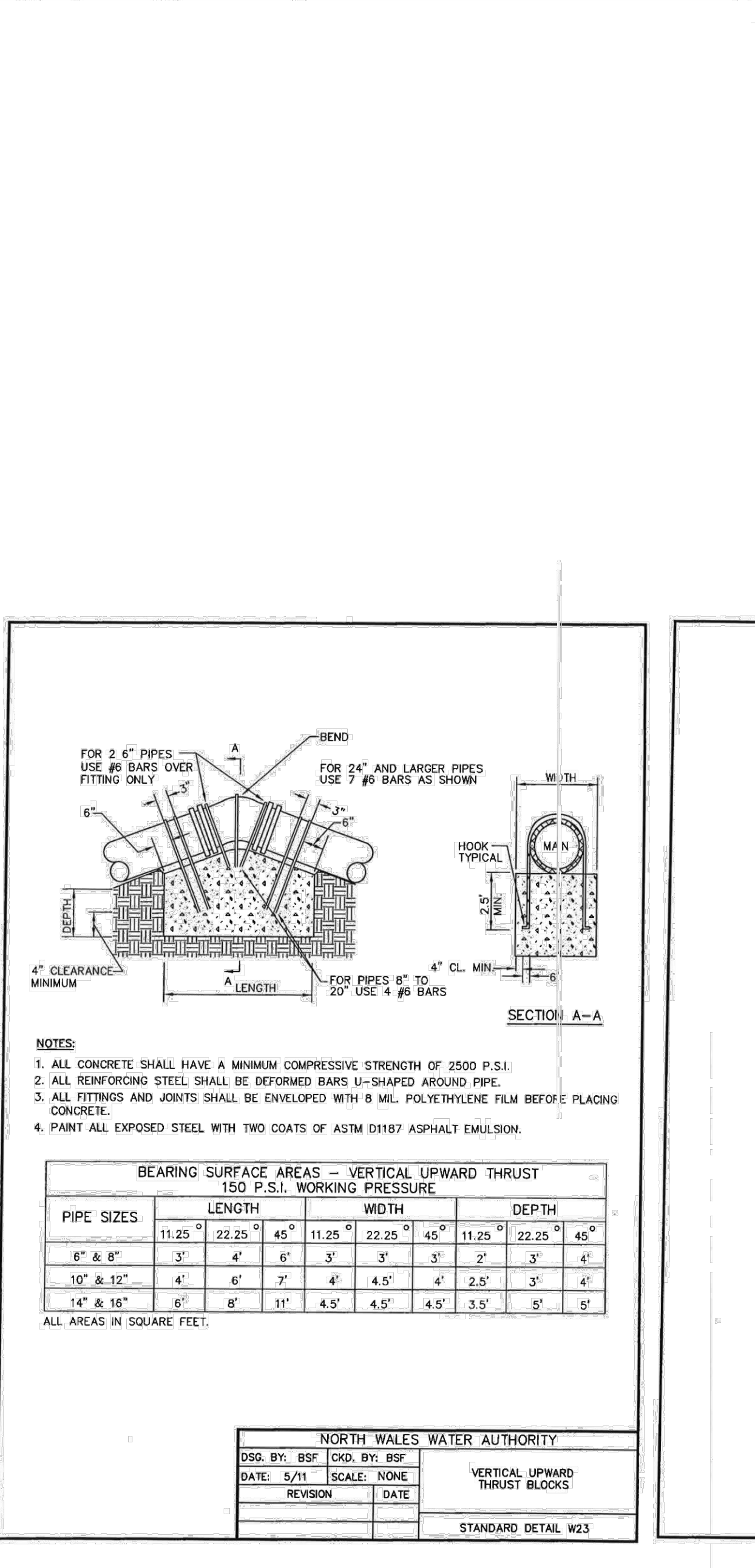
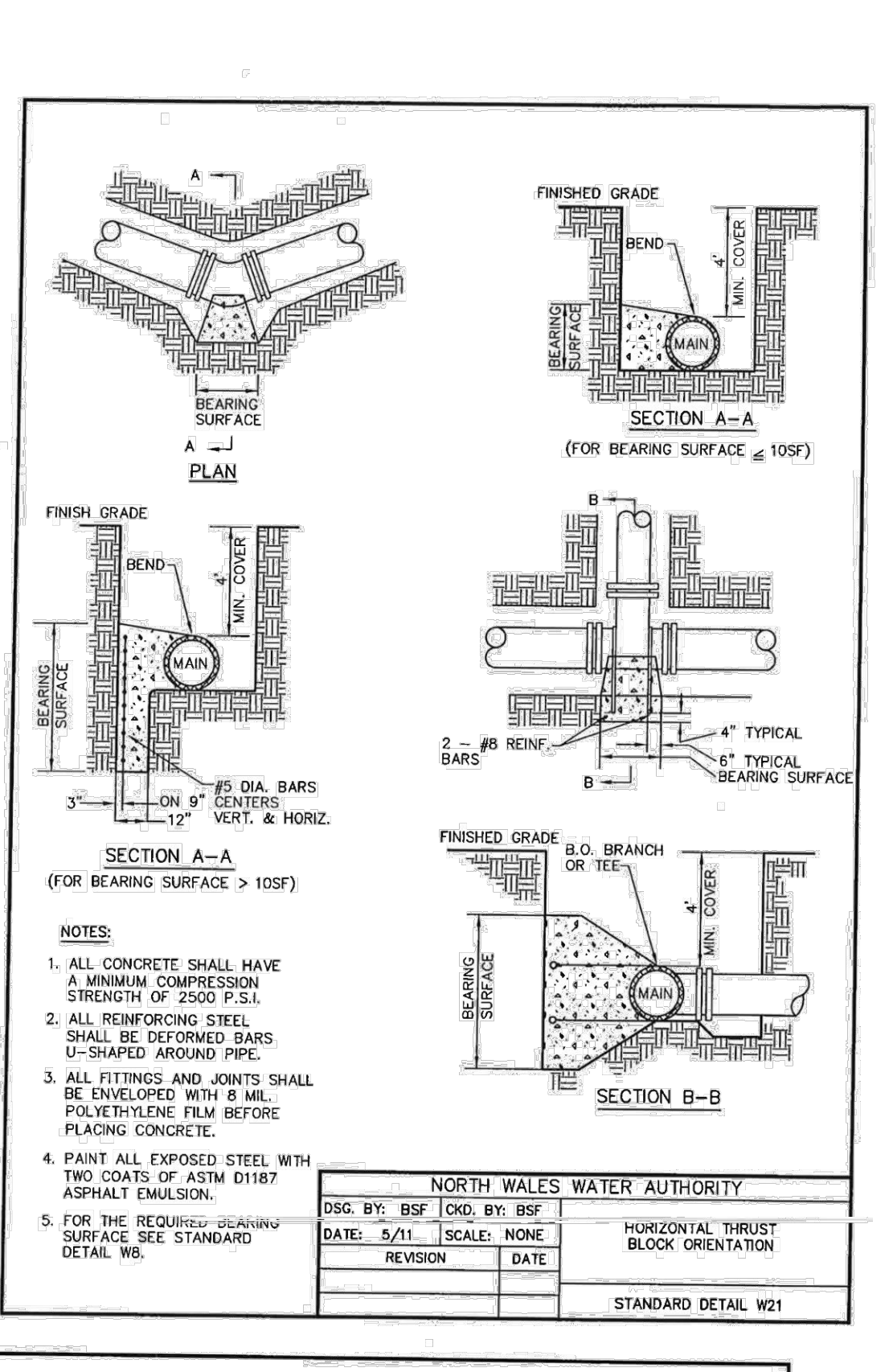
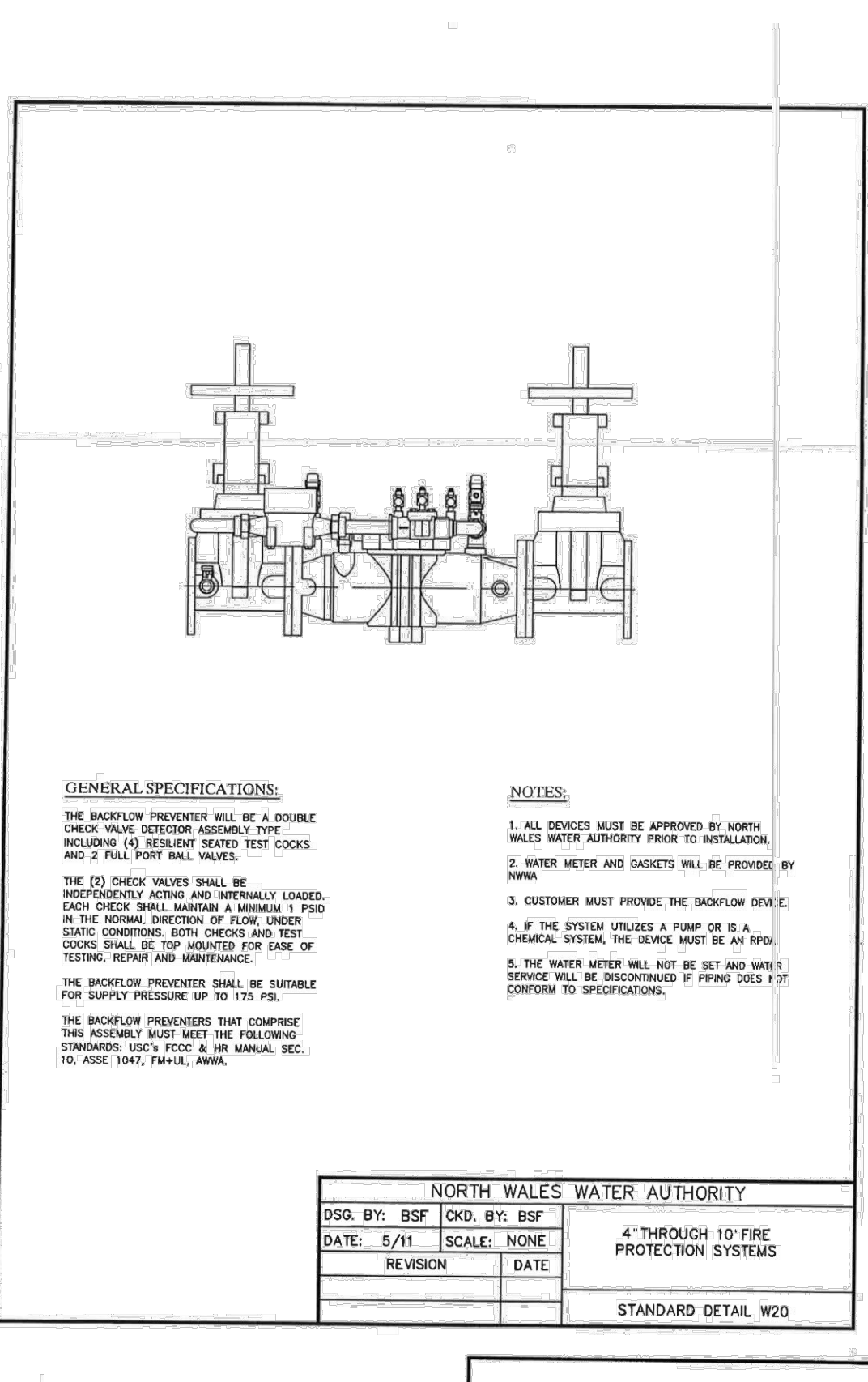
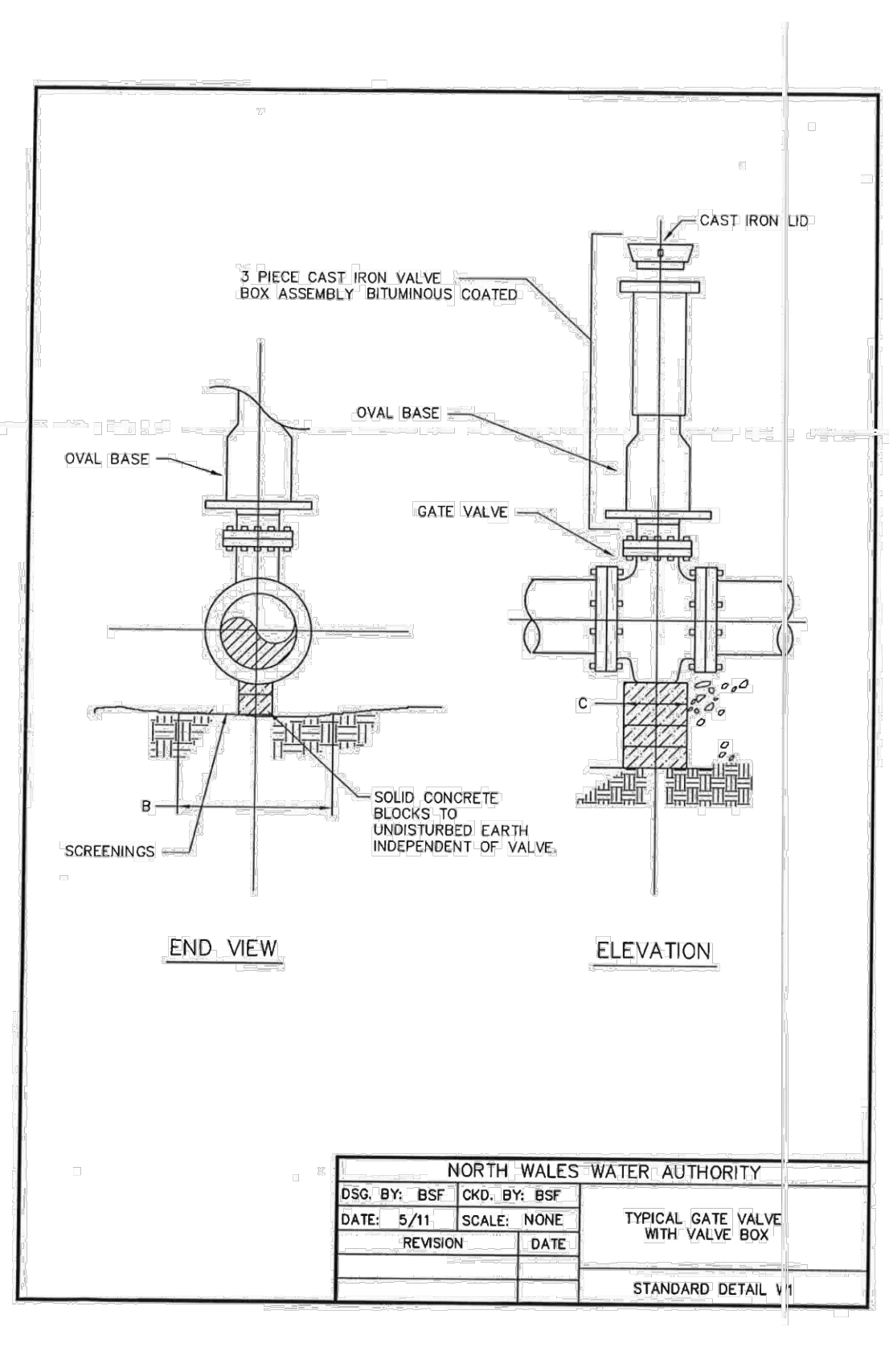
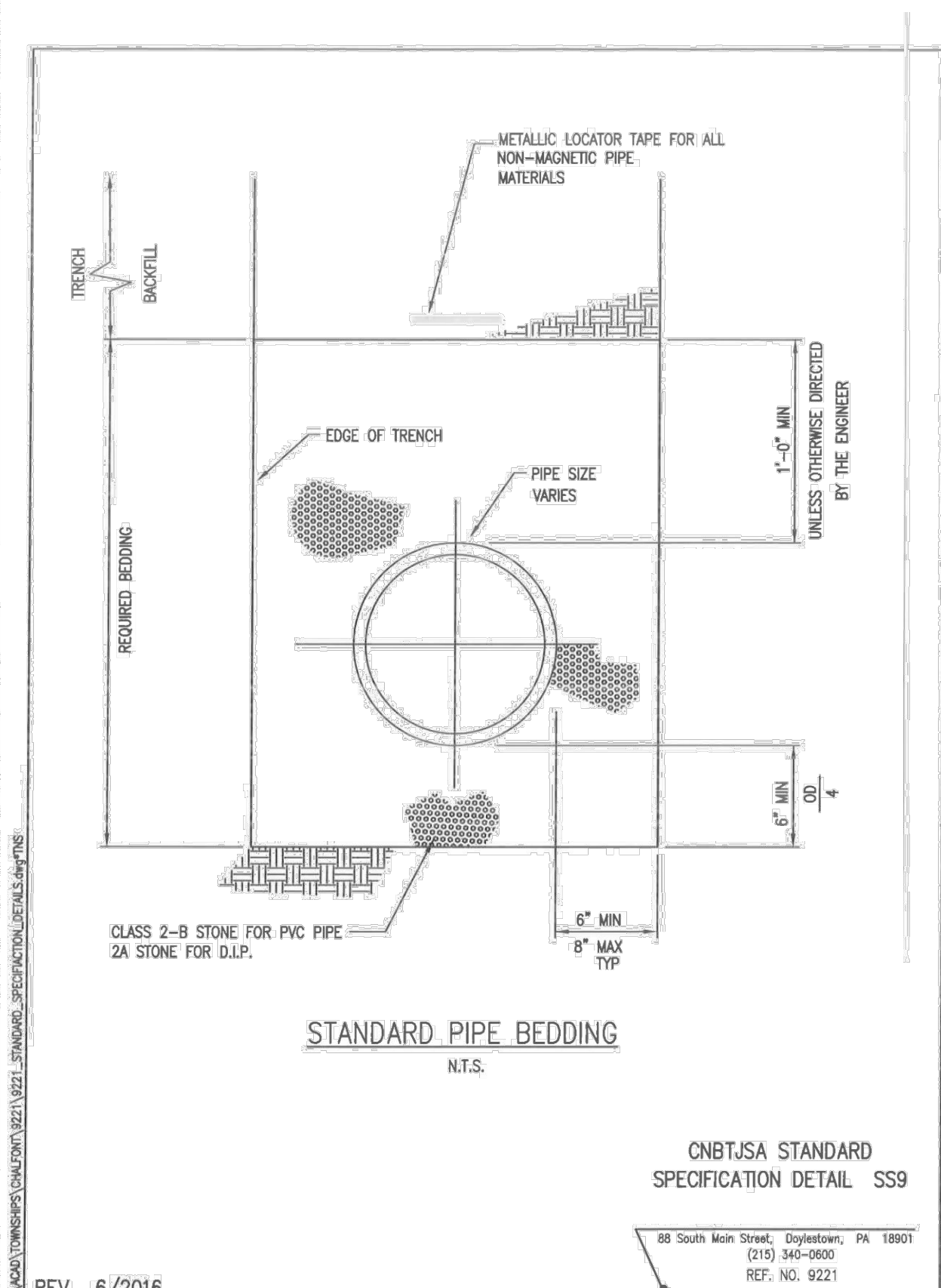
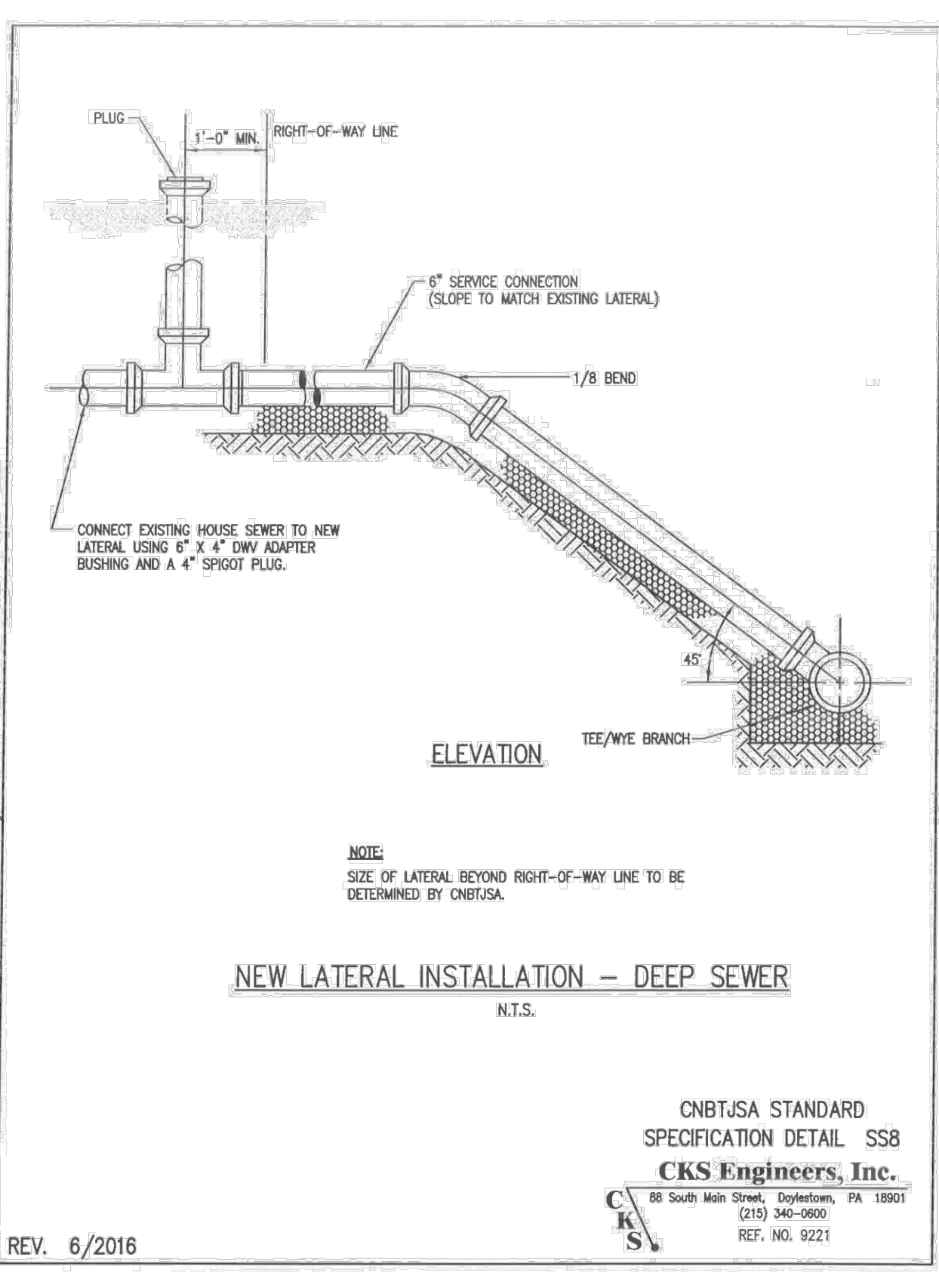
BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

UTILITY CONSTRUCTION DETAILS

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.	1482_C3.0 Utility.dwg
HCE Job	1482
Date	11/30/2021
Scale	N.T.S.
Designed	RC
Sheet	12 of 25

Drawing No.
C3.1



BEARING SURFACE AREAS - HORIZONTAL THRUST & VERTICAL DOWNWARD THRUST 150 P.S.I. WORKING PRESSURE					
PIPE SIZE	TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS	DEGREE OF BEND OR DEFLECTION			
		3"	4"	6"	8"
3"	SOFT CLAY (1,000#/SF)	2.8	2.9	2.1	1.1
3"	SILT (1,500#/SF)	1.8	2.6	1.4	1.0
3"	SANDY SILT (2,000#/SF)	1.0	1.0	1.0	1.0
3"	SAND (4,000#/SF)	1.0	1.0	1.0	1.0
3"	SANDY CLAY (6,000#/SF)	1.0	1.0	1.0	1.0
3"	HARD CLAY (8,000#/SF)	1.0	1.0	1.0	1.0

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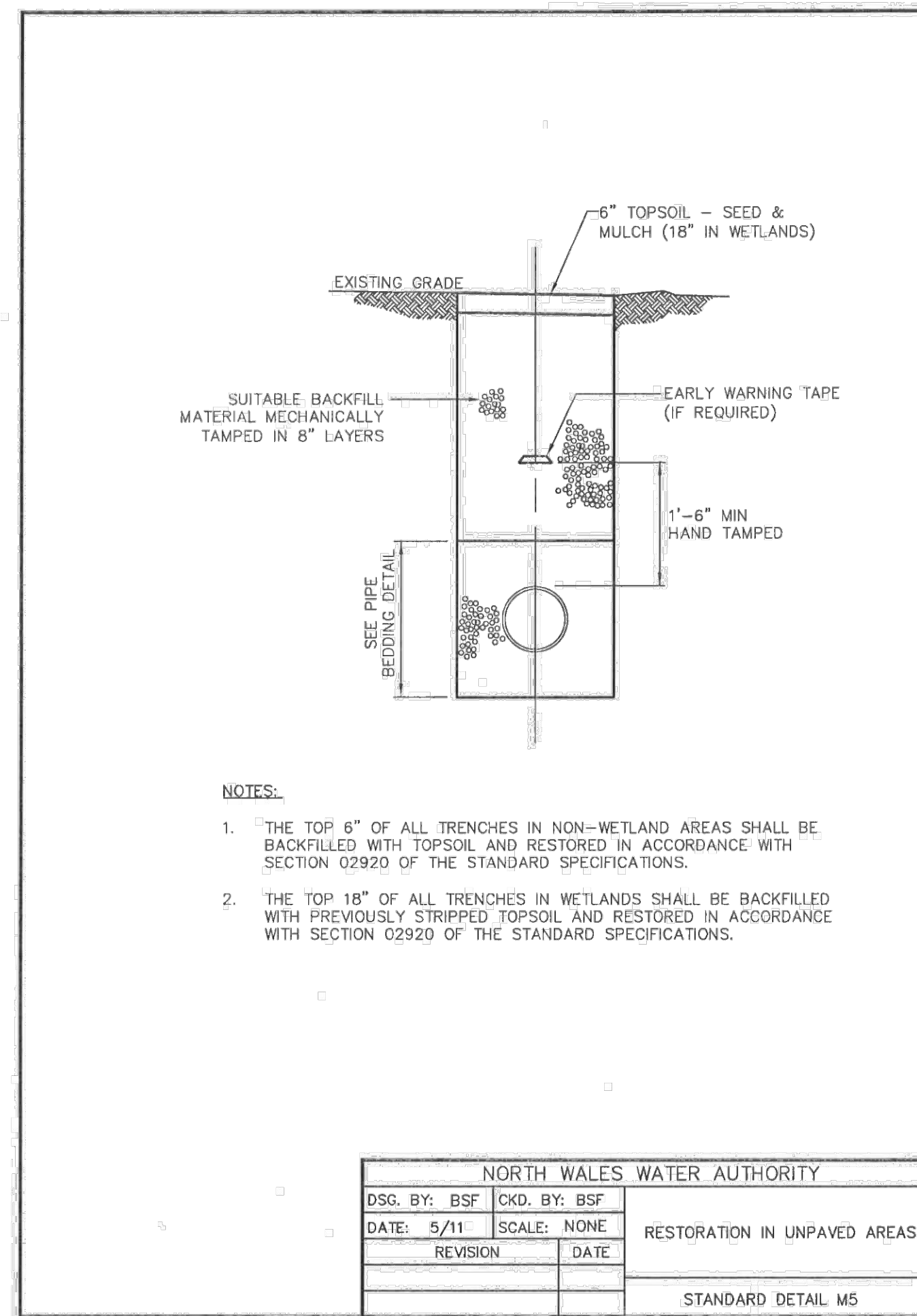
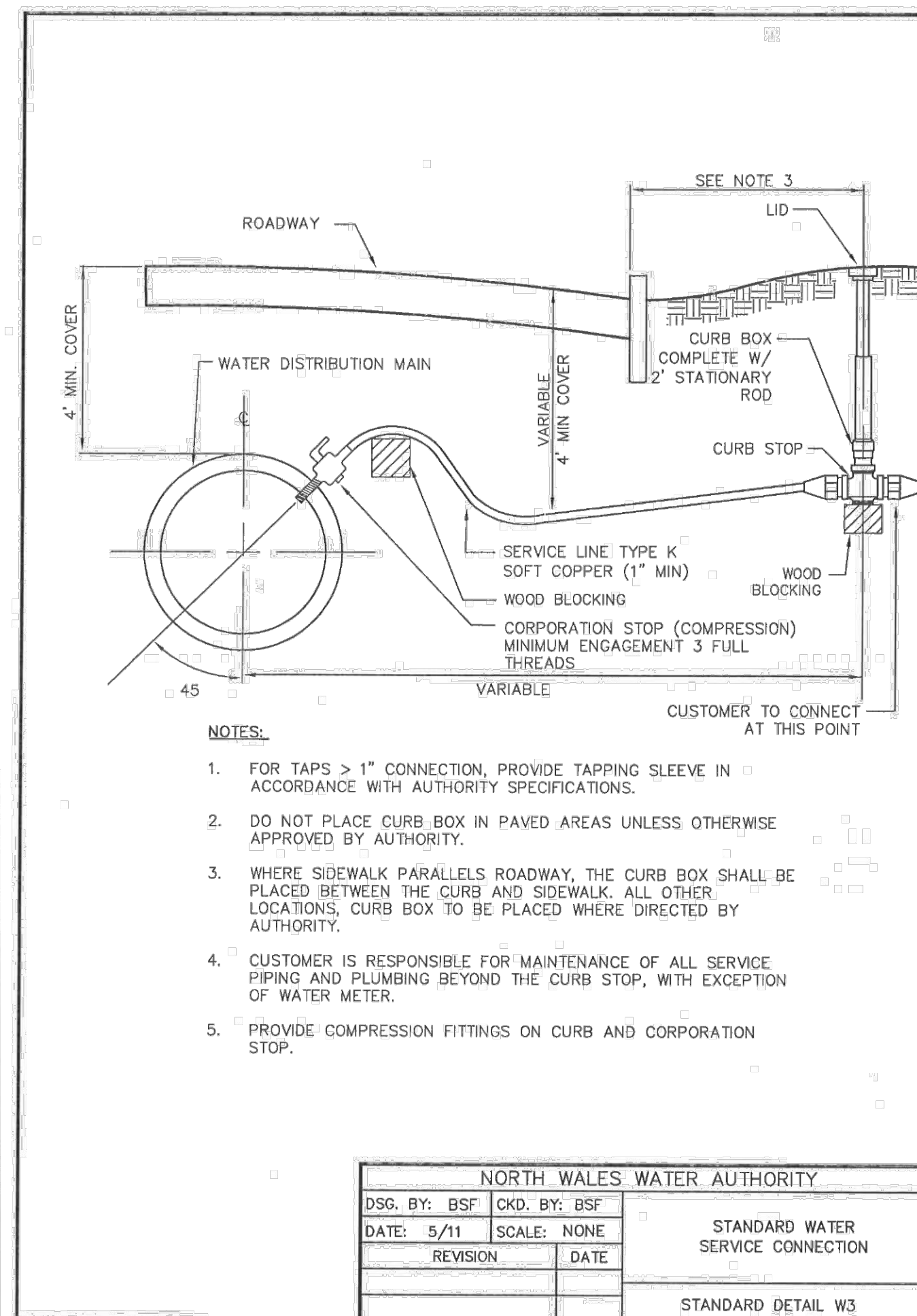
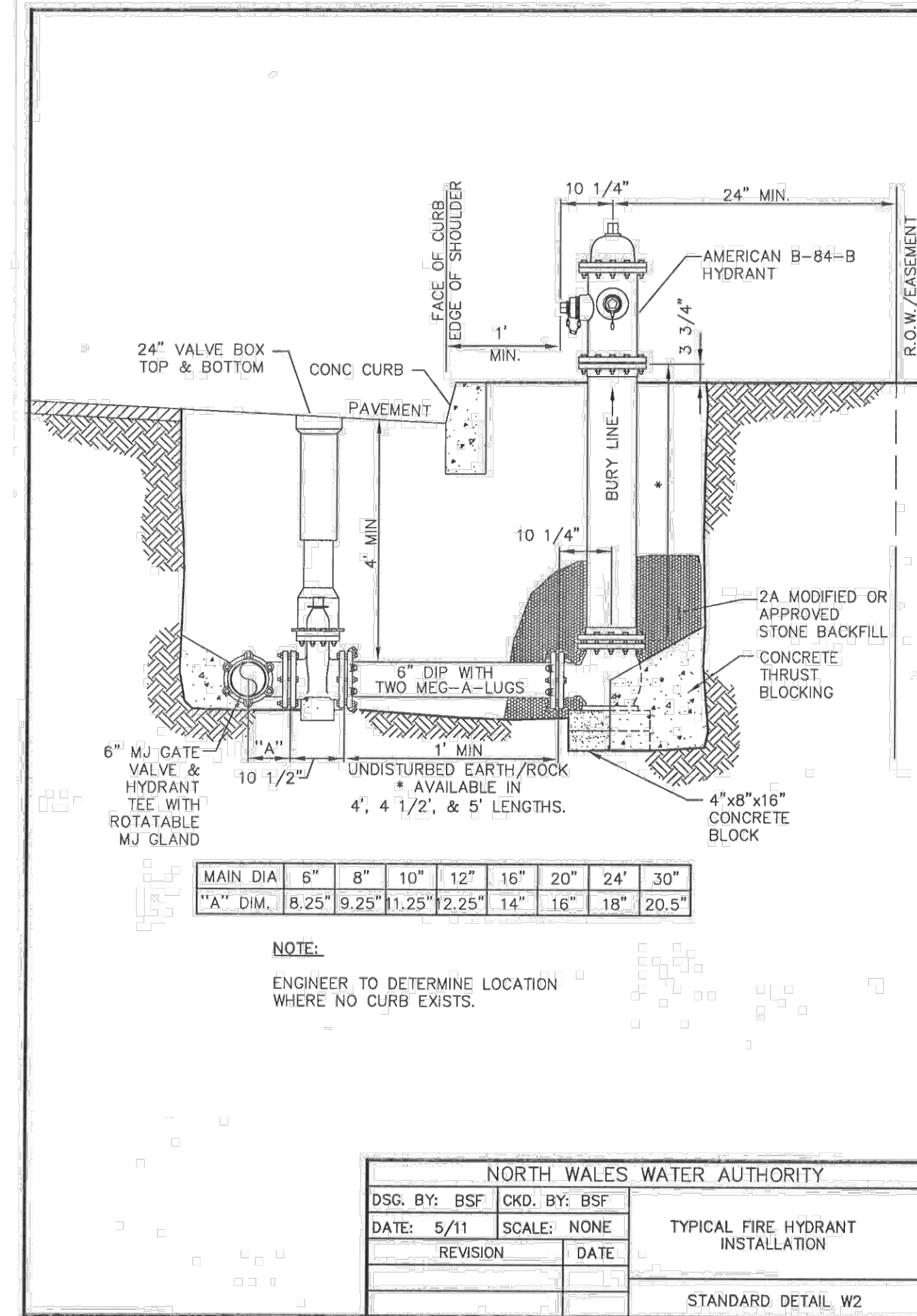
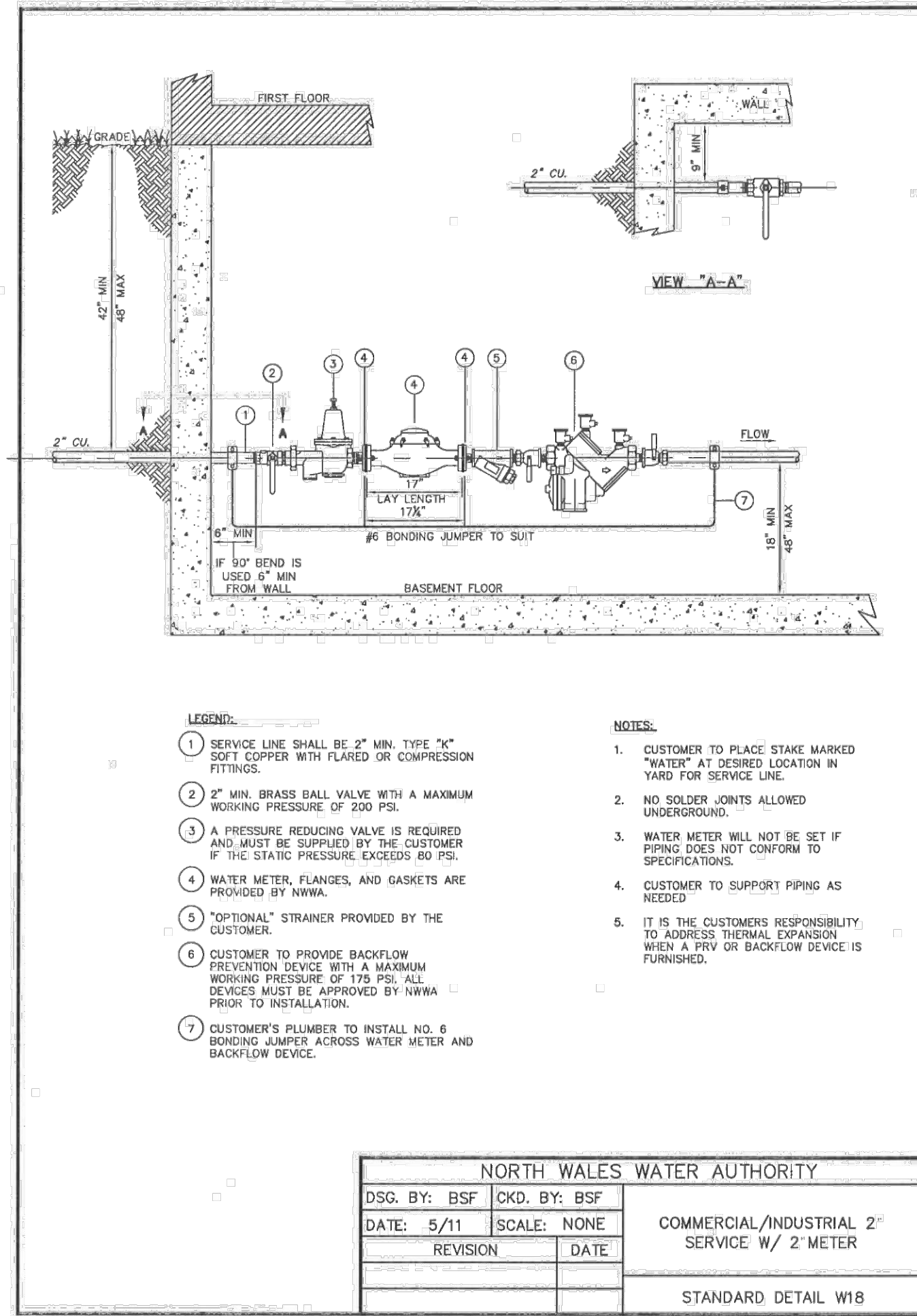
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 Date 11/30/2021
 Scale N.T.S.
 Designed RC
 Sheet 13 of 25

Drawing No. **C3.2**



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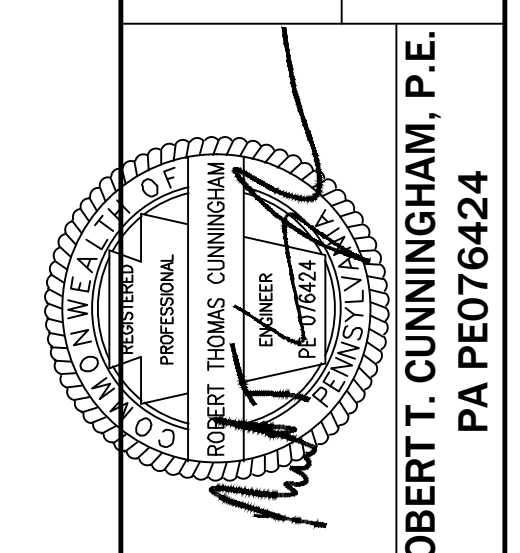
CALL BEFORE YOU DIG II
PENNSYLVANIA LAW REQUIRES
CONSTRUCTION PHASE AND
10 WORKING DAYS DESIGN STRIKE
NOTICE TO BE GIVEN TO ALL
OWNERS, STAKEHOLDERS & CALL
PENNSYLVANIA ONE
Call System, Inc.
1-800-942-1776

UTILITY LOCATIONS AS SHOWN ON
THIS DRAWING ARE THE PROPERTY OF
THE CONTRACTOR. THE CONTRACTOR
IS RESPONSIBLE FOR THE
CONTRACTOR TO OBTAIN ALL NECESSARY
PERMITS AND TO COMPLY WITH ALL
APPLICABLE REGULATIONS AND
TO ANY EXCAVATION.

BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

UTILITY CONSTRUCTION DETAILS

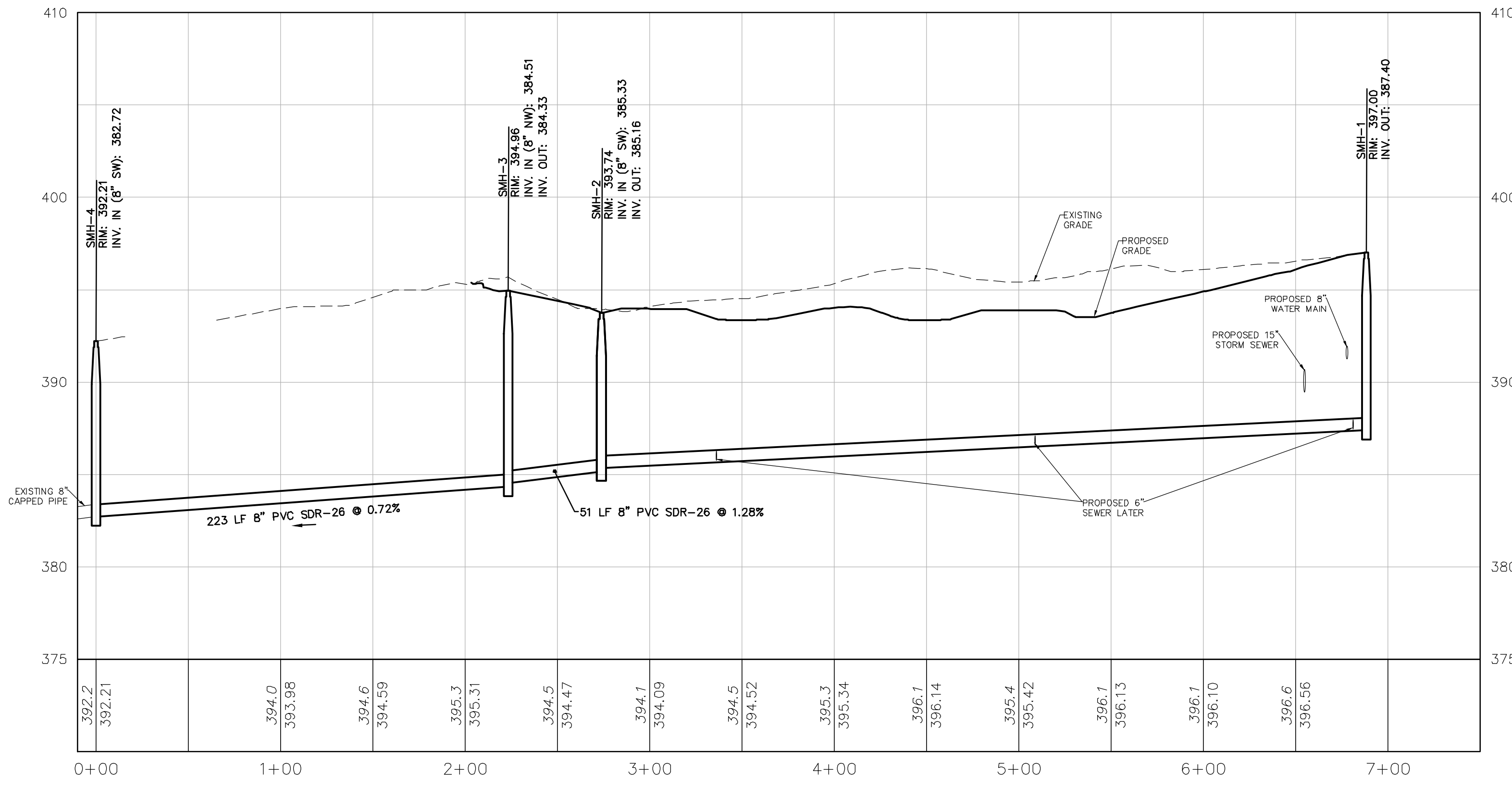
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PA PE076424



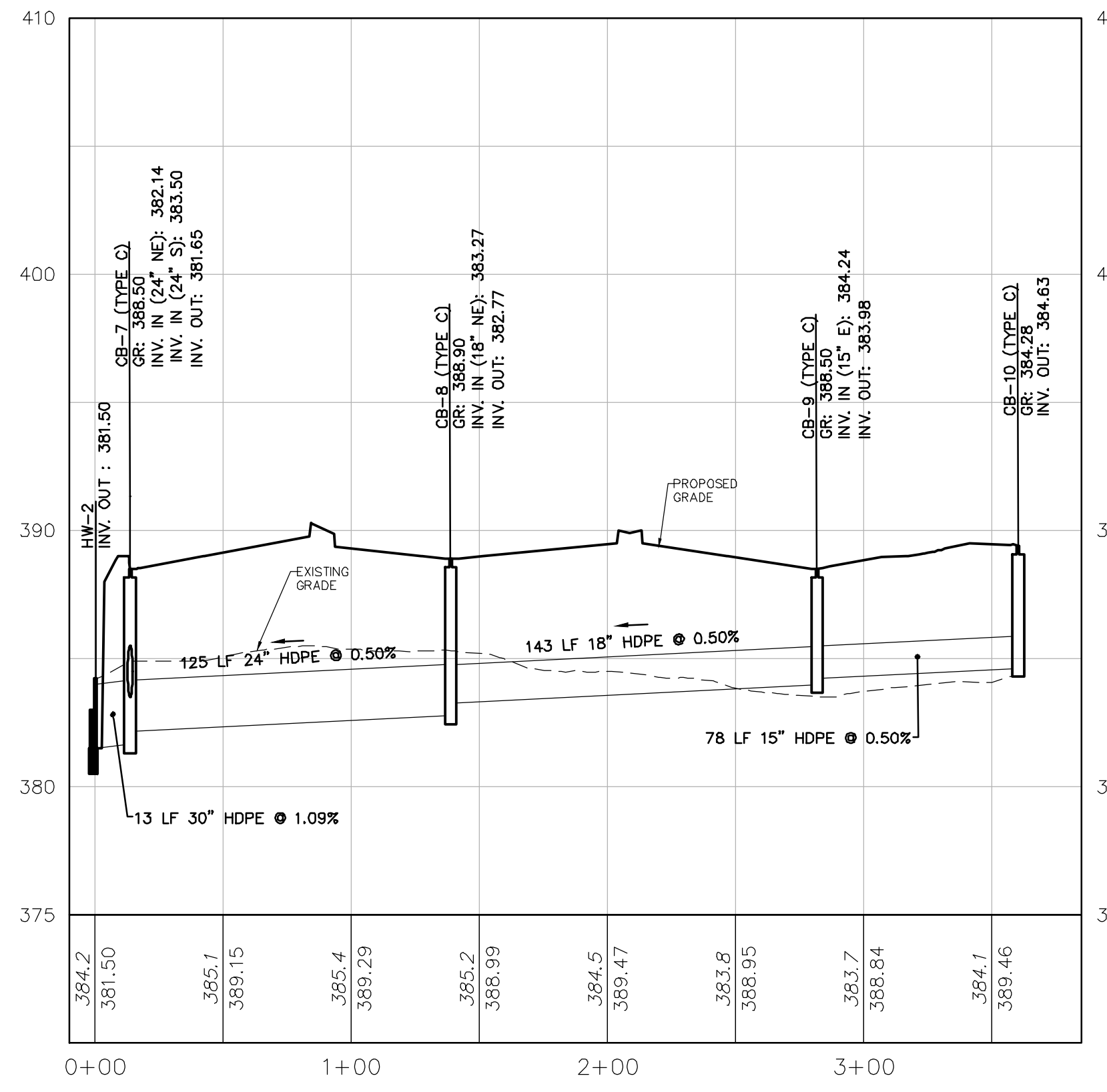
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HCE Job	1482	Date	11/30/2021	Scale	N.T.S.	Designed	RC	Sheet	14 of 25
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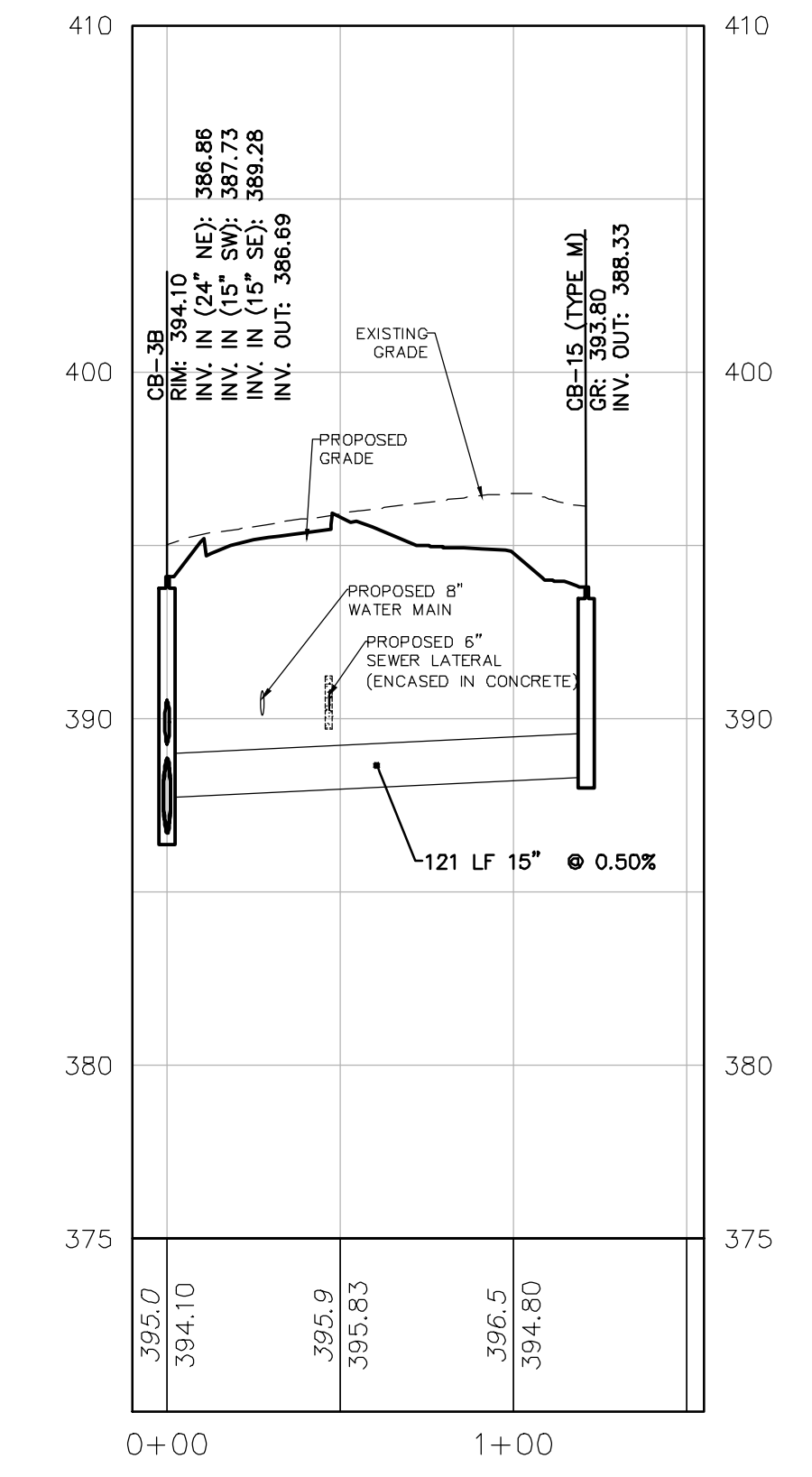
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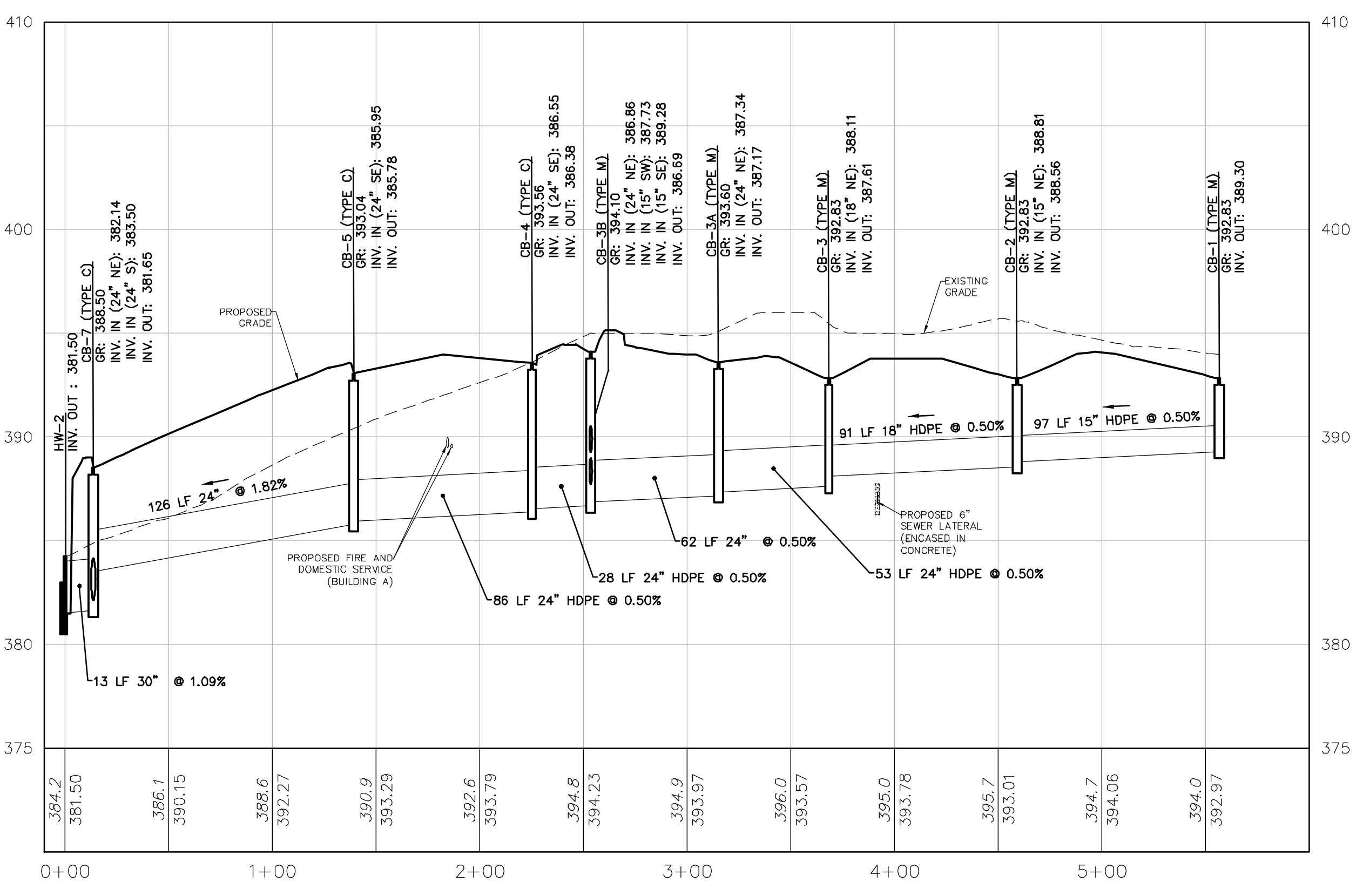
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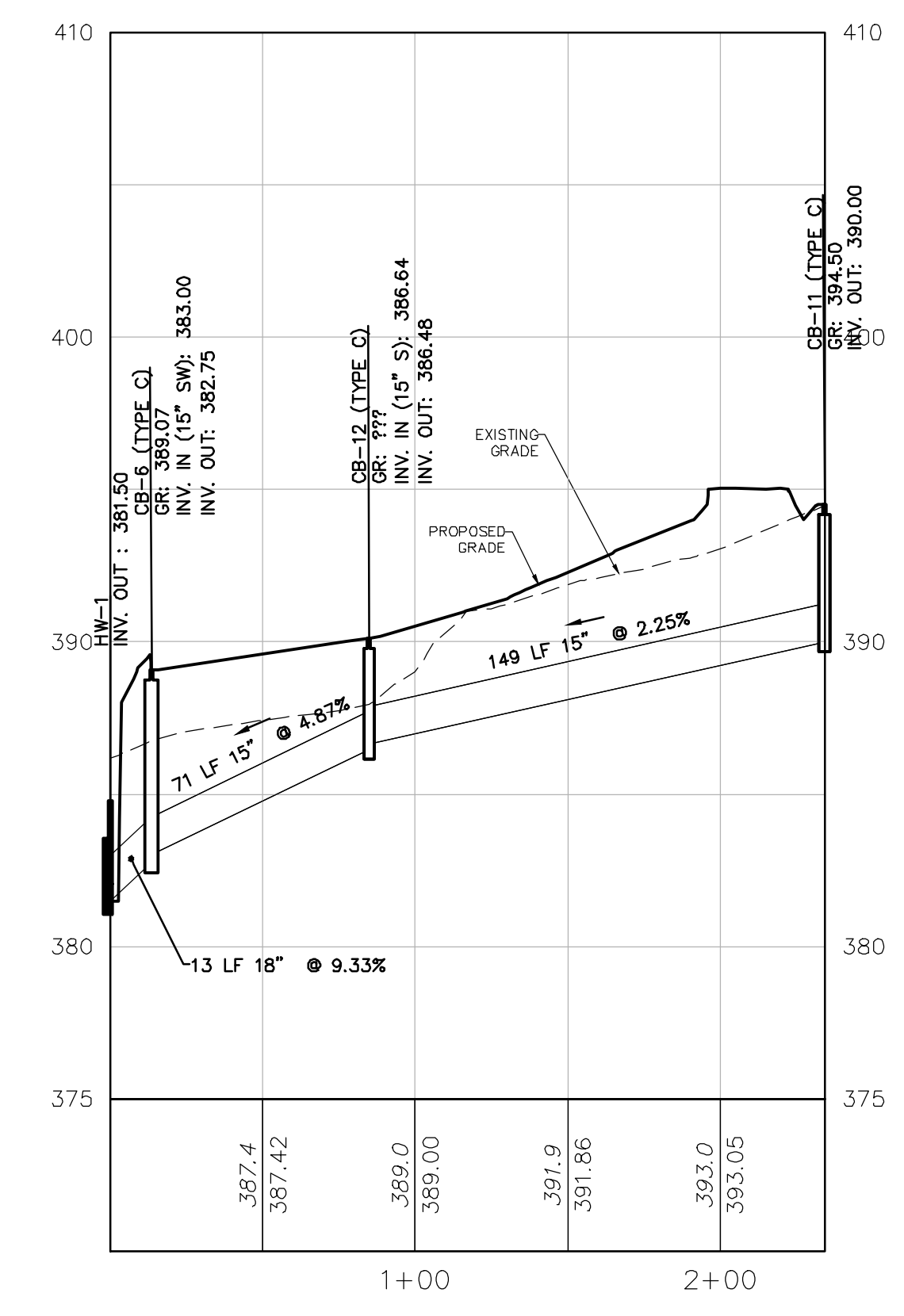
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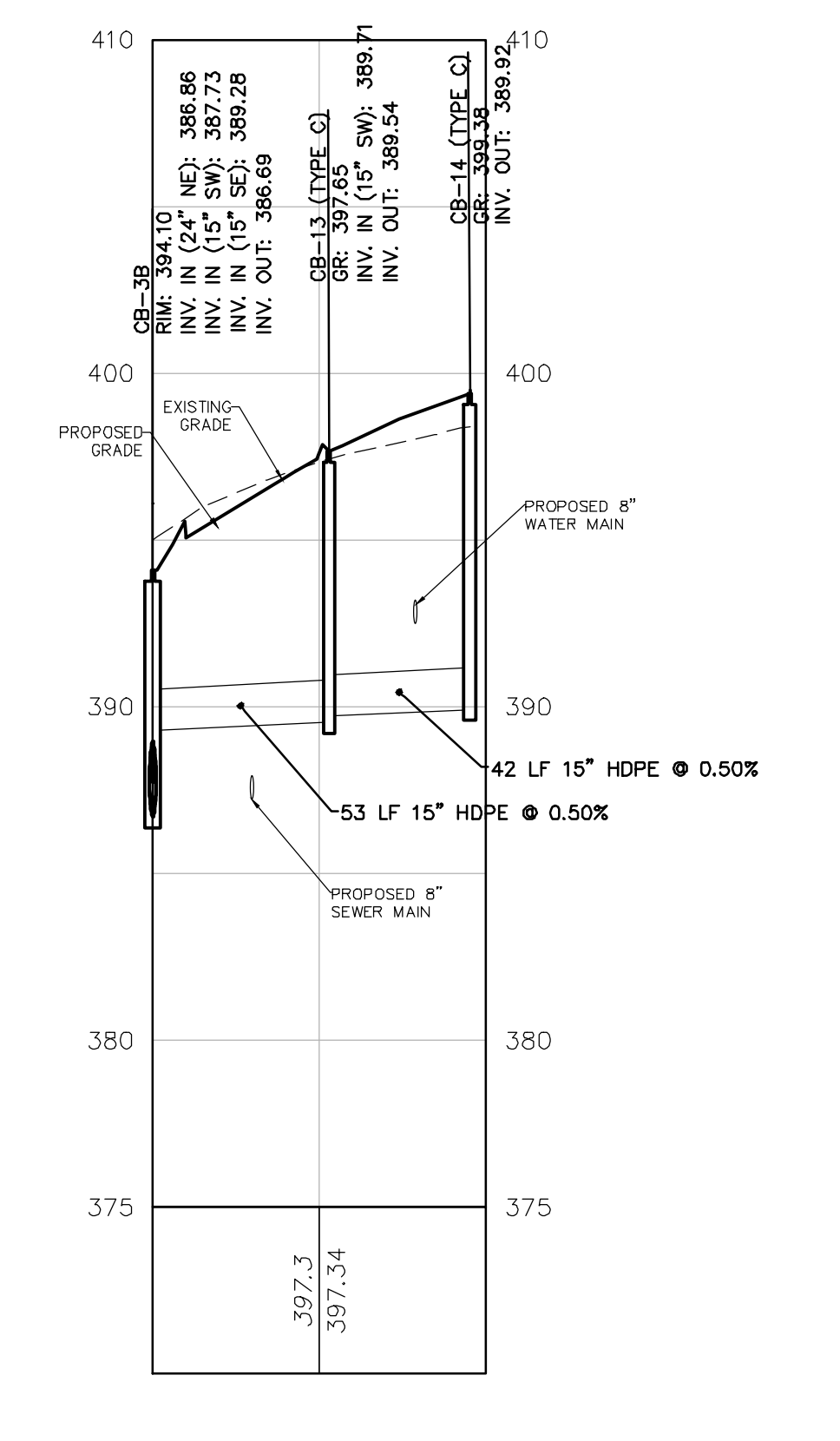
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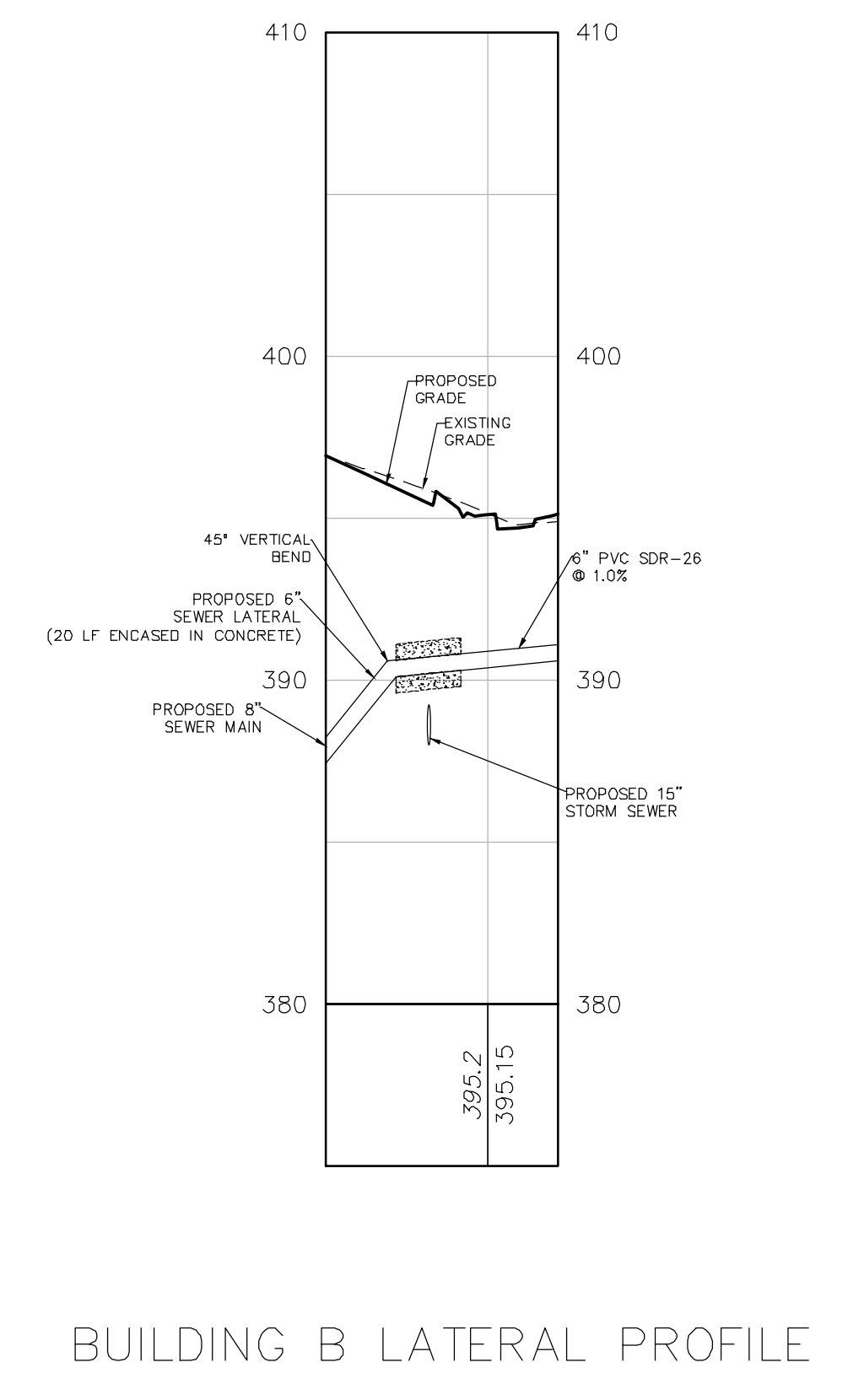
HW-2 TO CB-1 PROFILE



HW-1 TO CB-11 PROFILE



DMH-1 TO CB-14 PROFILE



BUILDING B LATERAL PROFILE

SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL

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REVISIONS	Description	Date
10	REVISED FOR TWP/BCCD COMMENTS	3-17-2022

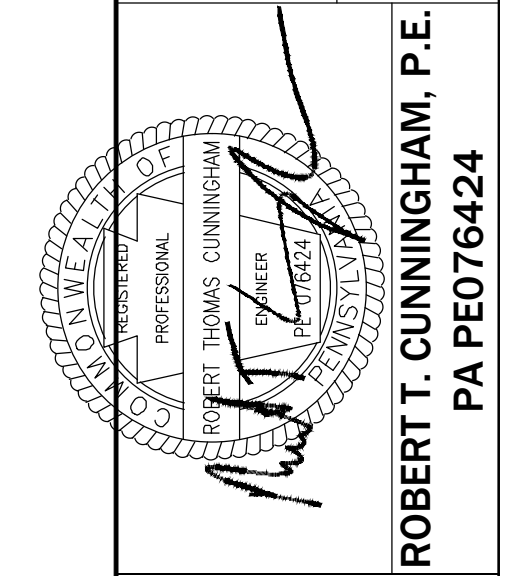
BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

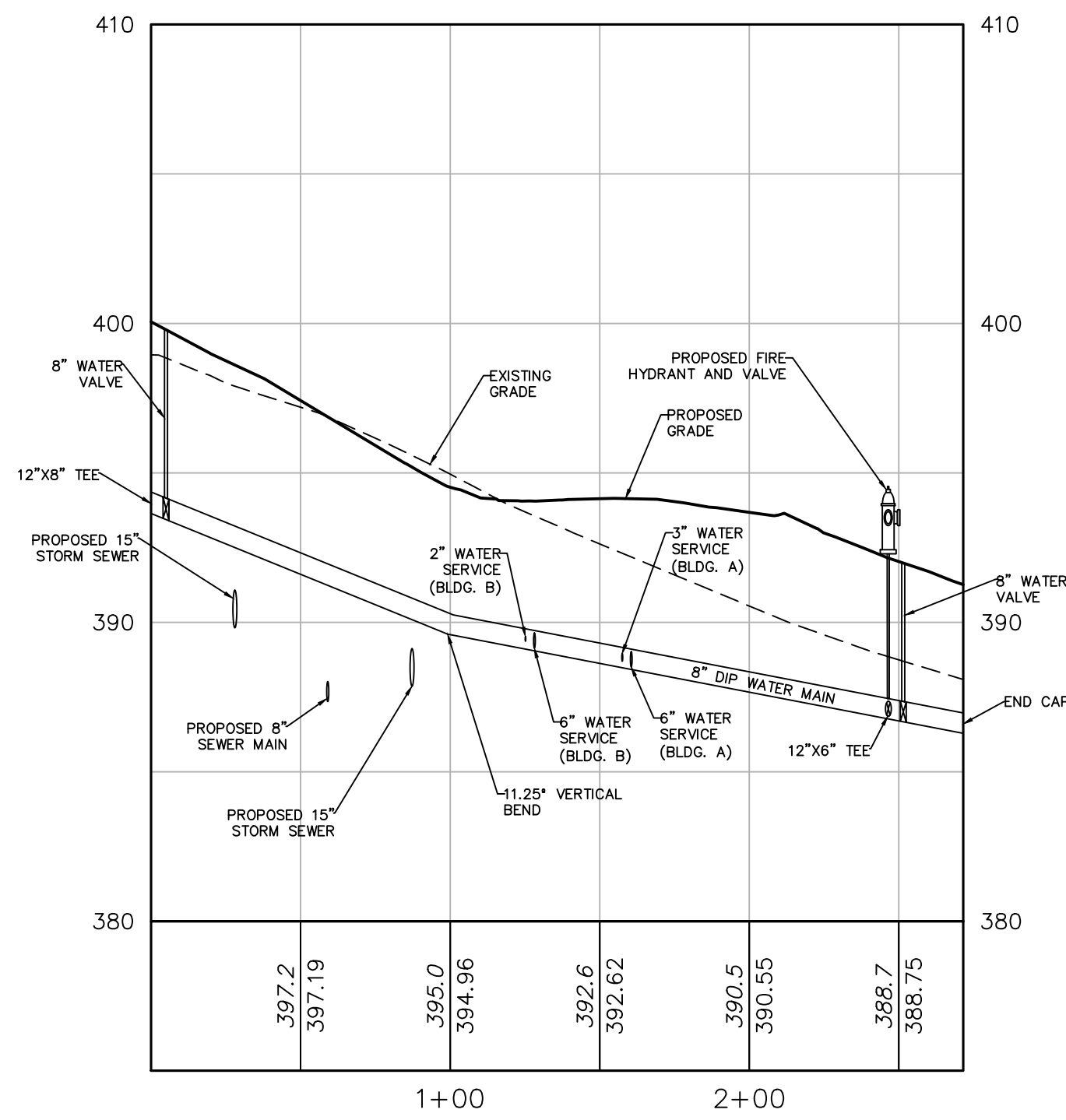
UTILITY PROFILES

File No.
1482_C4.0 Profiles.DWG

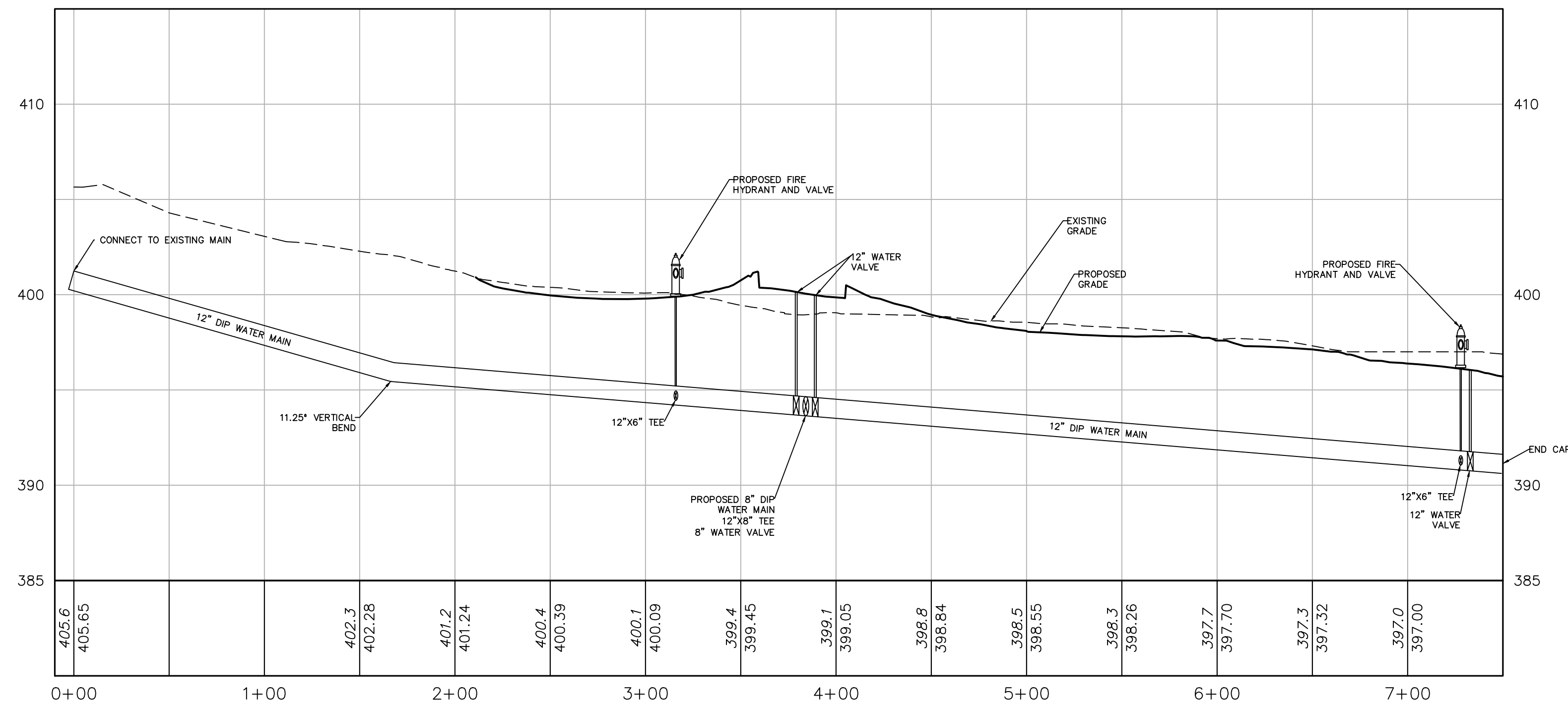
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Date: 11/30/2021
Scale: AS SHOWN
Designed: RC
Sheet: 15 of 25

Drawing No.
C4.0





8-INCH WATER MAIN PROFILE



12-INCH WATER MAIN PROFILE

SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL

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REVISIONS	Description	Date
1	REVISED FOR TWP/BCCD COMMENTS	3-17-2022

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PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PHASE AND UTILITIES DIVISION
STOP & CALL
Pennsylvania One
Call System, Inc.
1-800-942-1776

UTILITY LOCATIONS AS SHOWN ON THIS DRAWING ARE THE PROPERTY OF THE CONTRACTING UTILITY COMPANIES FROM WHOM THEY WERE OBTAINED.

BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

UTILITY PROFILES

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.	1482_C4.0 Profiles.DWG
HCE Job	1482
Date	11/30/2021
Scale	AS SHOWN
Designed	RC
Sheet	16 of 25

Drawing No.
C4.1

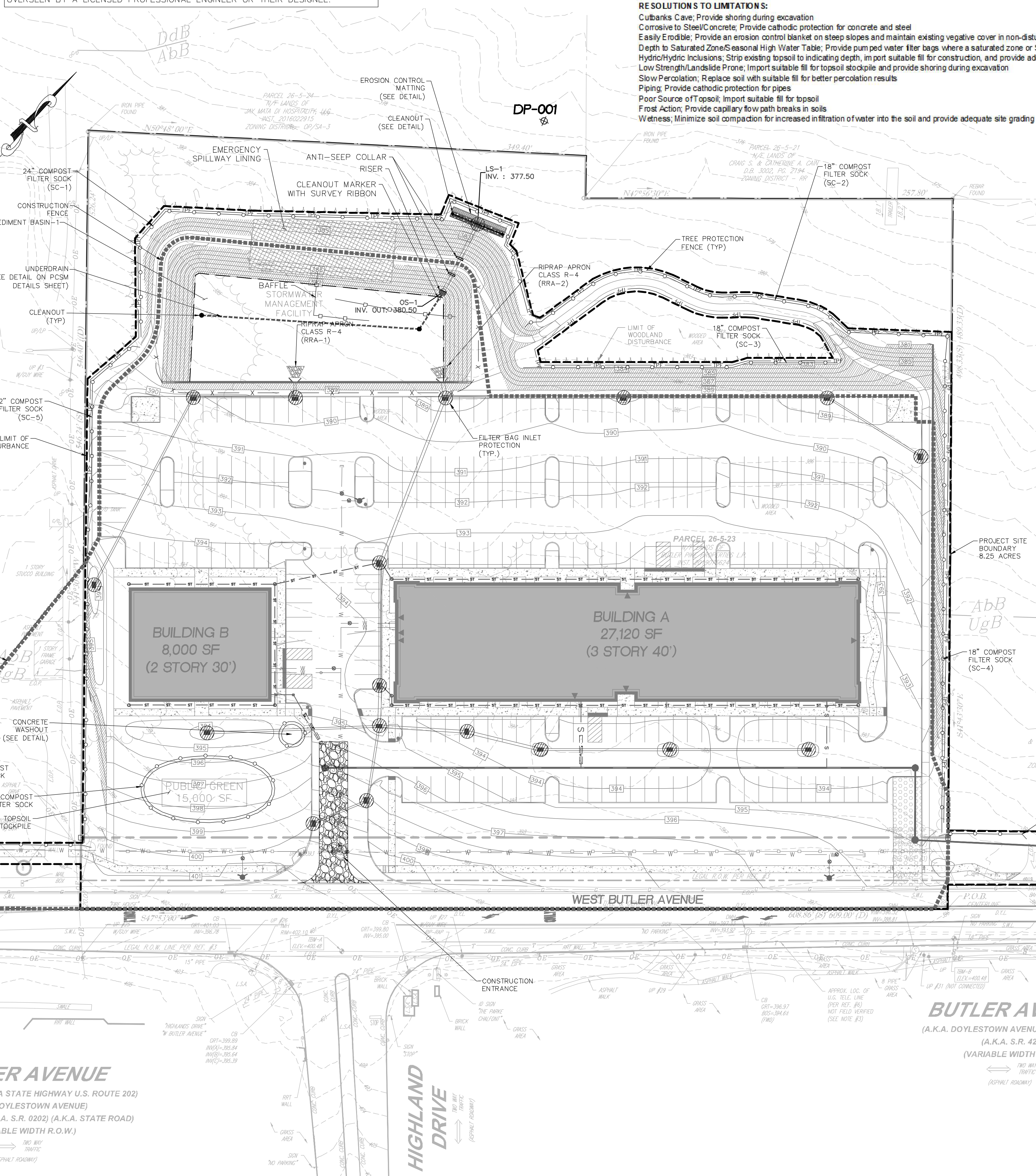
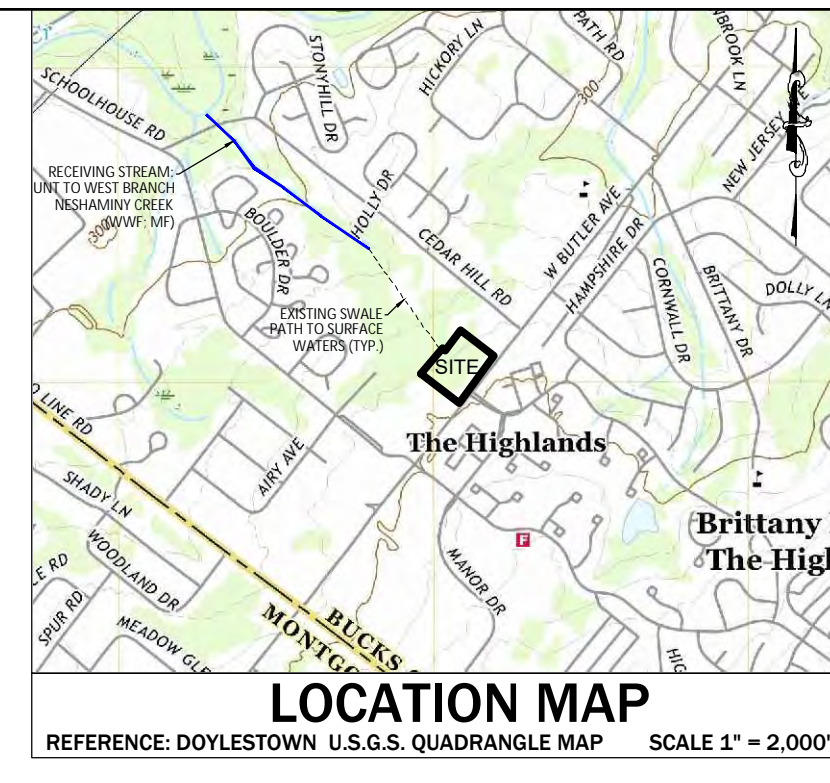
LIMIT OF DISTURBANCE = 6.44 ACRES

PROJECT SITE BOUNDARY = 8.22 ACRES

OWNER/APPLICANT: COUNTY BUILDERS, INC. 76 GRIFFITHS MILES CIRCE P.O. BOX 2579 WARMINSTER, PA 18974

Table with 7 columns: SYM, UNIT NAME, HYDRIC (Y/N), DEPTH TO BEDROCK (IN.), DEPTH TO WATER TABLE (IN.), HSG, FARMLAND CLASSIFICATION. Rows include Abb (Abbotstown silt loam) and UgB (Urban land-Abbotstown complex).

RESOLUTIONS TO LIMITATION: Cutbanks Cave; Provide shoring during excavation; Corrosive to Steel/Concrete; Provide cathodic protection for concrete and steel; Easily Erodible; Provide an erosion control blanket on steep slopes...



- GENERAL NOTES: 1. EXISTING CONDITIONS SHOWN ARE FROM BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC IN FEBRUARY 20, 2020. 2. SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

- SEQUENCE OF CONSTRUCTION NOTES: 1. SITE DEVELOPMENT OPERATIONS SHOULD BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING GENERAL SEQUENCE OF OPERATIONS. THE CONTRACTOR MAY DEVIATE FROM THE STAGING OF PERMANENT SITE IMPROVEMENT CONSTRUCTION ITEMS...

- 1. CONTACT THE BUCKS COUNTY CONSERVATION DISTRICT (215-345-7577), NEW BRITAIN TOWNSHIP, AND THE TOWNSHIP ENGINEER AT LEAST THREE (3) WORKING DAYS PRIOR TO SITE DISTURBANCE. 2. EACH STAGE OF THE SEQUENCE OF CONSTRUCTION MUST BE COMPLETED PRIOR TO INITIATION OF THE NEXT STAGE...

RECYCLING/ DISPOSAL OF MATERIALS: THE CONSTRUCTION WASTES ANTICIPATED INCLUDE DEMOLITION MATERIALS FROM THE BUILDING AND SITE DEMOLITION AND EXCESS BUILDING MATERIAL SUCH AS CONCRETE, WOOD, ETC.

ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS.

SESC LEGEND and UTILITY LEGEND. SESC LEGEND includes symbols for Limit of Disturbance, Project Site Boundary, Compost Filter Sock, Construction Fence, Stabilized Construction Pad, Soil Type Boundary, Soil Type, Filter Bag Inlet Protection, Proposed Contour, Tree Protection Fence, Baffle, Drainage Area to Sediment Trap, Jude Matting, and Landlok TRM-450 Blanket. UTILITY LEGEND includes Existing (Sewer Main, Storm Sewer, Water Gate, Utility Pole, Hydrant, Storm Inlet, Flared End Section, Utility Access Cover, Overhead Electric) and Proposed (Storm Sewer, Yard Inlet, Curb Inlet, Hydrant, Water Gate, Water Main, Water Lateral, Sanitary Sewer Main and Manhole, Sanitary Lateral, Telecommunication & Electric Line).

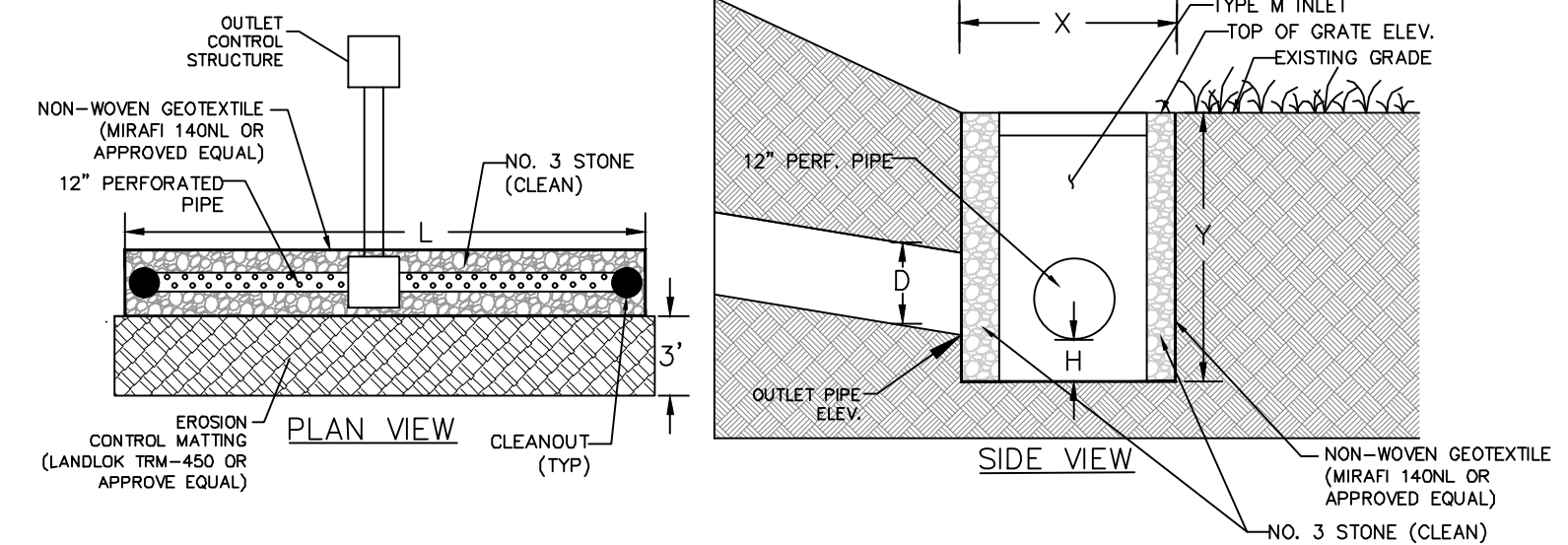
Hoimes Cunningham LLC 409 E. Butler Ave, Unit 5 Doylestown, PA 18901 (215) 586-3330 www.hcengineering.net

REVISIONS table with columns: Description, Date, Revised For. Includes one revision for 'REVISED FOR TWP/BCCD COMMENTS' dated 3-17-2022.

BUTLER AVENUE PROPERTY TWP # 26-005-023 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

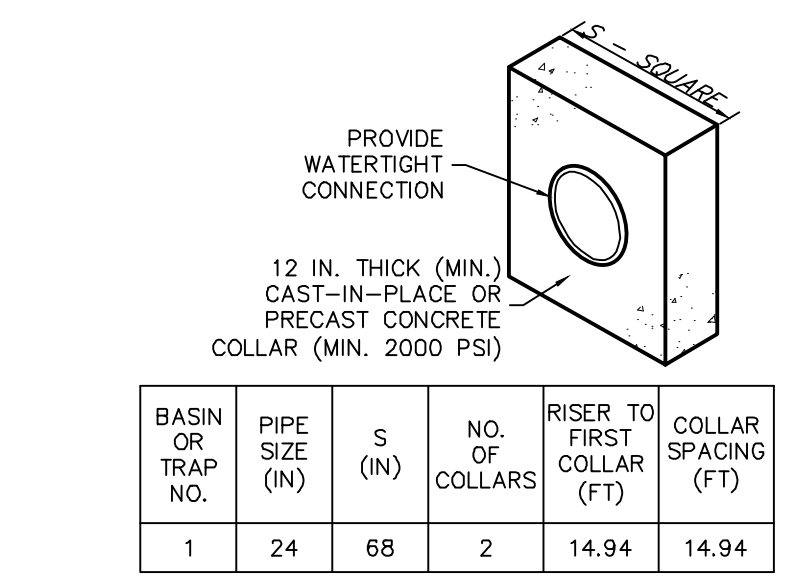
Professional seal for Robert T. Cunningham, P.E., License No. PA PE076424.

File No. 1482 C5.0 E&S.DWG. HCE Job 1482 Date 11/30/2021 Scale 1"=40' Designed RC Sheet 17 of 25. Drawing No. C5.0



OUTFALL #	L (FT)	D (IN)	OUTFALL PIPE ELEV.	TOP OF GRATE ELEV.	H (FT)	Y (FT)	X (FT)	TOP OF STONE ELEV.	BOTTOM OF STONE ELEV.
LS-1	40	24	377.50	380.00	0.50	3.00	4	380.00	377.00

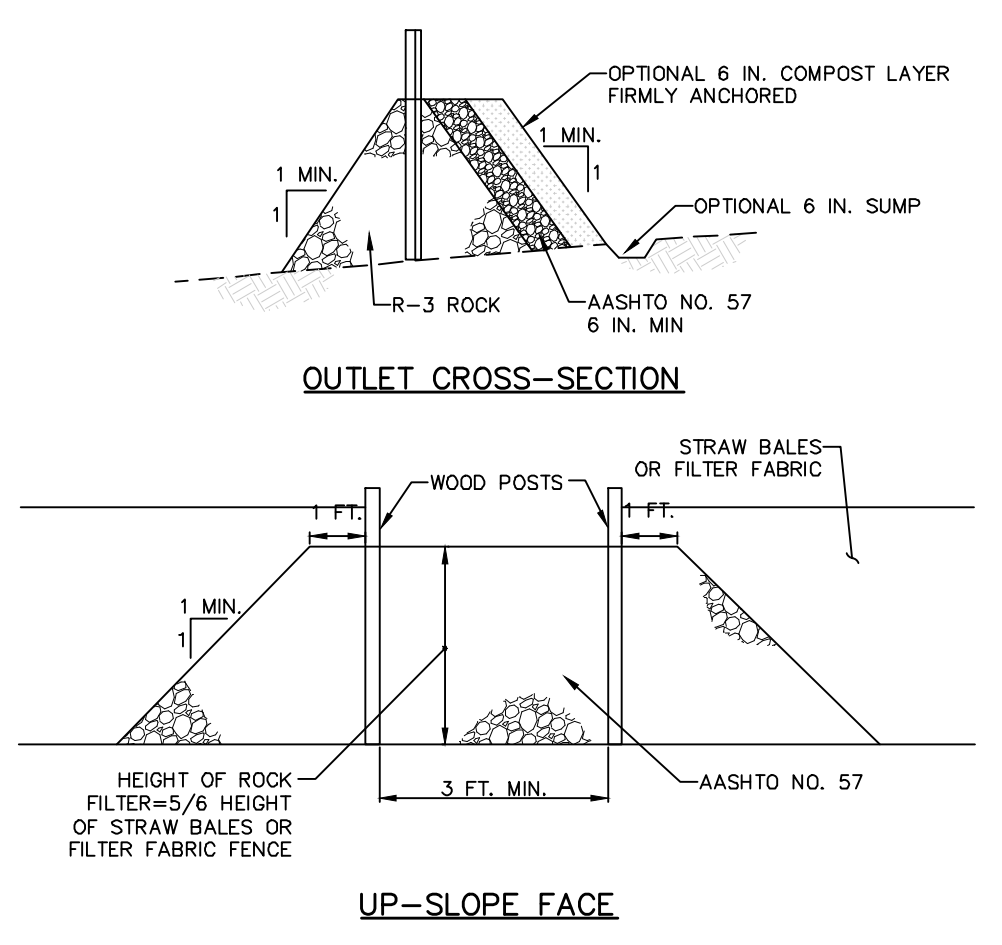
LEVEL SPREADER



- NOTES:**
1. ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATER-TIGHT.
 2. COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

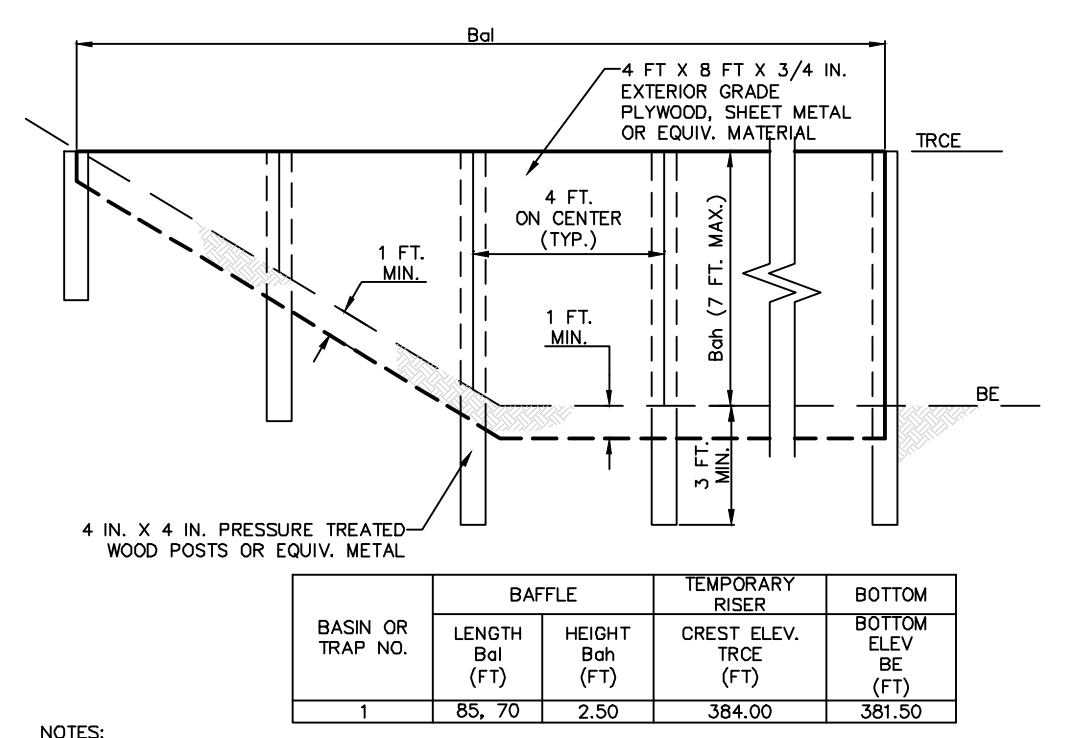
**STANDARD CONSTRUCTION DETAIL #7-16
CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS**

BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISE TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	24	68	2	14.94	14.94



- NOTES:**
- A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.
- SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

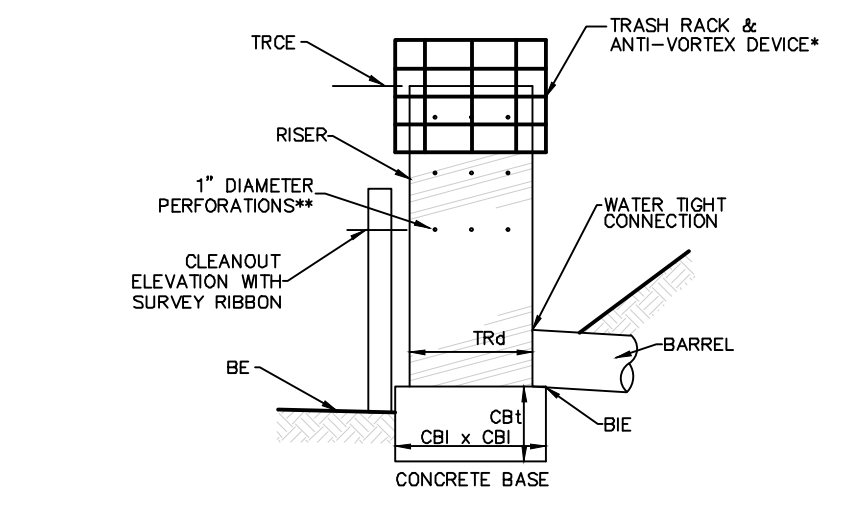
**STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET**



BASIN OR TRAP NO.	BAFFLE LENGTH (FT)	BAFFLE HEIGHT (FT)	TEMPORARY RISER CREST ELEV. (FT)	BOTTOM ELEV. (FT)
1	85.70	2.50	384.00	381.50

- NOTES:**
- SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.
- AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION.
- IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRICE ELEVATION.
- BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.
- SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.
- DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.
- BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

**STANDARD CONSTRUCTION DETAIL #7-14
BAFFLE**

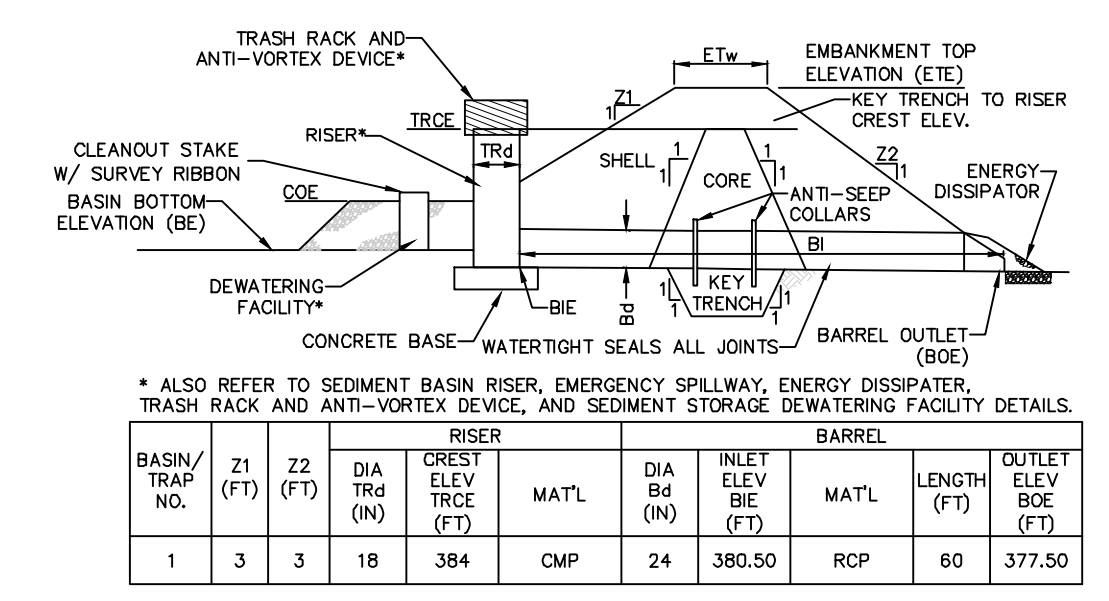


- * SEE STANDARD CONSTRUCTION DETAIL #7-5, TRASH RACK AND ANTI-VORTEX DEVICE
- ** LOWEST ROW OF HOLES AT SEDIMENT CLEAN-OUT ELEVATION

BASIN NO.	DIA TRD (IN)	RISE CREST ELEV TRICE (FT)	MAT'L	LOWEST ROW OF HOLES ELEV (FT)	PERF. NO. ROWS**	NO. HOLES PER ROW	VERT. SPACING OF ROWS (FT)	CONCRETE BASE LENGTH AND WIDTH CBI (IN)	THICKNESS CBI (IN)	BARREL INLET ELEV BE (FT)
1	18	384	CMP	382.75	2	4	.42	36	12	380.50

- NOTES:**
- A MINIMUM OF 2-#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.
- CONCRETE BASE SHALL BE FOUNDED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE LOWEST PERMANENT INVERT PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.
- EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.
- CLOSED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.
- SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN SEDIMENT HAS ACCUMULATED TO THE PROPOSED SURVEY RIBBON ELEVATION ON THE CLEANOUT STAKE. SEDIMENT MUST BE DISPOSED OF IN ACCORDANCE WITH REQUIREMENTS ON THE E&S PLAN.
- ALL PERMANENT ORIFICES OF THE PROPOSED OUTLET STRUCTURE SHALL BE BLOCKED AND SEALED WITH MARINE-GRADE PLYWOOD AND EPOXY OR GROUTED. TEMPORARY OUTLET HOLES SHALL BE DRILLED PRIOR TO INSTALLATION OF THE SEDIMENT BASIN, AND SHALL BE PERMANENTLY SEALED WITH GROUT OR EPOXY UPON CONVERSION OF THE BASIN TO A PERMANENT STORMWATER FACILITY. RISER CREST ELEVATION MAY BE ACHIEVED BY ADDING ENCLOSED A MARINE-GRADE PLYWOOD BOX AROUND THE OUTLET STRUCTURE, OR A CONCRETE RISER MAY BE ADDED TO THE TOP OF THE BOX.

**STANDARD CONSTRUCTION DETAIL #7-7
SEDIMENT BASIN RISER AND CLEANOUT**

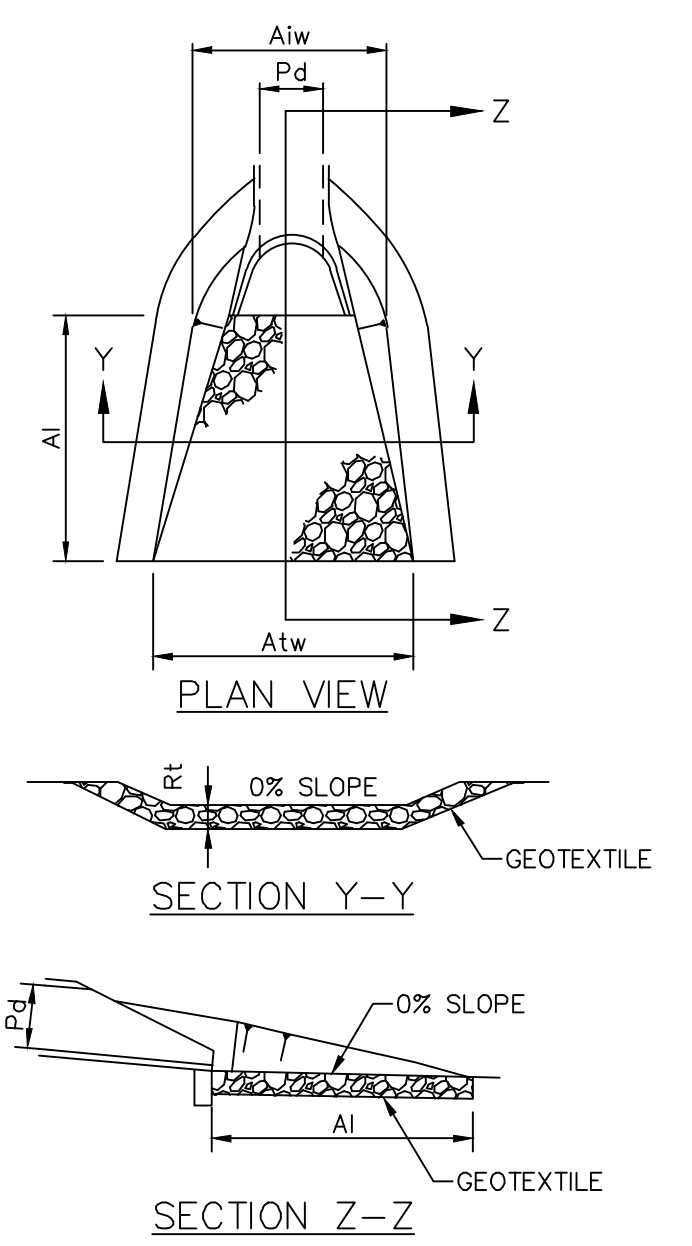


BASIN/ TRAP NO.	Z1 (FT)	Z2 (FT)	DIA TRD (IN)	RISE CREST ELEV TRICE (FT)	MAT'L	INLET ELEV BE (FT)	BARREL INLET ELEV BE (FT)	OUTLET ELEV BOE (FT)
1	3	3	18	384	CMP	24	380.50	377.50

TOP ELEV ETE (FT)	EMBANKMENT WIDTH ETW (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)	CLEANOUT ELEV COE (FT)	BOTTOM ELEV BE (FT)
388	10	2.0	4.0	382.75	381.50

- NOTES:**
- SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.
- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 8 IN. IN THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.
- ACCESS SHALL BE PROVIDED FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES.
- A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.
- INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. CHECK BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7-16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.
- ALL BASIN EMBANKMENTS SHOULD BE COMPACTED BY SHEEPSFOOT OR PAD ROLLER. THE LOOSE LIFT THICKNESS SHOULD BE 9 INCHES OR LESS, DEPENDING ON ROLLER SIZE, AND THE MAXIMUM PARTICLE SIZE IS 6 INCHES OR LESS. FIVE PASSES OF THE COMPACTION EQUIPMENT OVER THE ENTIRE SURFACE OF EACH LIFT IS REQUIRED. EMBANKMENT COMPACTION TO VISIBLE NON-MOVEMENT IS ALSO REQUIRED.

**STANDARD CONSTRUCTION DETAIL #7-6
SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS
PERFORATED RISER**



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP			INITIAL WIDTH A1w (FT)	TERMINAL WIDTH A3w (FT)
		SIZE R--	THICK. Rt (IN)	LENGTH A1 (FT)		
RRA-1	18	4	18	8	4.5	12.50
RRA-2	30	4	18	16	7.5	23.5

- NOTES:**
- ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
- ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

**STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL**

Holmes Cunningham LLC
409 E. Butler Ave.
Unit 5
Doylestown, PA 18901
(215) 586-3330
www.hcengineering.net

REVISIONS	Description	Date
3-17-2022	REVISED FOR TWP/RCCD COMMENTS	

BUTLER AVENUE PROPERTY
TWP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

EROSION AND SEDIMENT CONTROL DETAILS

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.	1482_C5.0_E&S.DWG
HCE Job	4482
Date	11/30/2021
Scale	AS SHOWN
Designed	RC
Sheet	19 of 25
Drawing No.	C5.2

- GENERAL NOTES**
- EXISTING CONDITIONS SHOWN ARE FROM BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC IN FEBRUARY 20, 2020.
 - SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
 - UNDER PENNSYLVANIA LAW THE CONTRACTOR IS REQUIRED TO NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM AT 1-800-242-1776 PRIOR TO THE START OF HIS WORK, SO THAT ALL THE VARIOUS UNDERGROUND UTILITY OPERATORS WILL BE ABLE TO LOCATE THEIR OWN UTILITIES.
 - THERE ARE NO HO OR EV WATERSHEDS LOCATED WITHIN THE PROJECT AREA.
 - THERE ARE NO RIPARIAN BUFFERS EXISTING OR PROPOSED AS PART OF THIS PROJECT (WITHIN OR OUTSIDE THE LIMIT OF DISTURBANCE). ADDITIONALLY, RIPARIAN BUFFER OFFSETS ARE NOT NECESSARY.
 - THERE ARE NO WETLANDS WITHIN THE PROJECT AREA.
 - THERE ARE NO INFILTRATION BMPs LOCATED OUTSIDE PROPOSED GRADING AREAS.
 - THE EXISTING SITE IS NOT UNDERLAIN BY ANY NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS WHICH COULD CAUSE POLLUTION DURING EARTH DISTURBANCE. THEREFORE, NO LOCATIONS ARE IDENTIFIED ON THIS PLAN AND NO DETAILS ARE PROVIDED FOR DISPOSAL OF SUCH MATERIAL.

MINIMIZE IMPERVIOUS AREAS
 THE PROJECT HAS LIMITED IMPERVIOUS AREAS PROPOSED TO THE MAXIMUM EXTENT POSSIBLE. THE SITE PLAN HAS CLUSTERED THE DEVELOPMENT TO REDUCE THE EXTENT OF PROPOSED ROADWAYS AND THE DRIVEWAYS ARE THE MINIMUM ACCEPTABLE LENGTH.

PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION
 THE LIMIT OF DISTURBANCE IS MINIMIZED TO REDUCE THE DISTURBANCE TO THE EXISTING FEATURES. THE EXISTING VEGETATION AROUND THE PERIMETER OF THE SITE IS TO REMAIN TO THE MAXIMUM EXTENT POSSIBLE. THERE IS NO PROPOSED DISTURBANCE TO DRAINAGE FEATURES.

MINIMIZE LAND CLEARING
 THE PROJECT HAS LIMITED THE SOIL DISTURBANCE AREA TO THE MAXIMUM EXTENT POSSIBLE AND LAND CLEARING IS LIMITED TO THE AREAS SHOWN ON THE PLAN.

STRUCTURAL AND NON-STRUCTURAL BMPs TO DECREASE STORMWATER RUNOFF
 RE-VEGETATE DISTURBED AREAS: ALL DISTURBED AREAS WILL BE PERMANENTLY SEEDED OR LANDSCAPED. ADDITIONALLY, NEW TREES WILL BE PLANTED THROUGHOUT THE SITE TO REDUCE THE THERMAL IMPACTS OF IMPERVIOUS SURFACES AND REDUCE RUNOFF VOLUME THROUGH TRANSPIRATION.

RECYCLING/ DISPOSAL OF MATERIALS
 THE CONSTRUCTION WASTES ANTICIPATED INCLUDE DEMOLITION MATERIALS FROM THE BUILDING AND SITE DEMOLITION AND EXCESS BUILDING MATERIAL SUCH AS CONCRETE, WOOD, ETC.

ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

EXISTING		PROPOSED	
— S —	SEWER MAIN	— SW —	STORM SEWER
— ST —	STORM SEWER	— YI —	YARD INLET
— W —	WATER GATE	— CI —	CURB INLET
— U —	UTILITY POLE	— H —	HYDRANT
— H —	HYDRANT	— WG —	WATER GATE
— SI —	STORM INLET	— W —	WATER MAIN
— FE —	FLARED END SECTION	— WL —	WATER LATERAL
— UC —	UTILITY ACCESS COVER	— SSM —	SANITARY SEWER MAIN AND MANHOLE
— OE —	OVERHEAD ELECTRIC	— SL —	SANITARY LATERAL
		— T&E —	TELECOMMUNICATION & ELECTRIC LINE

APPLICANT'S ACKNOWLEDGEMENT
 I, _____, ACKNOWLEDGE THAT STORMWATER FACILITIES AND BMPs ARE FIXTURES THAT CAN ONLY BE ALTERED AND REMOVED AFTER APPROVAL BY THE MUNICIPALITY AND SUBMISSION OF A REVISED E&S PLAN TO THE CONSERVATION DISTRICT.

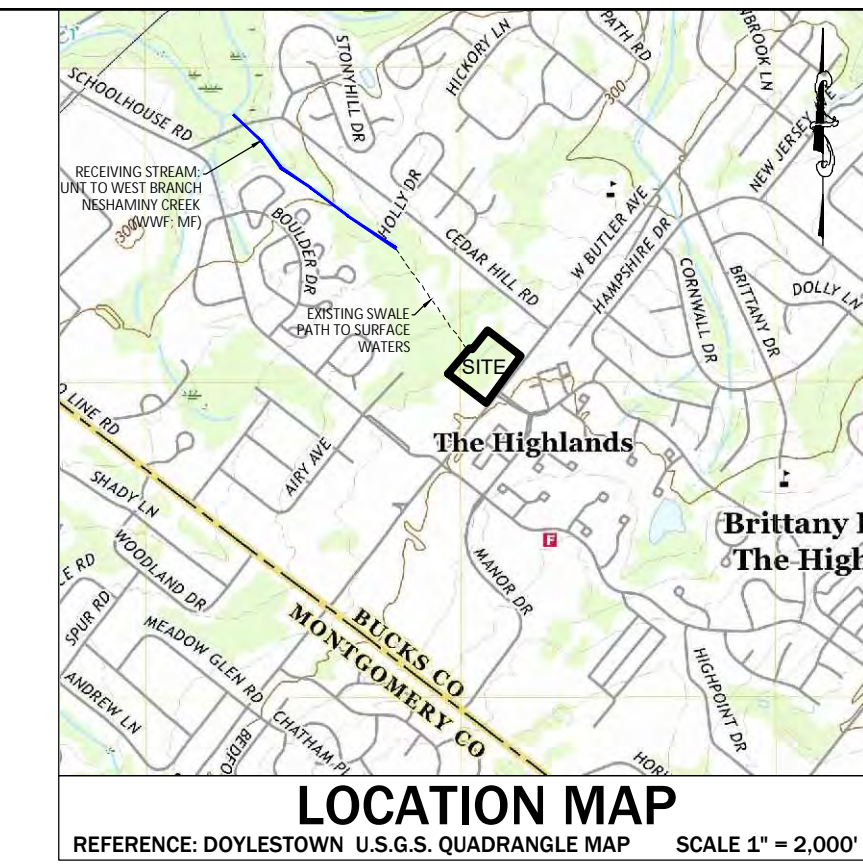
LIMIT OF DISTURBANCE = 6.44 ACRES

PROJECT SITE BOUNDARY = 8.22 ACRES

CRITICAL STAGES OF PCSM PLAN IMPLEMENTATION
 THE INSTALLATION AND/OR CONVERSION OF EROSION CONTROL FACILITIES TO STORMWATER FACILITIES, INCLUDING THE INFILTRATION BASIN WITH MRC, SHALL BE OVERSEEN BY A LICENSED PROFESSIONAL ENGINEER OR THEIR DESIGNEE.

SOIL TYPES						
SYM	UNIT NAME	HYDRIC (Y/N)	DEPTH TO BEDROCK (IN.)	DEPTH TO WATER TABLE (IN.)	HSG	FARMLAND CLASSIFICATION
AbB	Abbottstown silt loam, 3 to 8 percent slopes	N	40-60	6-18	D	Statewide Importance
UgB	Urban land-Abbottstown complex, 0 to 8 percent slopes	N	40-60	6-18	D	Not Prime Farmland

RESOLUTIONS TO LIMITATIONS:
 Cutbanks Cave: Provide shoring during excavation
 Corrosive to Steel/Concrete: Provide cathodic protection for concrete and steel
 Easily Erodible: Provide an erosion control blanket on steep slopes and maintain existing vegetative cover in non-disturbed areas
 Depth to Saturated Zone/Seasonal High Water Table: Provide pump and water filter bags where a saturated zone or SHWT is encountered
 Hydric/Hydric Inclusions: Strip existing topsoil to indicating depth, import suitable fill for construction, and provide adequate site grading
 Low Strength/Landslide Prone: Import suitable fill for topsoil stockpile and provide shoring during excavation
 Slow Percolation: Replace soil with suitable fill for better percolation results
 Piping: Provide cathodic protection for pipes
 Poor Source of Topsoil: Import suitable fill for topsoil
 Frost Action: Provide capillary flow path breaks in soils
 Wetness: Minimize soil compaction for increased infiltration of water into the soil and provide adequate site grading



OWNER/APPLICANT:
 BUTLER PIKE PROPERTIES, LP
 76 GRIFFITHS MILES CIRCE
 P.O. BOX 2579
 WARMINSTER, PA 18974

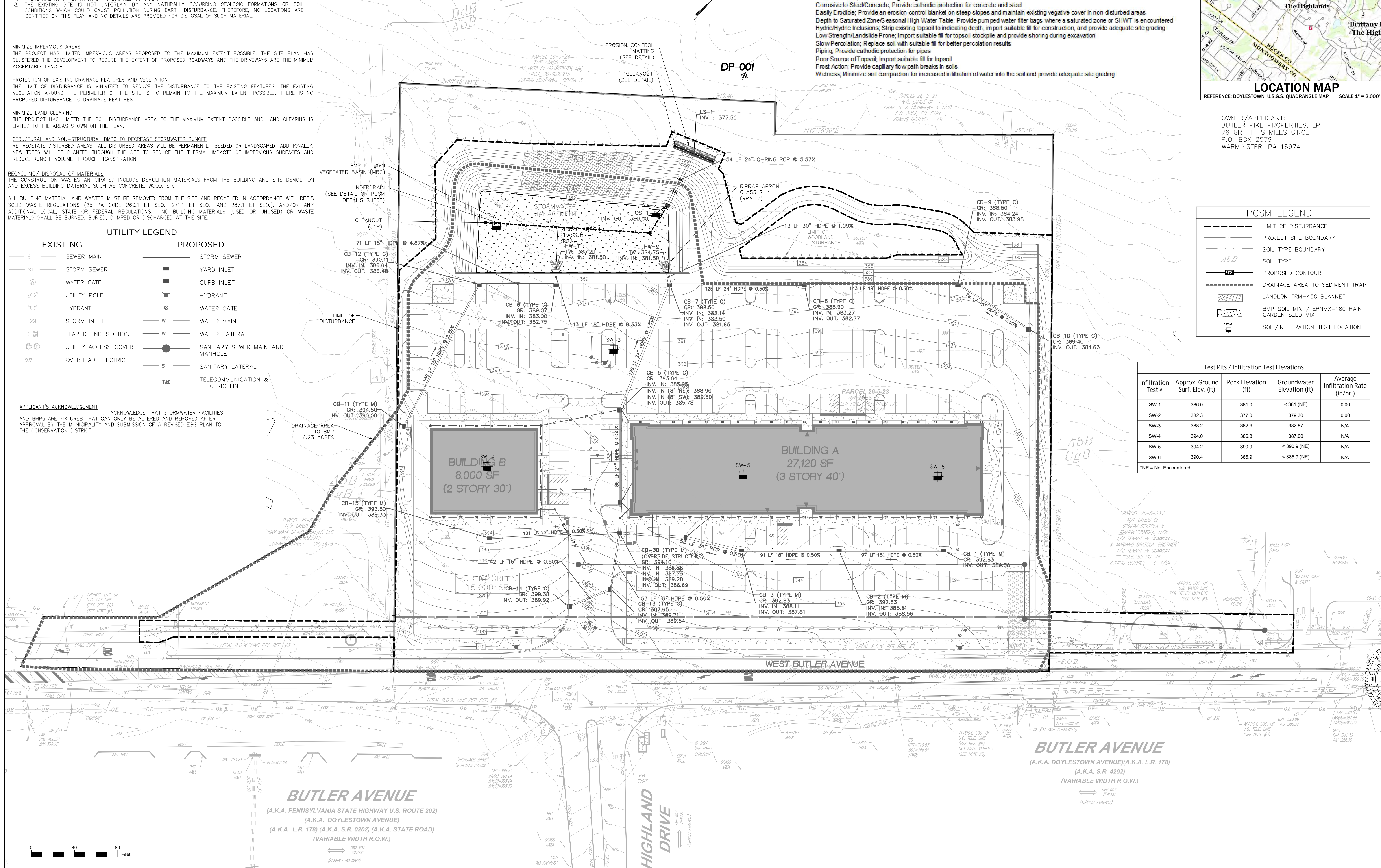
PCSM LEGEND

- LIMIT OF DISTURBANCE
- PROJECT SITE BOUNDARY
- SOIL TYPE BOUNDARY
- SOIL TYPE
- PROPOSED CONTOUR
- DRAINAGE AREA TO SEDIMENT TRAP
- LANDLOK TRM-450 BLANKET
- BMP SOIL MIX / ERNMX-180 RAIN GARDEN SEED MIX
- SW-1 SOIL/INFILTRATION TEST LOCATION

Test Pits / Infiltration Test Elevations

Infiltration Test #	Approx. Ground Surf. Elev. (ft)	Rock Elevation (ft)	Groundwater Elevation (ft)	Average Infiltration Rate (in/hr.)
SW-1	386.0	381.0	< 381 (NE)	0.00
SW-2	382.3	377.0	379.30	0.00
SW-3	388.2	382.6	382.87	N/A
SW-4	394.0	386.8	387.00	N/A
SW-5	394.2	390.9	< 390.9 (NE)	N/A
SW-6	390.4	385.9	< 385.9 (NE)	N/A

*NE = Not Encountered



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 409 E. Butler Ave,
 Unit 5
 Doylestown, PA 18901
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 www.hcengineering.net

REVISIONS

Date	Description
3-17-2022	REVISED FOR TWP/BCCD COMMENTS

CALL BEFORE YOU DIG!!
 THIS IS A PRELIMINARY PLAN AND NOT A CONSTRUCTION PERMIT AND NOT TO BE USED FOR CONSTRUCTION WITHOUT THE APPROVAL OF THE TWP/BCCD. THE RESPONSIBILITY OF THE CONTRACTOR IS TO VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY EXCAVATION.

BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

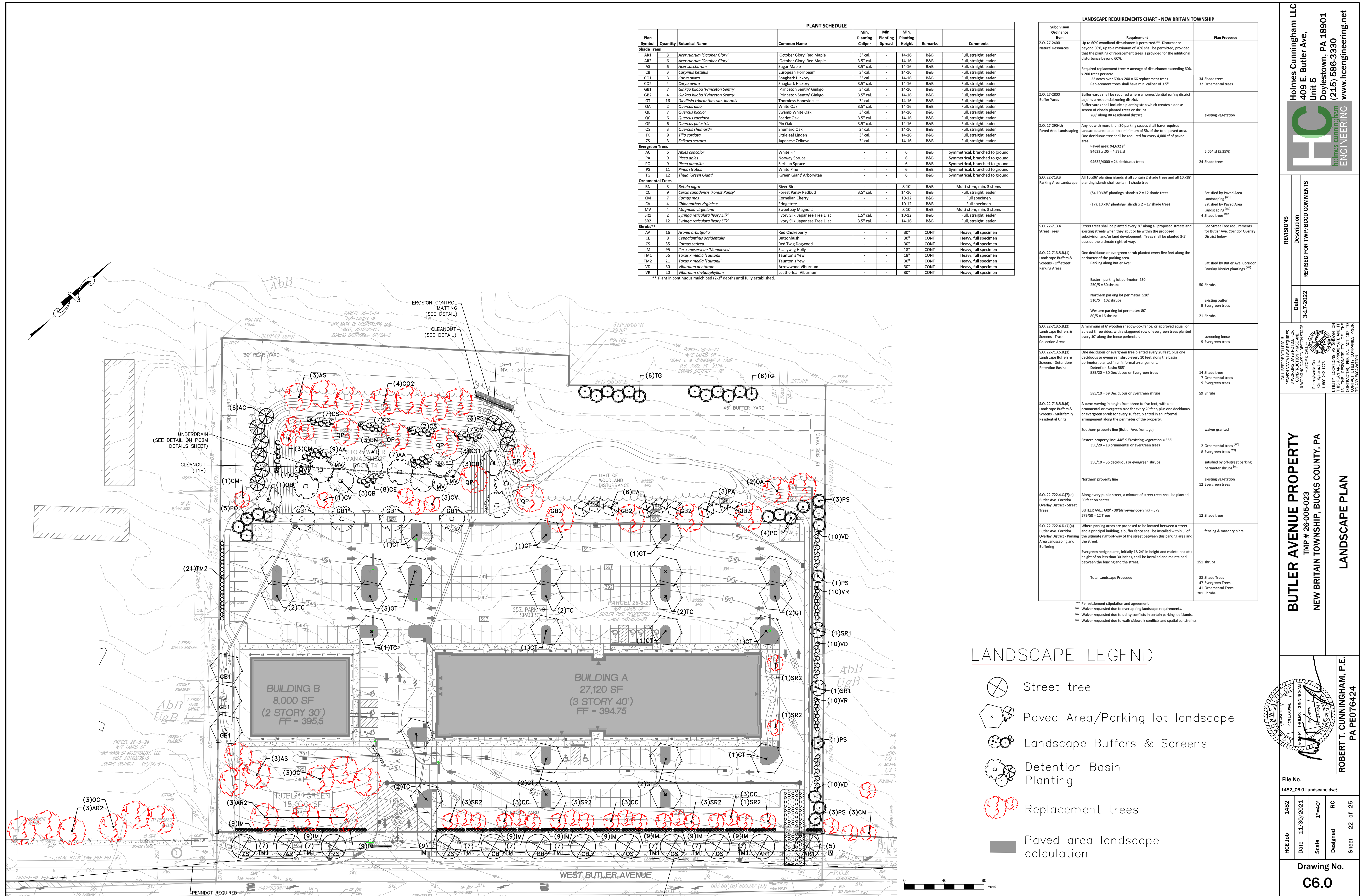
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

File No. 1482
 1482_C5.3_PCSM.DWG

HCE Job 1482
 Date 11/30/2021
 Scale 1"=40'
 Designed RC
 Sheet 20 of 25

Drawing No. **C5.3**

PROFESSIONAL ENGINEER
 ROBERT T. CUNNINGHAM, P.E.
 PA PE076424



PLANT SCHEDULE								
Plan Symbol	Quantity	Botanical Name	Common Name	Min. Planting Caliper	Min. Planting Spread	Min. Planting Height	Remarks	Comments
Shade Trees								
AR1	3	<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple	3" cal.	-	14-16'	B&B	Full, straight leader
AR2	6	<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple	3.5" cal.	-	14-16'	B&B	Full, straight leader
AS	6	<i>Acer saccharum</i>	Sugar Maple	3.5" cal.	-	14-16'	B&B	Full, straight leader
CB	3	<i>Carpinus betulus</i>	European Hornbeam	3" cal.	-	14-16'	B&B	Full, straight leader
CO1	3	<i>Carya ovata</i>	Shagbark Hickory	3" cal.	-	14-16'	B&B	Full, straight leader
CO2	4	<i>Carya ovata</i>	Shagbark Hickory	3.5" cal.	-	14-16'	B&B	Full, straight leader
GB1	7	<i>Ginkgo biloba</i> 'Princeton Sentry'	Princeton Sentry Ginkgo	3" cal.	-	14-16'	B&B	Full, straight leader
GB2	4	<i>Ginkgo biloba</i> 'Princeton Sentry'	Princeton Sentry Ginkgo	3.5" cal.	-	14-16'	B&B	Full, straight leader
GT	16	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Honeylocust	3" cal.	-	14-16'	B&B	Full, straight leader
QA	2	<i>Quercus alba</i>	White Oak	3.5" cal.	-	14-16'	B&B	Full, straight leader
QB	7	<i>Quercus bicolor</i>	Swamp White Oak	3" cal.	-	14-16'	B&B	Full, straight leader
QC	6	<i>Quercus coccinea</i>	Scarlet Oak	3.5" cal.	-	14-16'	B&B	Full, straight leader
QP	6	<i>Quercus palustris</i>	Pin Oak	3.5" cal.	-	14-16'	B&B	Full, straight leader
QS	3	<i>Quercus shumardii</i>	Shumard Oak	3" cal.	-	14-16'	B&B	Full, straight leader
TC	9	<i>Tilia cordata</i>	Littleleaf Linden	3" cal.	-	14-16'	B&B	Full, straight leader
ZS	3	<i>Zelkova serrata</i>	Japanese Zelkova	3" cal.	-	14-16'	B&B	Full, straight leader
Evergreen Trees								
AC	6	<i>Abies concolor</i>	White Fir	-	-	6'	B&B	Symmetrical, branched to ground
PA	9	<i>Picea abies</i>	Norway Spruce	-	-	6'	B&B	Symmetrical, branched to ground
PD	9	<i>Picea canadensis</i>	Serbian Spruce	-	-	6'	B&B	Symmetrical, branched to ground
PS	11	<i>Pinus strobus</i>	White Pine	-	-	6'	B&B	Symmetrical, branched to ground
TG	12	<i>Thuja 'Green Giant'</i>	'Green Giant' Arborvitae	-	-	6'	B&B	Symmetrical, branched to ground
Ornamental Trees								
BN	3	<i>Betula nigra</i>	River Birch	-	-	8-10'	B&B	Multi-stem, min. 3 stems
CC	9	<i>Cercis canadensis</i> 'Forest Pansy'	Forest Pansy Redbud	3.5" cal.	-	14-16'	B&B	Full, straight leader
CM	7	<i>Cornus mas</i>	Cornelian Cherry	-	-	10-12'	B&B	Full specimen
CV	4	<i>Chionanthus virginicus</i>	Fringetree	-	-	10-12'	B&B	Full specimen
MV	4	<i>Magnolia virginiana</i>	Sweetbay Magnolia	8-10'	-	B&B	Multi-stem, min. 3 stems	
SR1	2	<i>Syringa reticulata</i> 'Ivory Silk'	'Ivory Silk' Japanese Tree Lilac	1.5" cal.	-	10-12'	B&B	Full, straight leader
SR2	12	<i>Syringa reticulata</i> 'Ivory Silk'	'Ivory Silk' Japanese Tree Lilac	3.5" cal.	-	14-16'	B&B	Full, straight leader
Shrubs**								
AA	16	<i>Aronia arbutifolia</i>	Red Chokeberry	-	-	30"	CONT	Heavy, full specimen
CE	8	<i>Cephalanthus occidentalis</i>	Buttonbush	-	-	30"	CONT	Heavy, full specimen
CS	35	<i>Cornus sericea</i>	Red Twig Dogwood	-	-	30"	CONT	Heavy, full specimen
IM	95	<i>Ilex x meserveae</i> 'Monieus'	Scallywag Holly	-	-	18"	CONT	Heavy, full specimen
TM1	56	<i>Taxus x media</i> 'Tautoni'	Taunton's Yew	-	-	18"	CONT	Heavy, full specimen
TM2	21	<i>Taxus x media</i> 'Tautoni'	Taunton's Yew	-	-	30"	CONT	Heavy, full specimen
VD	30	<i>Viburnum dentatum</i>	Arrowwood Viburnum	-	-	30"	CONT	Heavy, full specimen
VR	20	<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum	-	-	30"	CONT	Heavy, full specimen

** Plant in continuous mulch bed (2-3" depth) until fully established.

LANDSCAPE REQUIREMENTS CHART - NEW BRITAIN TOWNSHIP		
Subdivision Ordinance	Requirement	Plan Proposed
Z.O. 27-2400 Natural Resources	Up to 60% woodland disturbance is permitted. Disturbance beyond 60% up to a maximum of 70% shall be permitted, provided that the planting of replacement trees is provided for the additional disturbance beyond 60%. Required replacement trees = acreage of disturbance exceeding 60% x 200 trees per acre. 33 acres over 60% x 200 = 66 replacement trees Replacement trees shall have min. caliper of 3.5"	34 Shade Trees 32 Ornamental trees
Z.O. 27-2800 Buffer Yards	Buffer yards shall be required where a nonresidential zoning district adjoins a residential zoning district. Buffer yards shall include a planting strip which creates a dense screen of closely planted trees or shrubs. 28' along RR residential district	existing vegetation
Z.O. 27-2904.h Paved Area Landscaping	Any lot with more than 30 parking spaces shall have required landscape area equal to a minimum of 5% of the total paved area. One deciduous tree shall be required for every 4,000 sf of paved area. Paved area: 94,632 sf 94632 x .05 = 4,732 sf 94632/4000 = 24 deciduous trees	5,064 sf (5.35%) 24 Shade trees
S.O. 22-713.3 Parking Area Landscaping	All 10'x30' planting islands shall contain 2 shade trees and all 10'x18' planting islands shall contain 1 shade tree (6), 10'x30' planting islands x 2 = 12 shade trees (17), 10'x30' planting islands x 2 = 17 shade trees	Satisfied by Paved Area Landscaping Satisfied by Paved Area Landscaping
S.O. 22-713.4 Street Trees	Street trees shall be planted every 30' along all proposed streets and existing streets when they abut or lie within the proposed subdivision and/or land development. Trees shall be planted 3-5' outside the ultimate right-of-way.	See Street Tree requirements for Butler Ave. Corridor Overlay District below
S.O. 22-713.5.B(1) Landscape Buffers & Screens - Off-street Parking Areas	One deciduous or evergreen shrub planted every five feet along the perimeter of the parking area. Parking along Butler Ave: Eastern parking lot perimeter: 250' 250/5 = 50 shrubs Northern parking lot perimeter: 510' 510/5 = 102 shrubs Western parking lot perimeter: 80' 80/5 = 16 shrubs	Satisfied by Butler Ave. Corridor Overlay District plantings 50 Shrubs existing buffer 8 Evergreen trees 21 Shrubs
S.O. 22-713.5.B(2) Landscape Buffers & Screens - Trash Collection Areas	A minimum of 6' wooden shadow-box fence, or approved equal, on at least three sides, with a staggered row of evergreen trees planted every 10' along the fence perimeter.	9 Screening trees
S.O. 22-713.5.B(3) Landscape Buffers & Screens - Detention/Retention Basins	One deciduous or evergreen tree planted every 20 feet, plus one deciduous or evergreen shrub every 10 feet along the basin perimeter, planted in an informal arrangement. Detention Basin 585 585/20 = 30 Deciduous or Evergreen trees 585/10 = 59 Deciduous or Evergreen shrubs	14 Shade trees 7 Ornamental trees 9 Evergreen trees 59 Shrubs
S.O. 22-713.5.B(6) Landscape Buffers & Screens - Multifamily Residential Units	A berm varying in height from three to five feet, with one ornamental or evergreen tree for every 20 feet, plus one deciduous or evergreen shrub for every 10 feet, planted in an informal arrangement along the perimeter of the property. Southern property line (Butler Ave. frontage) Eastern property line: 448'-92' (existing vegetation = 356') 356/20 = 18 ornamental or evergreen trees 356/10 = 36 deciduous or evergreen shrubs Northern property line	walver granted 2 Ornamental trees 8 Evergreen trees satisfied by off-street parking perimeter shrubs existing vegetation 12 Evergreen trees
S.O. 22-722.4.C(7)(a) Butler Ave. Corridor Overlay District - Street Trees	Along every public street, a mixture of street trees shall be planted 50 feet on center. BUTLER AVE - 600' - 30' (driveway opening) = 570' 570/50 = 12 Trees	12 Shade trees
S.O. 22-722.4.D(7)(a) Butler Ave. Corridor Overlay District - Parking Area Landscaping and Buffering	Where parking areas are proposed to be located between a street and a principal building, a buffer fence shall be installed within 5' of the ultimate right-of-way of the street between this parking area and the street. Evergreen hedge plants, initially 18-24" in height and maintained at a height of no less than 30 inches, shall be installed and maintained between the fencing and the street.	fencing & masonry piers 151 shrubs
Total Landscape Proposed		88 Shade Trees 47 Evergreen Trees 41 Ornamental Trees 281 Shrubs

** Per settlement stipulation and agreement.
 (M) Waiver requested due to overlapping landscape requirements.
 (N) Waiver requested due to utility conflicts in certain parking lot islands.
 (O) Waiver requested due to walk/sidewalk conflicts and spatial constraints.

LANDSCAPE LEGEND

- Street tree
- Paved Area/Parking lot landscape
- Landscape Buffers & Screens
- Detention Basin Planting
- Replacement trees
- Paved area landscape calculation

Holmes Cunningham LLC
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Unit 5
Doylesstown, PA 18901
(215) 586-3330
www.hcengineering.net

REVIEWS
Description
Date
3-17-2022

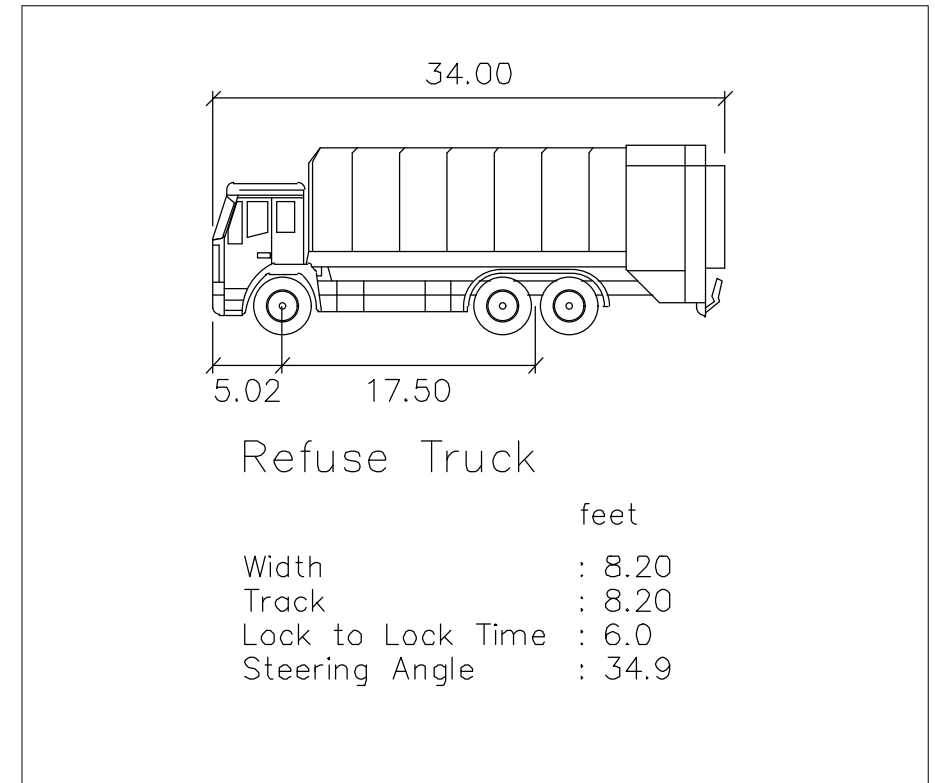
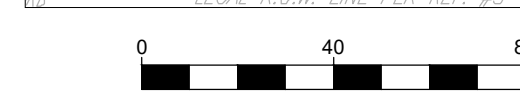
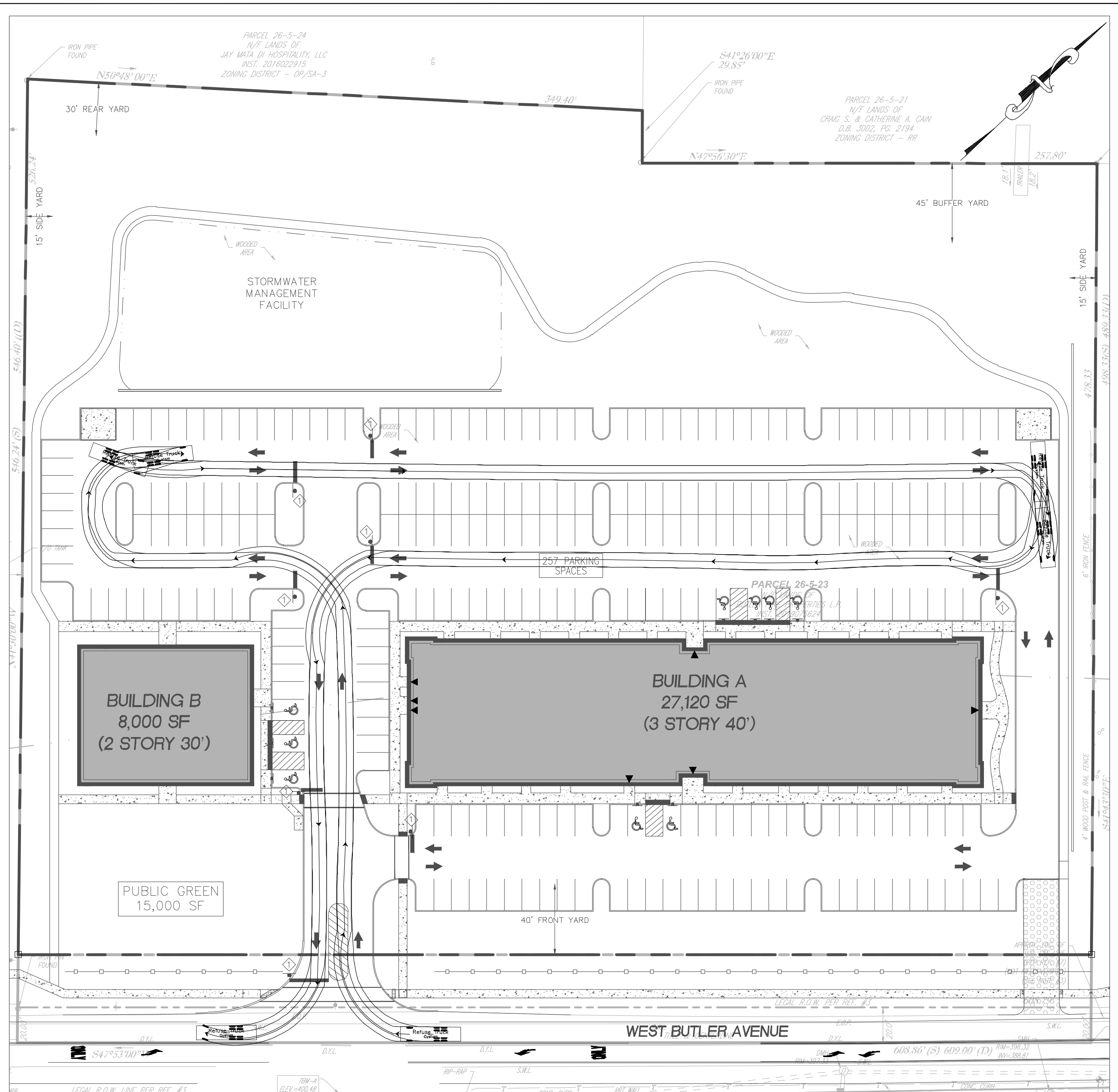
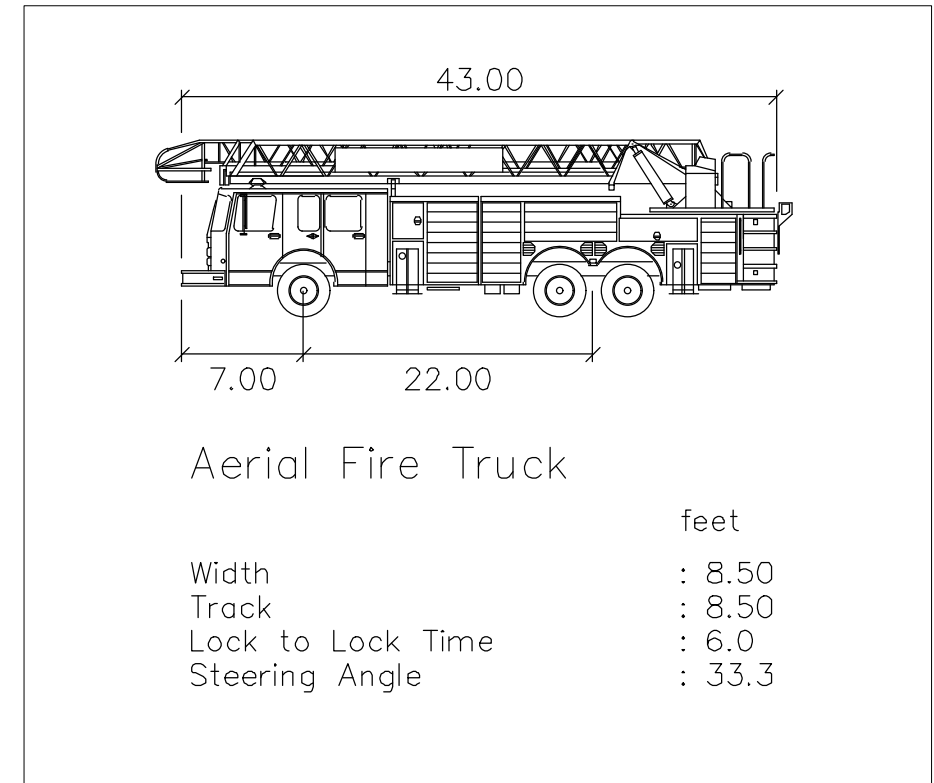
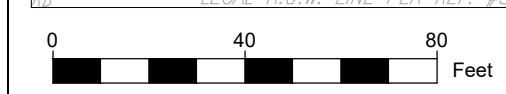
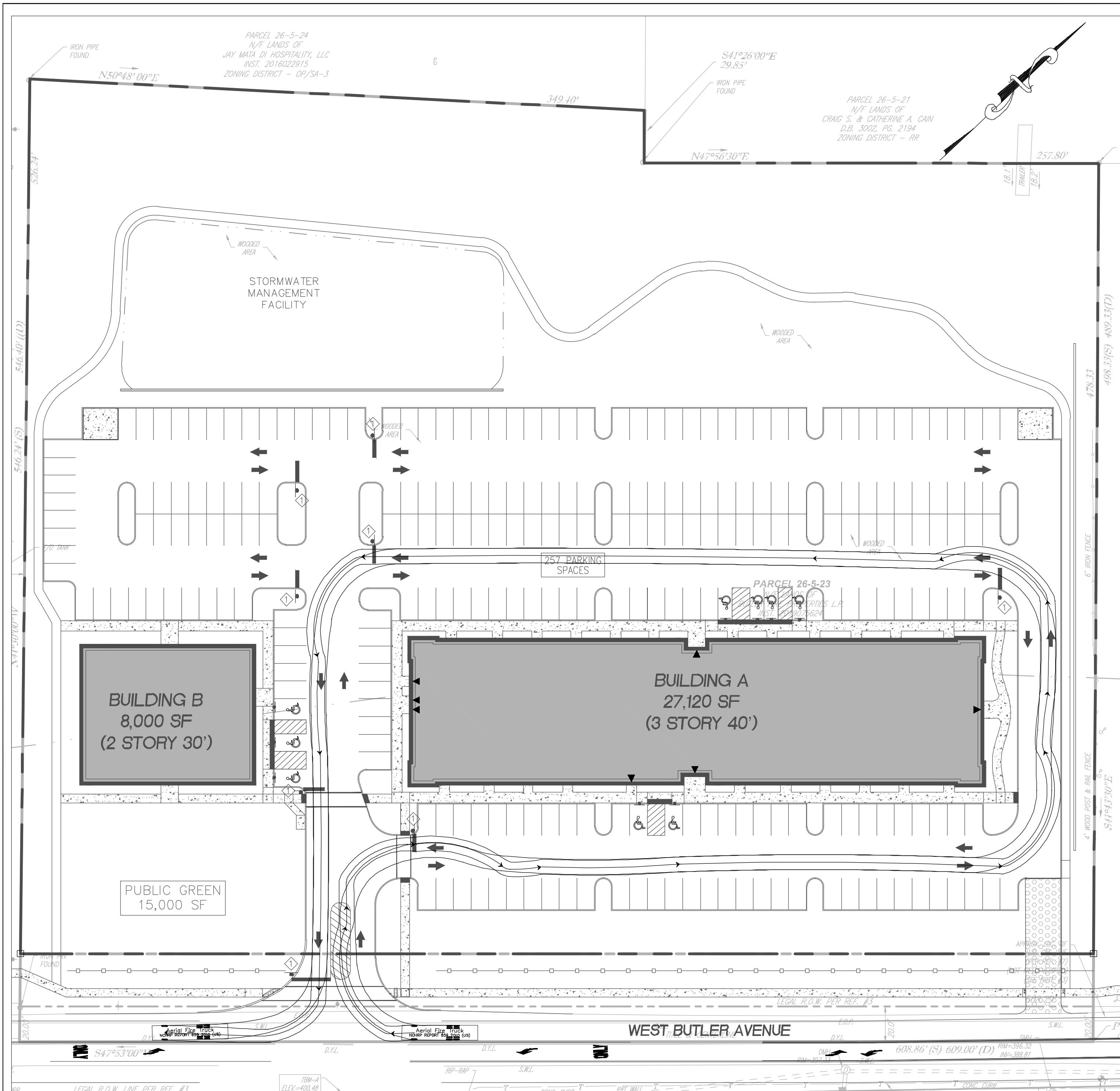
REVISIONS
Description
Date
REVISED FOR TWP/BCCD COMMENTS

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3 WORKING DAYS NOTICE FOR
UTILITY LOCATIONS AS SHOWN ON
THIS PLAN ARE APPROXIMATE AND IT
IS THE RESPONSIBILITY OF THE
CONTRACTOR TO VERIFY THE
LOCATION OF ALL UTILITIES PRIOR
TO CONSTRUCTION.

BUTLER AVENUE PROPERTY
TMP # 26-005-023
NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA
LANDSCAPE PLAN

ROBERT T. CUNNINGHAM, P.E.
PA PE076424

File No.
1482_C6.0 Landscape.dwg
HCE Job 1482
Date 11/30/2021
Scale 1"=40'
Designed RC
Sheet 22 of 25
Drawing No.
C6.0



Holmes Cunningham LLC
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 Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

REVISIONS	Description	Date
10	REVISED FOR TWP/BCCD COMMENTS	3-17-2022

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BUTLER AVENUE PROPERTY
 TWP # 26-005-023
 NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA
TRUCK TURN PLAN

ROBERT T. CUNNINGHAM, P.E.
 PA PE076424

File No.	1482_C7.0 Truck Turn.DWG		
HCE Job	1482	Scale	AS SHOWN
Date	11/30/2021	Designed	RC
Sheet	25	of	25
Drawing No.	C7.0		