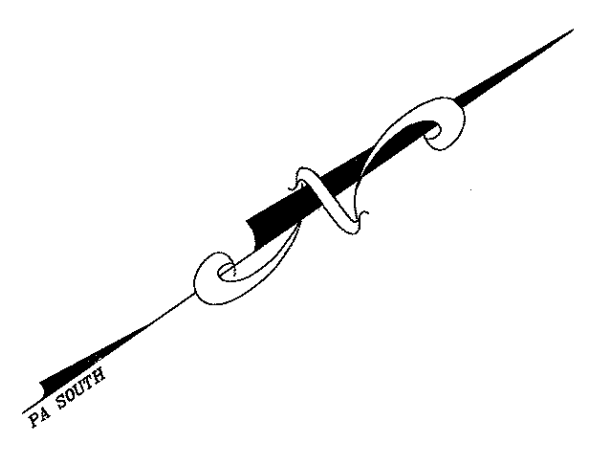
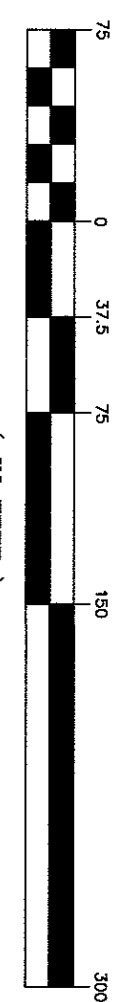


SOIL DATA	HYDROLOGIC GROUP
B/C - BRECKNOCK CHANNERY SILT LOAM, 8-15% SLOPES	B
D - INDIAN SILT LOAM	C
Nd3 - NESHAMINY GRAVELLY SILT LOAM, 3-8% SLOPES	C
NdC - NESHAMINY GRAVELLY SILT LOAM, 8-15% SLOPES	C

GRAPHIC SCALE
(IN FEET)
1 inch = 75 ft.



EXISTING FEATURES		LEGEND	
	EXISTING ADJOINER LINE		EXISTING BOUNDARY LINE
	EXISTING CORNERS		EXISTING EDGE OF PAVEMENT
	EXISTING CURB LINE		EXISTING RIGHT-OF-WAY
	EXISTING FENCE		EXISTING STORMWATER
	EXISTING WATERLINE		EXISTING GASLINE
	EXISTING SIDEWALK/CONCRETE		EXISTING CONTOURS
	EXISTING TREELINE		LIMITS OF FIELD SURVEY
	EXISTING UTILITY POLE		EXISTING LIGHT POLE
	EXISTING 100-YR FLOOD PLAN		EXISTING PERCOLATION AND PROBE TESTING SITE



FIELD CREW: DVT/IB
BASE MAP: AEC
DRAWN: ABK
DESIGN: ABK
CHECKED: GNS
DATE: 5/5/2020
SCALE: 1"=75'
PROJECT #216-17-001

SES
Steckbeck Engineering & Surveying Inc.
279 North Zions Mill Road / Suite A
Lebanon, Pennsylvania 17042
Phone: (717) 272-7110
Fax: (717) 272-7348

EXISTING CONDITIONS PLAN
FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
For
BRYANT BERNHARDT
located in
Cornwall Borough
Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCDD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

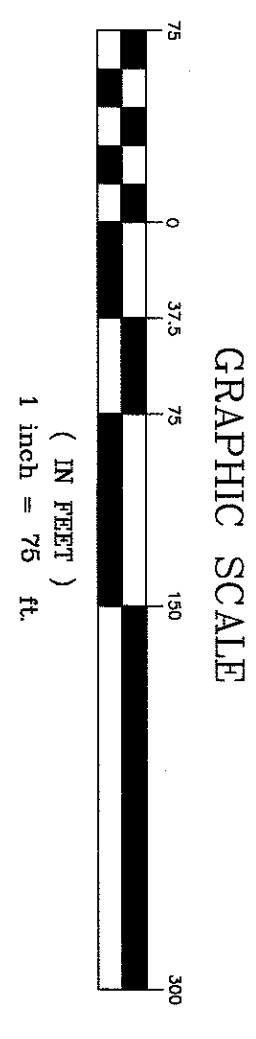
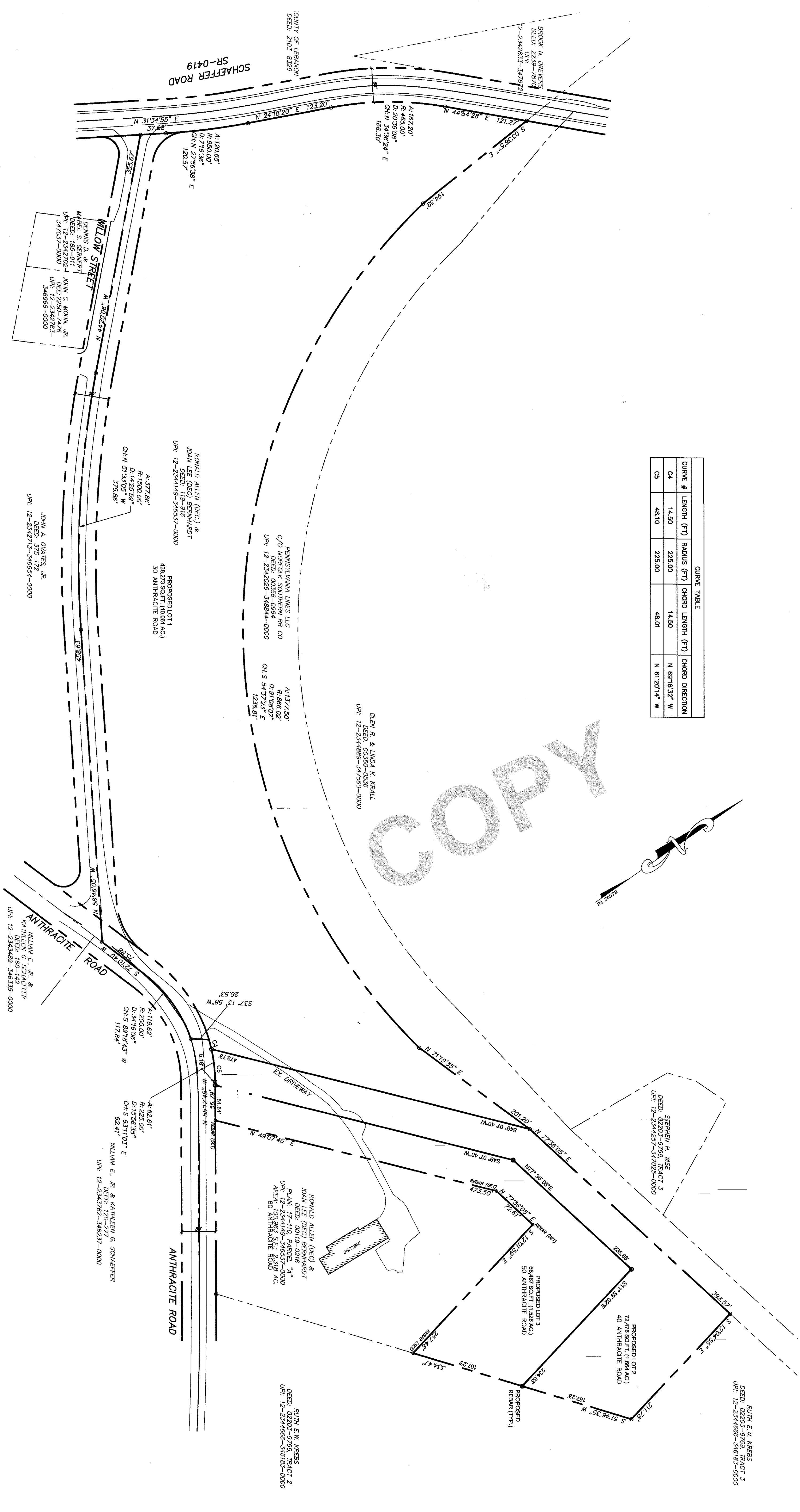
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LEGEND

	EXISTING ADJOINER LINE
	EXISTING BOUNDARY LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED LOT LINE
	CURVE DATA
	RIGHT-OF-WAY
	EASEMENT
	PROPOSED RIGHT-OF-WAY

CURVE TABLE

CURVE #	LENGTH (FT)	RADIUS (FT)	CHORD LENGTH (FT)	CHORD DIRECTION
C4	14.50	225.00	14.50	N 69°18'32" W
C5	48.10	225.00	48.01	N 61°20'14" W

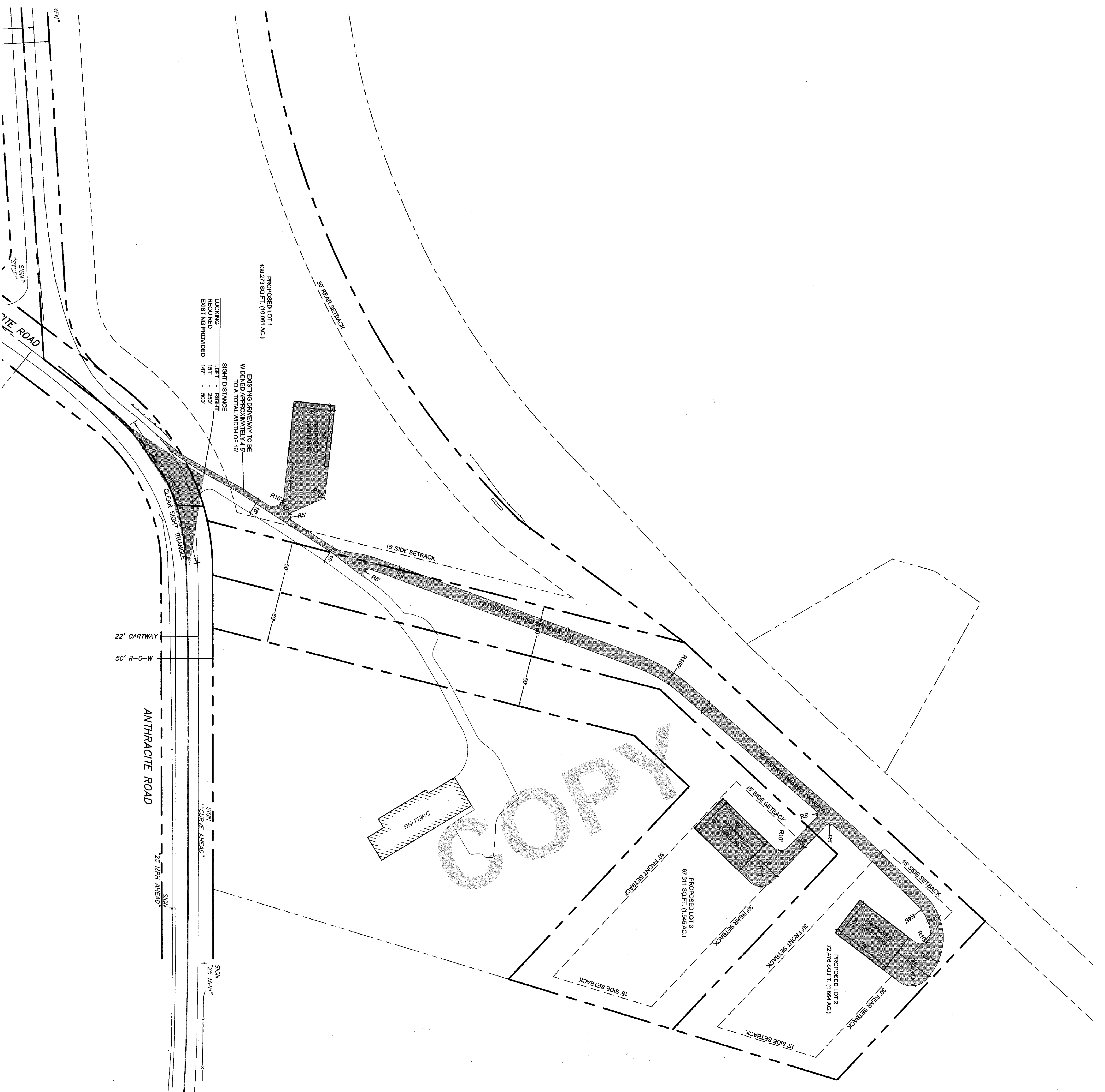


FIELD CREW: DY/TB
BASE MAP: EC
DRAWN: ABR
DESIGN: ABR
CHECKED: CDS
DATE: 5/5/2020
SCALE: 1" = 75'
PROJECT #216-17-001

SESI
 Steckbeck Engineering & Surveying Inc.
 279 North Zinns Mill Road / Suite A
 Lebanon, Pennsylvania 17042
 Phone: (717) 272-7110
 Fax: (717) 272-7348

SUBDIVISION PLAN
FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
 For
BRYANT BERNHARDT
 located in
 Cornwell Borough
 Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCDD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK



COPY

PROPOSED LOT 1
488.273 SQ. FT. (10.881 AC.)

EXISTING DRIVEWAY TO BE
WIDENED APPROXIMATELY 4'-8"
TO ACCOMMODATE 12' DRIVE
WITH 5'-10" CLEARANCE

LOOKING LEFT RIGHT
REQUIRED 15' 250' 147' 500'

22' CARTWAY

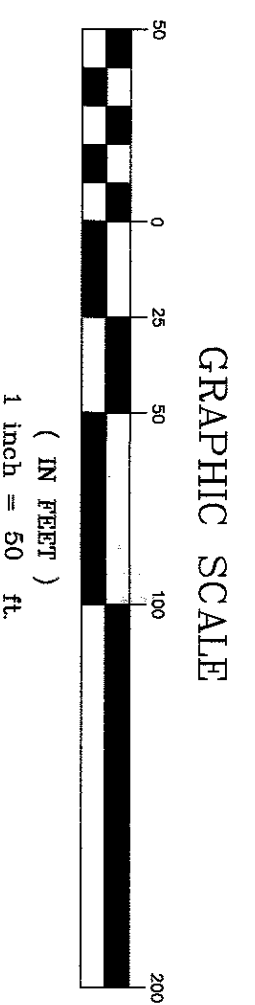
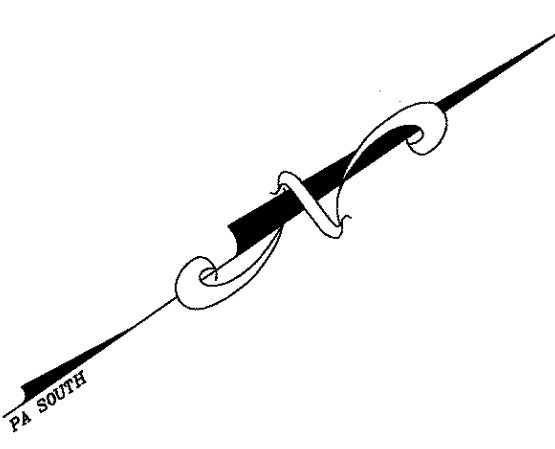
50' R-O-W

ANTHRACITE ROAD

120' DRIVE AHEAD

75' MPH

- LEGEND**
- EXISTING FEATURES
 - ADJUSTERS
 - EXISTING BOUNDARY LINE
 - EXISTING CORNERS
 - EXISTING EDGE OF PAVEMENT
 - EXISTING EDGE OF GRAVEL
 - EXISTING FENCE
 - PROPOSED FEATURES
 - PROPOSED RIGHT-OF-WAY
 - PROPOSED BUILDING SETBACK
 - PROPOSED EDGE OF GRAVEL



FIELD CREW:	DY/TJB
BASE MAP:	JEC
DRAWN:	ABK
DESIGN:	ABK
CHECKED:	CDS
DATE:	5/5/2020
SCALE:	1"=50'
PROJECT #	#216-17-001

SESI

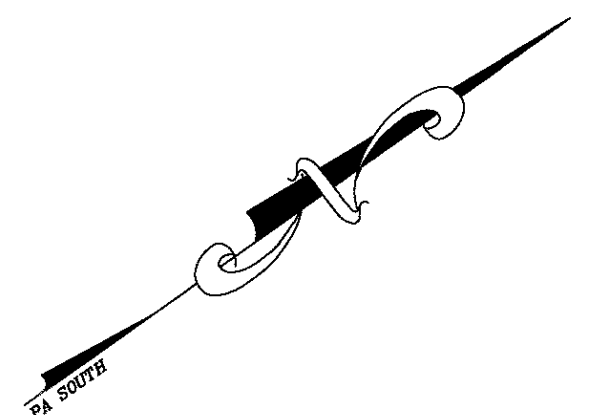
Steckbeck Engineering & Surveying Inc.
279 North Zions Mill Road / Suite A
Lebanon, Pennsylvania 17042
Phone: (717) 272-7110
Fax: (717) 272-7348

LAYOUT PLAN

FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
for
BRYANT BERNHARDT
located in
Cornwall Borough
Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCDD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK
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1



PROPOSED STREAM EASEMENT

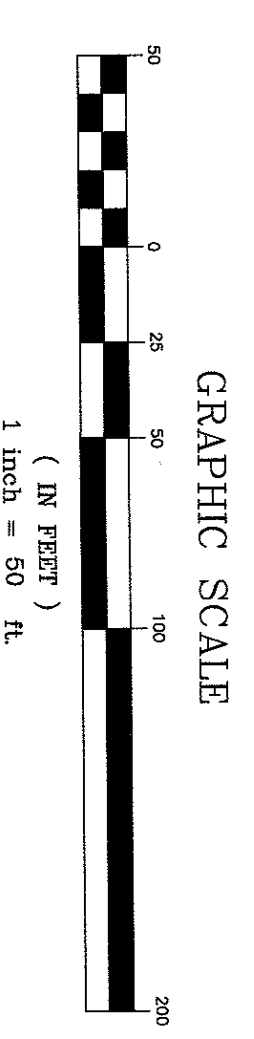
- EXISTING FEATURES**
- ADORNERS
 - EXISTING BOUNDARY LINE
 - AND CORNERS
 - EXISTING EDGE OF PAVEMENT
 - EXISTING EDGE OF GRAVEL
 - EXISTING FENCE
- PROPOSED FEATURES**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED PROPERTY LINE
 - PROPOSED EASEMENTS

- EASEMENT NOTES**
- 1. NO STRUCTURES OR TREES SHALL BE PLACED IN EASEMENTS.
- DRAINAGE EASEMENT NOTES**
- 1. DRAINAGE SHALL BE AUTHORIZED TO USE DRAWINGS AS ACCESS TO INSPECT STORMWATER FACILITIES.

Line #	Direction	Length
L1	S82° 11' 10"E	29.42'
L2	N82° 11' 10"W	7.44'
L3	N64° 22' 10"W	44.28'
L4	N44° 45' 30"W	25.30'
L5	N21° 52' 10"W	27.79'
L6	N30° 21' 10"W	12.56'
L7	N56° 54' 40"W	32.09'
L8	N53° 29' 30"W	34.42'
L9	N48° 12' 10"W	142.78'
L10	N43° 51' 20"W	74.85'
L11	N46° 18' 20"W	296.17'
L12	N37° 52' 30"W	106.30'
L13	N44° 48' 40"W	87.15'
L14	N30° 24' 00"W	18.01'
L15	N6° 28' 20"E	20.05'
L16	N43° 39' 10"W	52.58'
L17	N9° 22' 00"W	55.03'
L18	N14° 11' 30"W	136.48'
L19	N12° 52' 00"W	130.00'
L20	N25° 54' 20"W	85.73'

Line #	Direction	Length
L21	N44° 54' 30"E	21.18'
L22	S25° 54' 20"E	94.98'
L23	S12° 52' 00"E	132.05'
L24	S14° 11' 30"E	137.09'
L25	S9° 22' 00"E	49.70'
L26	S43° 39' 10"E	55.77'
L27	S6° 28' 20"W	22.73'
L28	S30° 24' 00"E	8.81'
L29	S44° 48' 40"E	85.83'
L30	S37° 52' 30"E	106.04'
L31	S46° 18' 20"E	295.12'
L32	S43° 51' 20"E	74.51'
L33	S48° 12' 10"E	141.10'
L34	S53° 29' 30"E	32.89'
L35	S56° 54' 40"E	36.21'
L36	S30° 21' 10"E	18.76'
L37	S21° 52' 10"E	25.23'
L38	S44° 45' 30"E	17.80'
L39	S64° 22' 10"E	42.96'

Curve #	Radius	Length	Delta
C1	225.00'	28.19'	7° 10' 40"



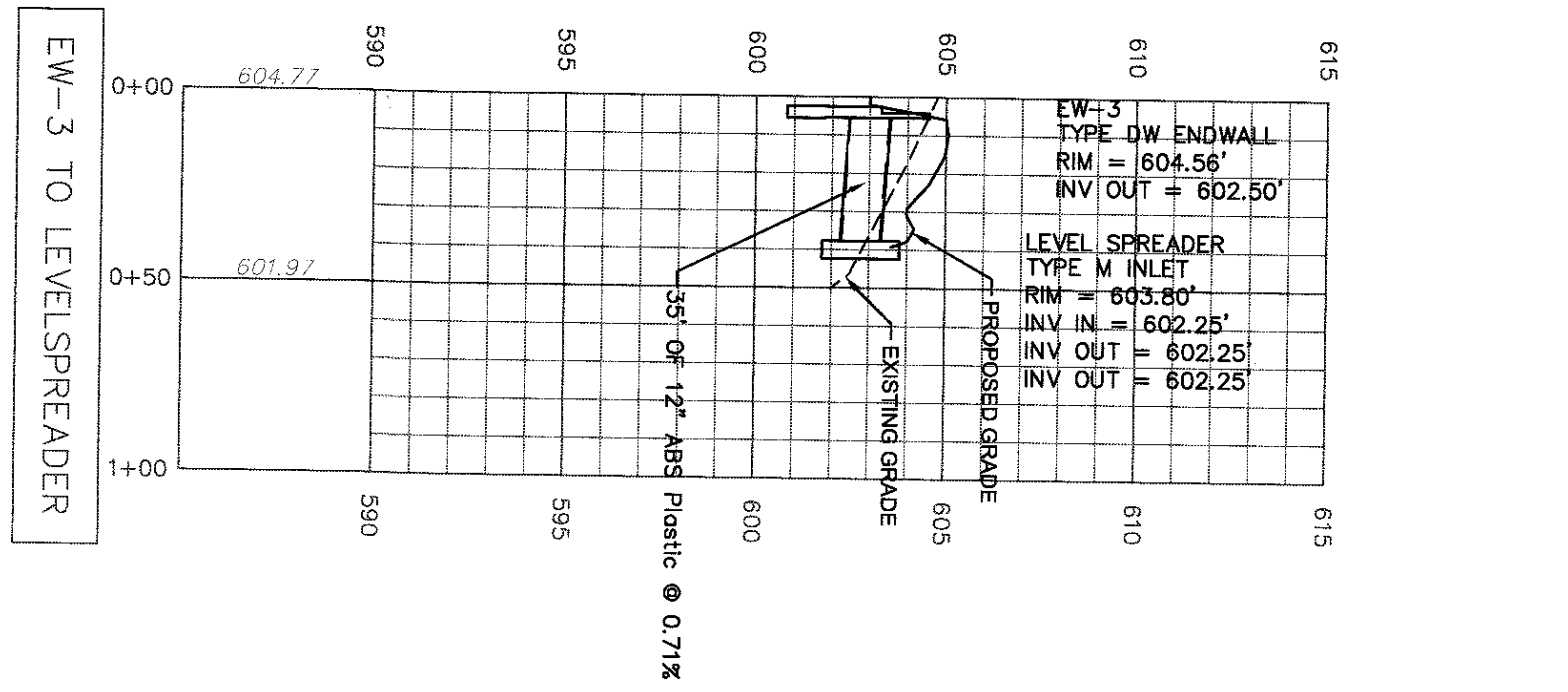
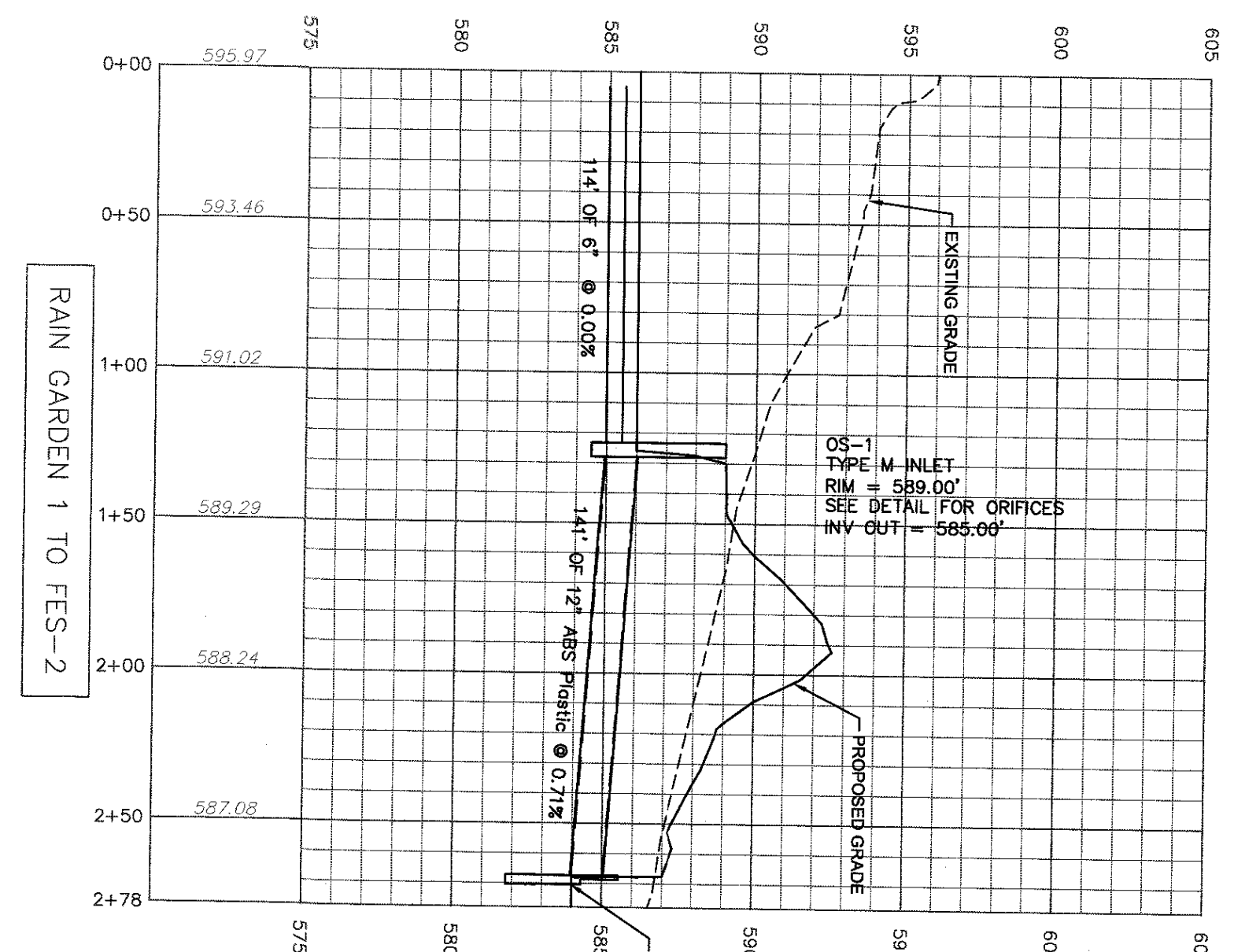
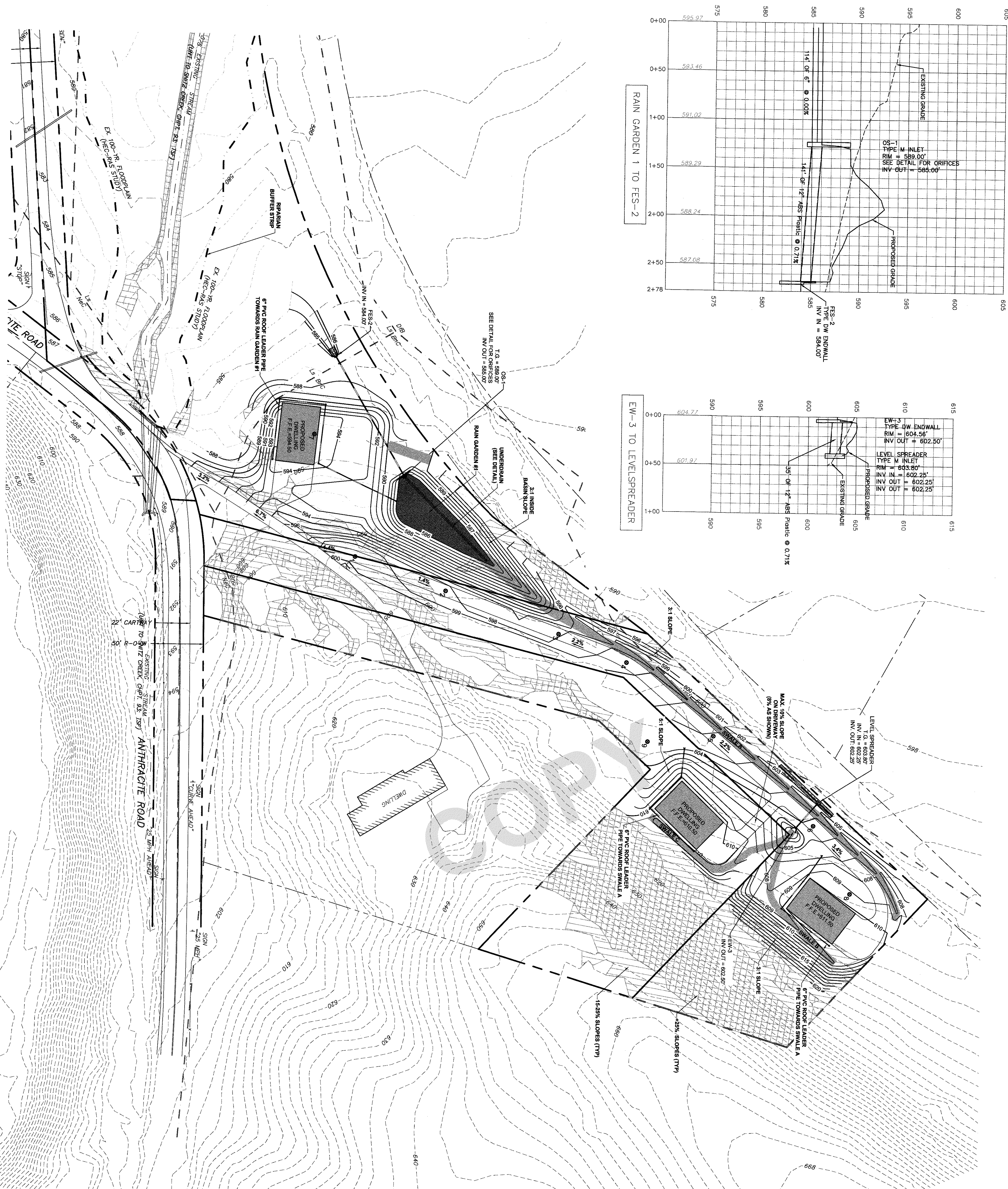
FIELD CREW:	DY/TB
BASE MAP:	JEC
DRAWN:	ABK
DESIGN:	ABK
CHECKED:	QSS
DATE:	5/5/2020
SCALE:	1"=50'
PROJECT #:	216-17-001

SES
 Steckbeck Engineering & Surveying, Inc.
 279 North Zions Mill Road / Suite A
 Lebanon, Pennsylvania 17042
 Phone: (717) 272-7110
 Fax: (717) 272-7348

EASEMENT PLAN
 FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
 for
BRYANT BERNHARDT
 located
 Cornwall Borough
 Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

6
 6 OF 15 SHEETS



LEGEND

- EXISTING FEATURES
- SOILS
- ADJOINERS
- EXISTING CONTOURS
- EXISTING TRENCH
- EXISTING BOUNDARY LINE AND CORNERS
- EXISTING EDGE OF PAVEMENT
- EXISTING WATER LATERAL
- EXISTING SEWER
- EXISTING SEWER EASEMENT
- EXISTING FENCE
- EXISTING 100'-YR FLOOD PLAN
- PROPOSED FEATURES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONTOURS
- PROPOSED WATER LATERAL
- PROPOSED SEWER LATERAL
- PROPOSED STORMWATER
- PROPOSED BUILDING SETBACK
- EXISTING PERCOLATION AND POND TESTING SITE
- ENGINEERED SOILS AND POND SEED MIX 25%+ SLOPES
- 15-25% SLOPES

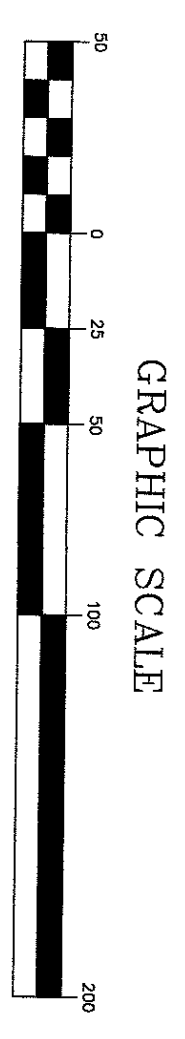
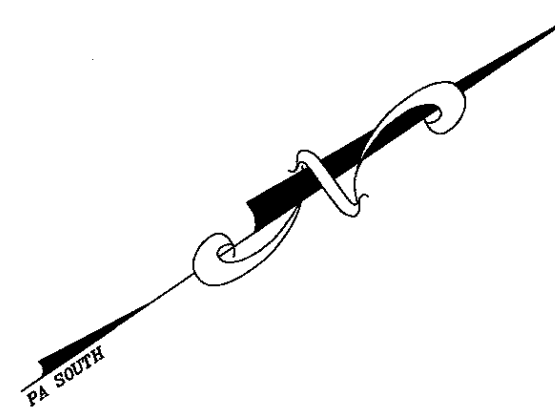
SOIL DATA	HYDROLOGIC GROUP
BnC - BRICKNOCK CHANNERY SILT LOAM, 8-15% SLOPES	B
U ₈ - LINDSIDE SILT LOAM	C
U ₈ - NESHAMINY GRAVELLY SILT LOAM, 3-8% SLOPES	C
U ₈ - NESHAMINY GRAVELLY SILT LOAM, 8-15% SLOPES	C

ROOF GUTTER NOTES:

- ALL DOWNSPOUTS DISCHARGE MUST BE COLLECTED AND PEED TO PROPOSED STORMWATER MANAGEMENT FACILITIES.
- ALL DOWNSPOUTS MUST HAVE IN-LINE FILTERS AND GUTTERS AND BLOCKING THE ROOF LEADER FROM ENTERING.

RE-VEGETATION NOTE:

- ALL AREAS DISTURBED DURING CONSTRUCTION THAT AREN'T SHOWN OTHERWISE IN THIS PLAN SHALL BE RE-VEGETATED UPON COMPLETION OF CONSTRUCTION.

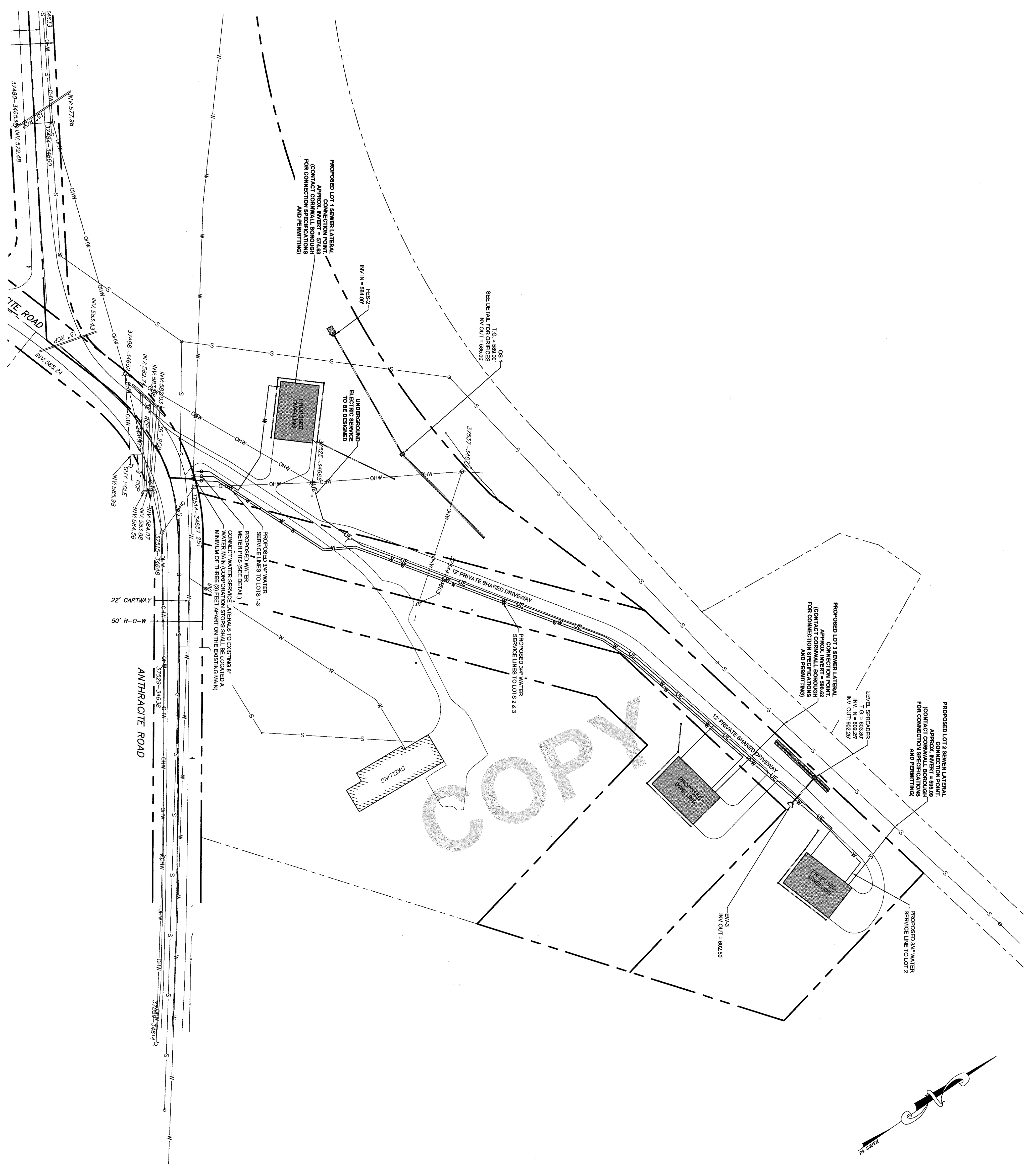


FIELD CREW: DV/TB	DESIGN: ABR
BASE MAP: JEG	CHECKED: CDS
DRAWN: ABR	DATE: 5/5/2020
PROJECT #216-17-001	SCALE: 1"=50'

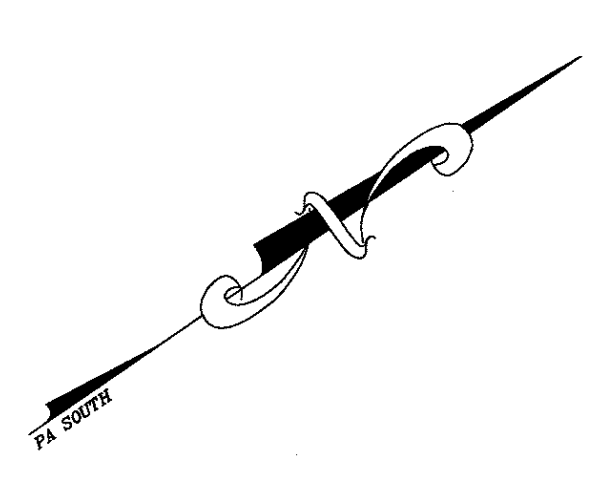
SES
 Steckbeck Engineering & Surveying Inc.
 279 North Zions Mill Road / Suite A
 Lebanon, Pennsylvania 17042
 Phone: (717) 272-7110
 Fax: (717) 272-7348

GRADING & POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
 FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
 for
BRYANT BERNHARDT
 located in
 Cornwall Borough
 Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCOD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK



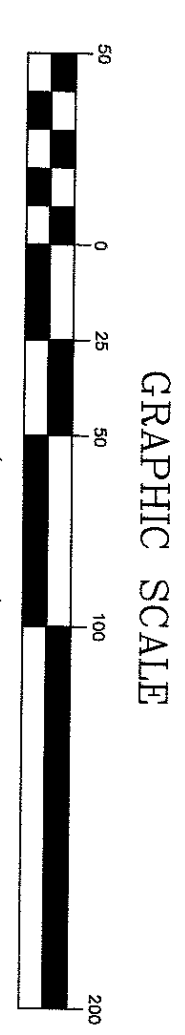
COPY



LEGEND

- EXISTING FEATURES
- SOILS
- ADJOINERS
- EXISTING CONTOURS
- EXISTING TIE LINE
- EXISTING BOUNDARY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING WATER LATERAL
- EXISTING SEWER
- EXISTING SEWER EASEMENT
- EXISTING FENCE
- EXISTING 100-YR FLOOD PLAN
- PROPOSED FEATURES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONTOURS
- PROPOSED WATER LATERAL
- PROPOSED SEWER LATERAL
- PROPOSED STORMWATER
- PROPOSED BUILDING SETBACK
- EXISTING PERCOLATION AND PROBE TESTING SITE

UTILITY NOTES
 1. ALL UTILITIES MUST BE INSTALLED UNDERGROUND, NO OVERHEAD UTILITIES ARE ALLOWED PER CORNWALL BOROUGH.



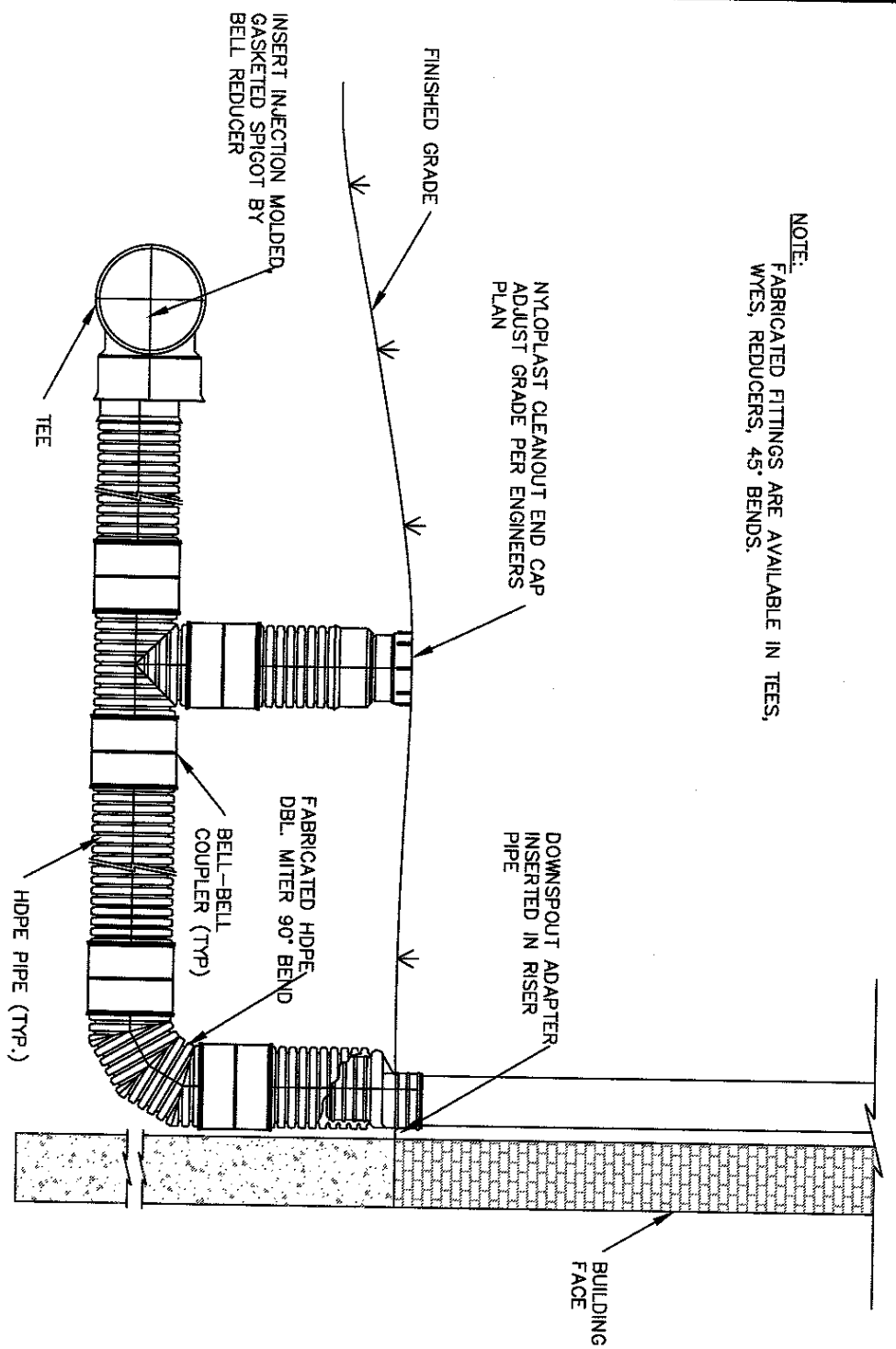
FIELD CREW:	DY/TB
BASE MAP:	JEC
DRAWN:	ABK
DESIGN:	ABK
CHECKED:	ODS
DATE:	5/5/2020
SCALE:	1"=50'
PROJECT #	216-17-001

SESI
 Steckbeck Engineering & Surveying Inc.
 279 North Zions Mill Road / Suite A
 Lebanon, Pennsylvania 17042
 Phone: (717) 272-7110
 Fax: (717) 272-7348

UTILITY PLAN
FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
 For
BRYANT BERNHARDT
 located in
 Cornwall Borough
 Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCDD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

8
 OF 13 SHEETS

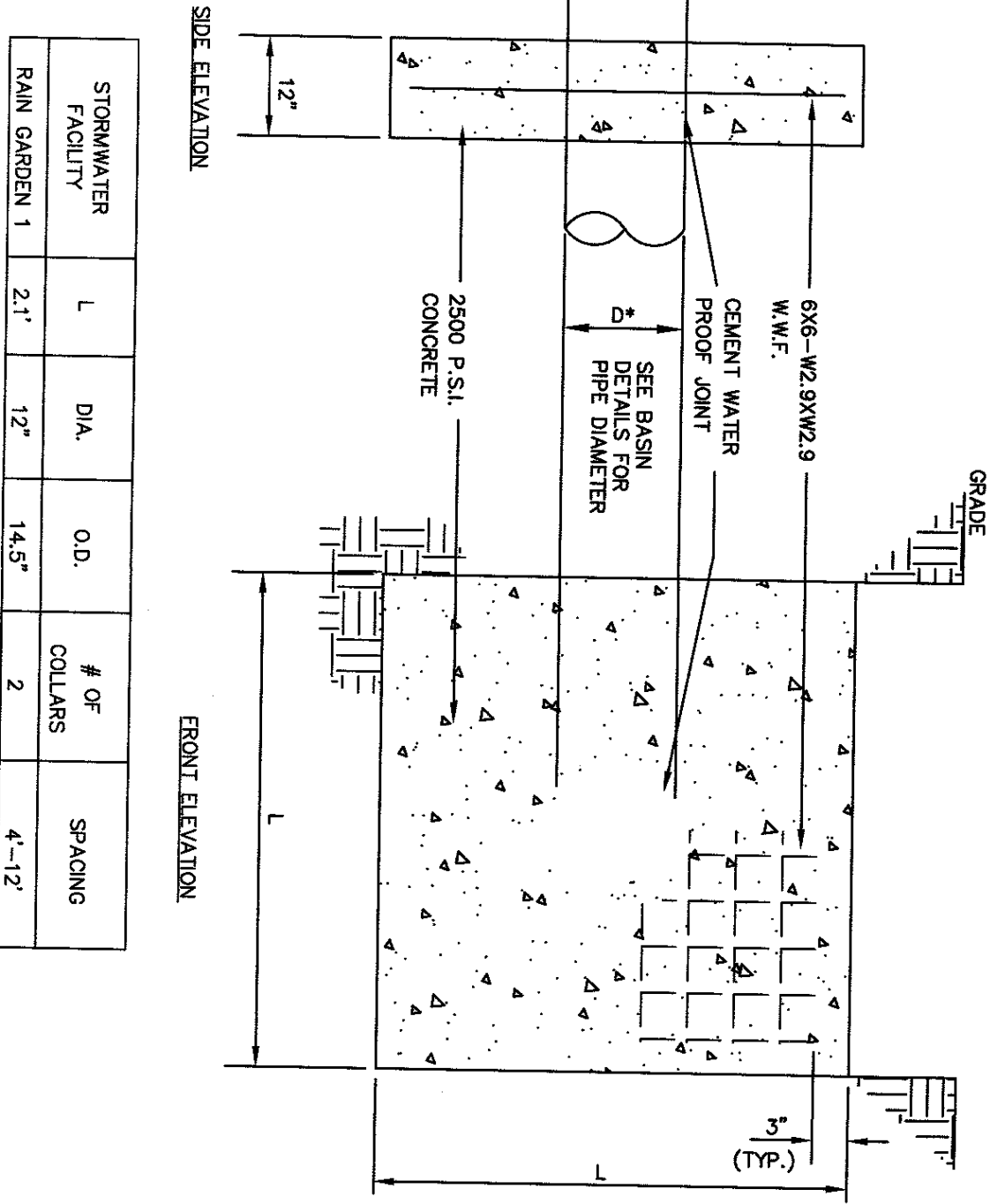


NYLOPLAST CONNECTION TO DOWN SPOUT DETAIL
NO SCALE

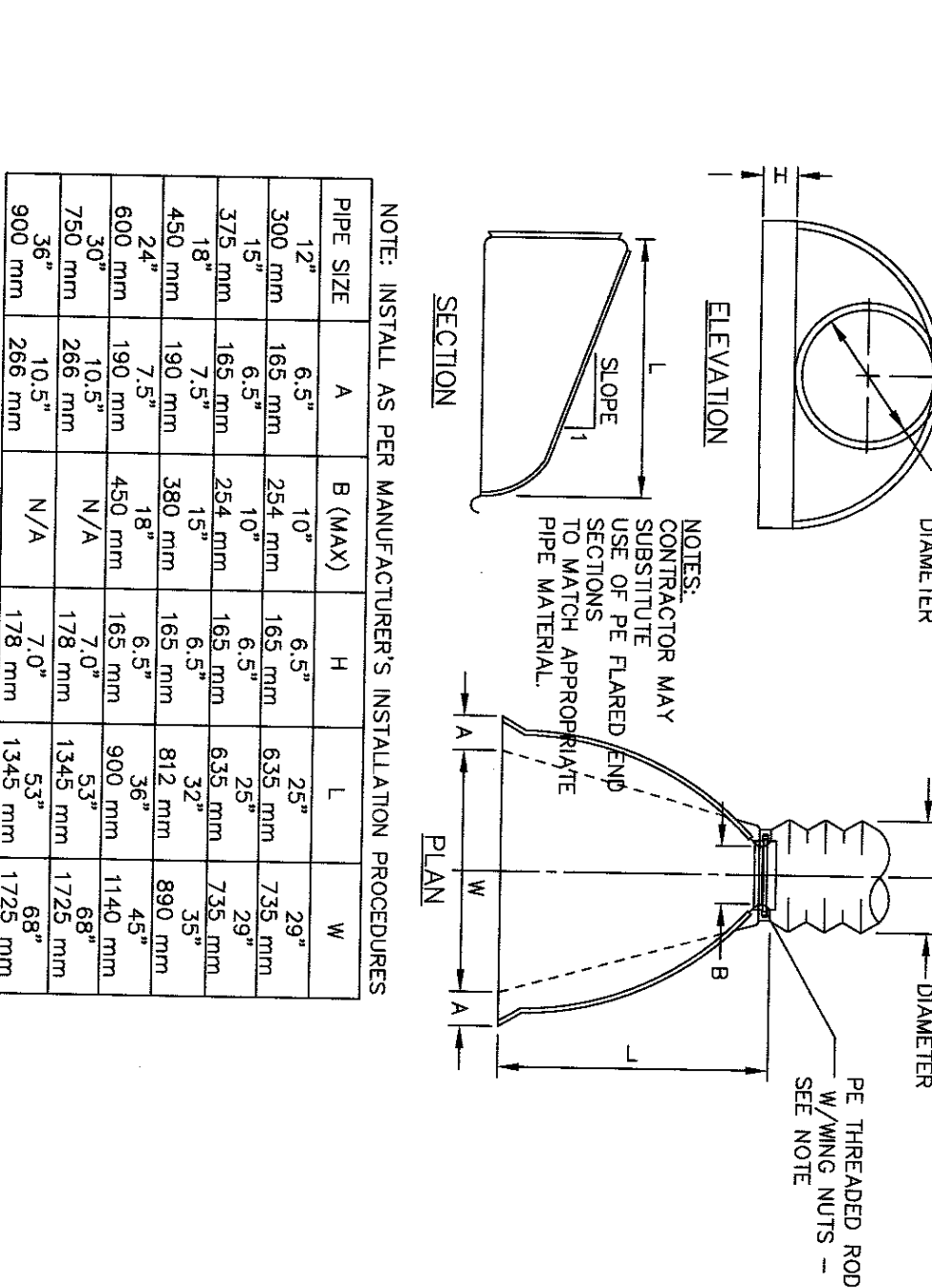
APPLICATION	SPECIES	%	APPLICATION RATE	FERTILIZER	LINING RATE	GERMINATION SEASON (SEE NOTE #1)
PERMANENT	SPRING OATS	50%	90 LBS. (3 BU) / AC.	40-40-40 AT 2,000 LBS./AC.	2,000 LBS./AC.	MARCH 15 TO OCTOBER 15
	PATAGONIA TALL FESCUE	15%	40 LBS. AC.			
	ANNUAL REGRASS	10%				
	SECURITY BERBERIS RED FESCUE	10%	125 LBS./AC.			
				SEE NOTE 1 BELOW	SEE NOTE 1 BELOW	
						MARCH 15 TO OCTOBER 15

- FERTILIZER AND LIME SHALL BE APPLIED IN ACCORDANCE WITH SOIL TESTS.
- SEEDING SHALL BE COMPLETED USING PENN DOT PUBLICATION NO. 408 AND THE PENN STATE AGRONOMY GUIDE (LATEST EDITION).
- ALL SEEDING AREAS SHALL BE MULCHED WITH HAY OR STRAW APPLIED AT A RATE OF 6,000 LBS./ACRE (1,240 LBS./575) WHICH TO BE ANCHORED WITH WOOD CELLULOSE FIBER AT 750 LBS./ACRE OR EQUAL. THE CONTRACTOR SHALL PROVIDE MULCHING AS SPECIFIED ABOVE IN NOTE 3, IN THE PRODUCTS AREAS OF DISTURBANCE WHICH ARE NOT STABILIZED.
- APPLY TEMPORARY SEED MIX ALONG WITH PERMANENT SEED MIX.

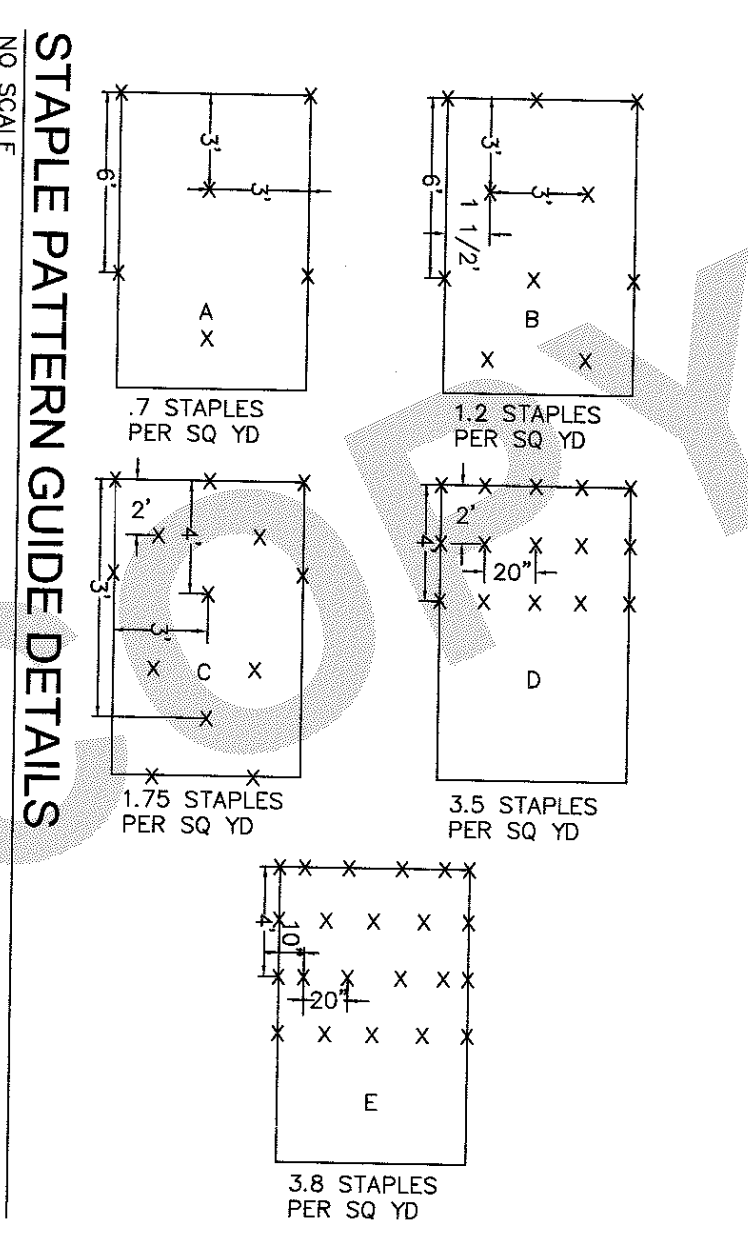
SEEDING SCHEDULE & NOTES
NO SCALE



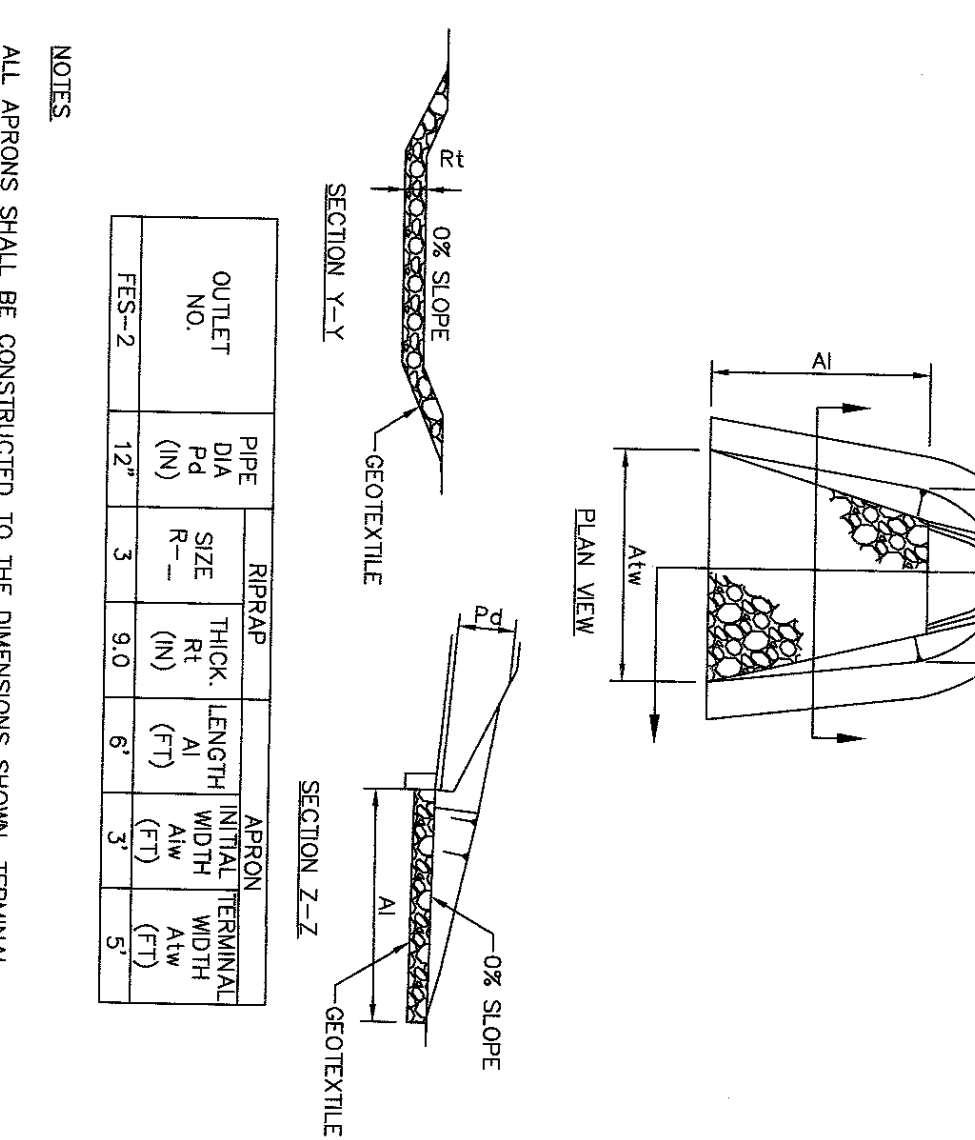
CONCRETE ANTI-SEEP COLLAR DETAIL
NO SCALE



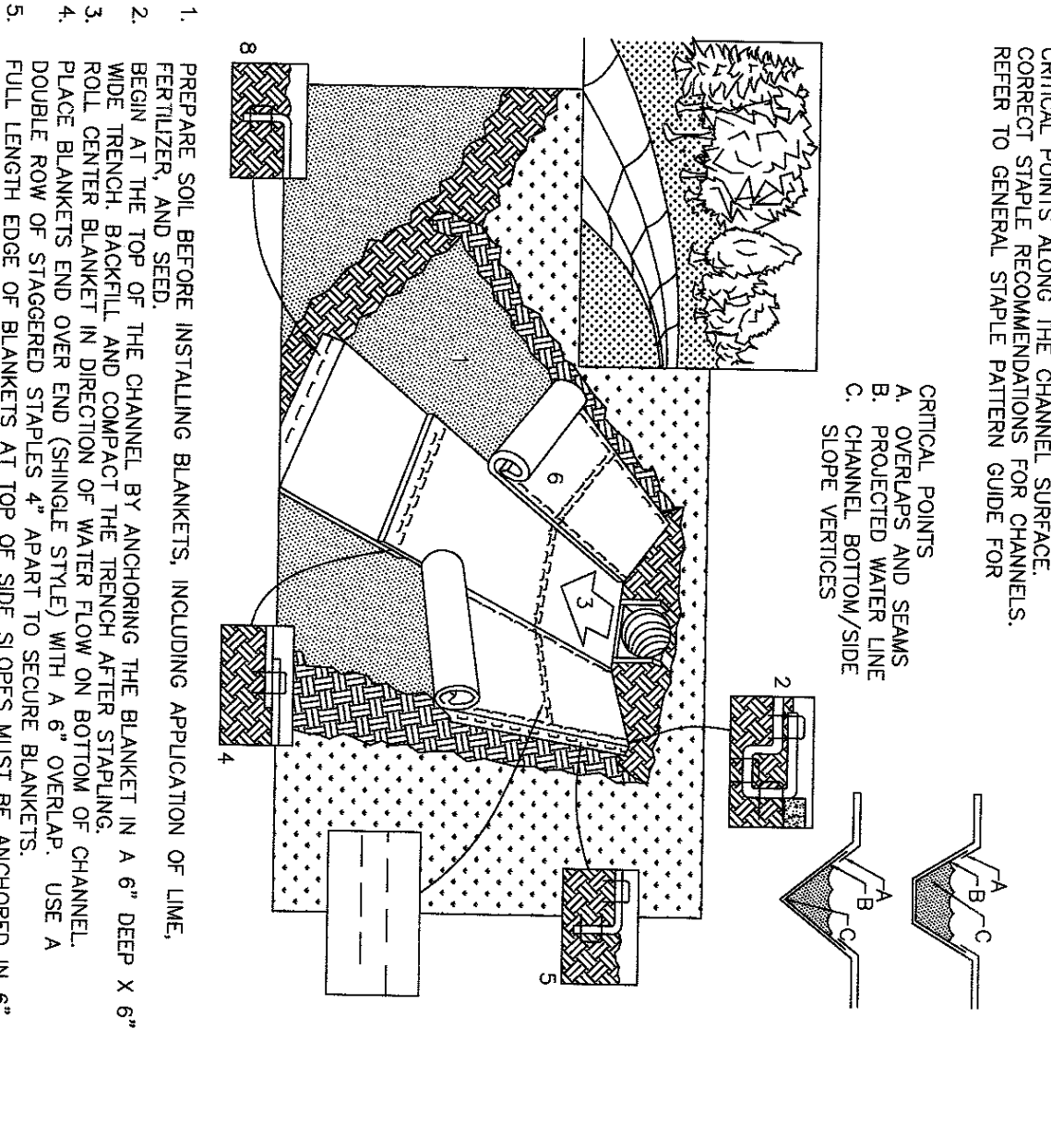
POLYETHYLENE FLARED END SECTION DETAIL
NO SCALE



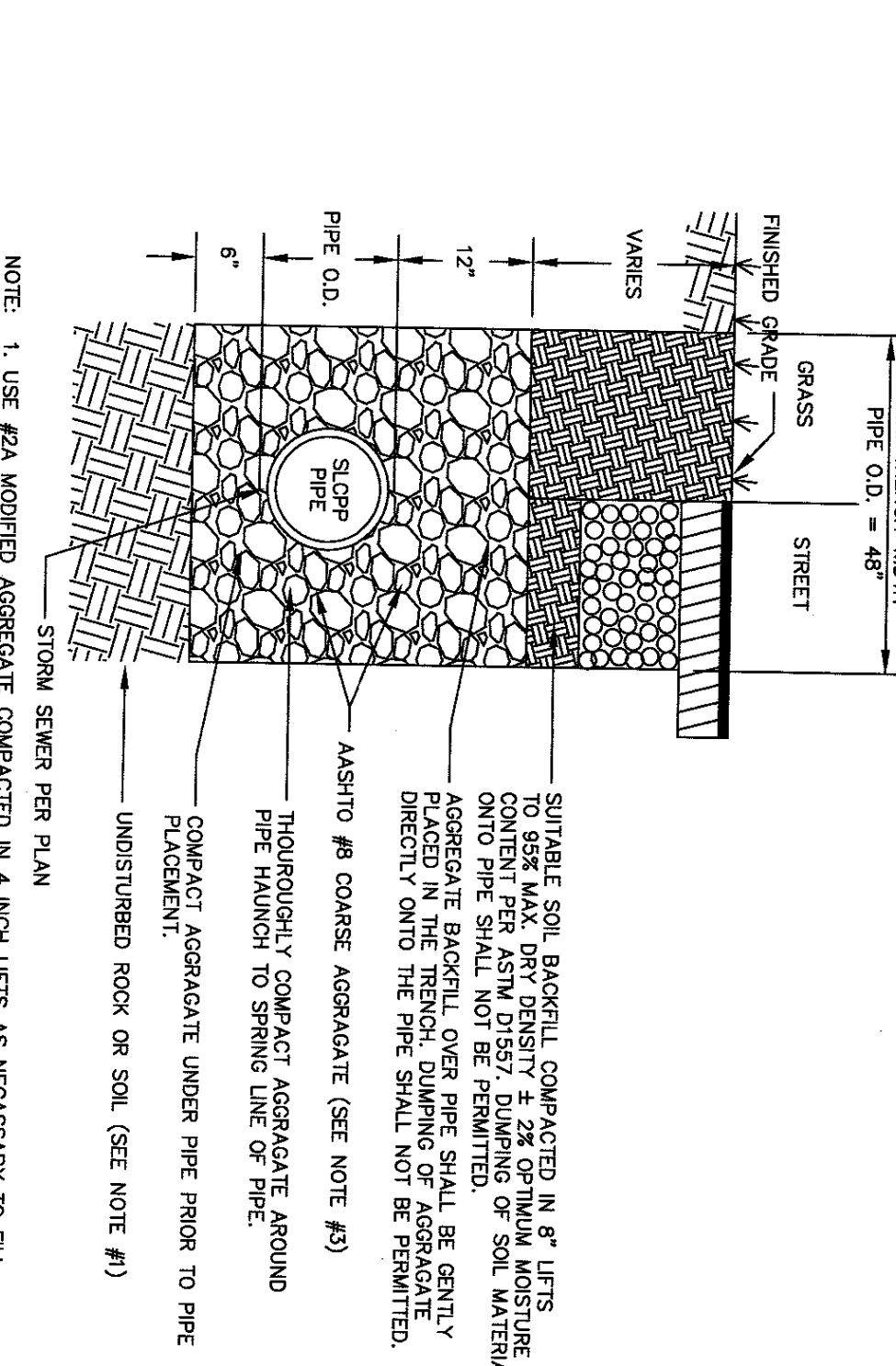
STAPLE PATTERN GUIDE DETAILS
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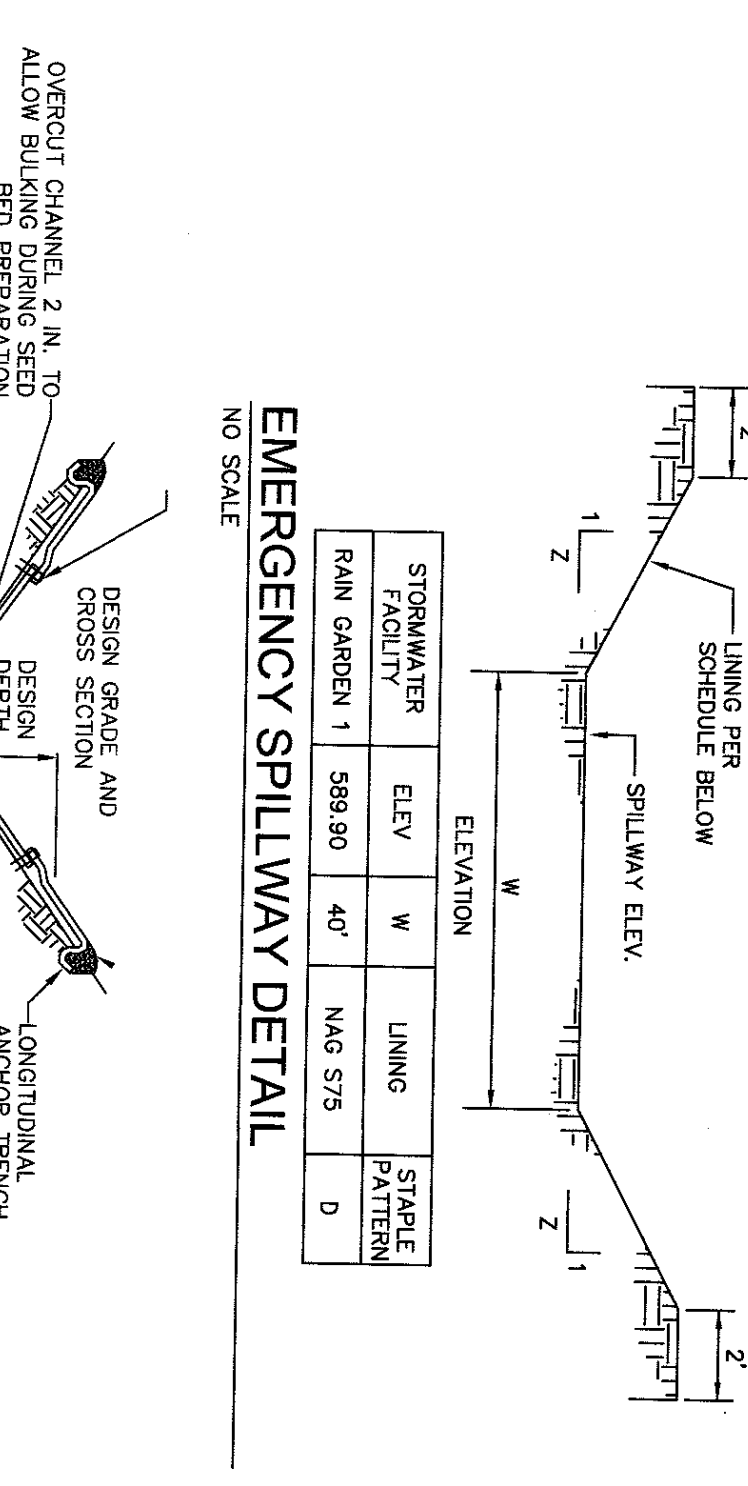
RIPRAP APRON AT PIPE OUTLET
NO SCALE



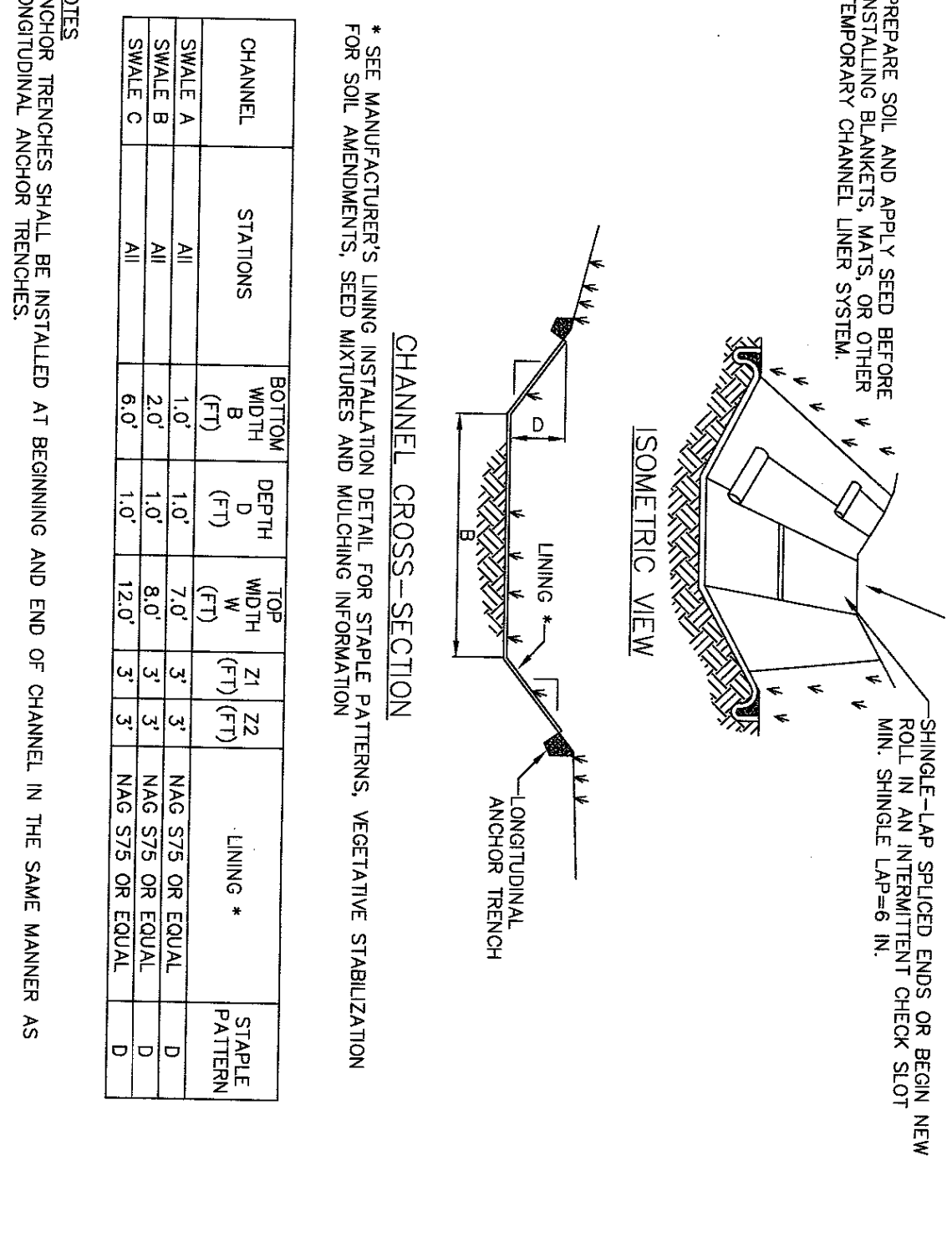
EROSION LINING INSTALLATION DETAIL
NO SCALE



TYPICAL TRENCH DETAIL FOR SLOPP INSTALLATION
NO SCALE



EMERGENCY SPILLWAY DETAIL
NO SCALE



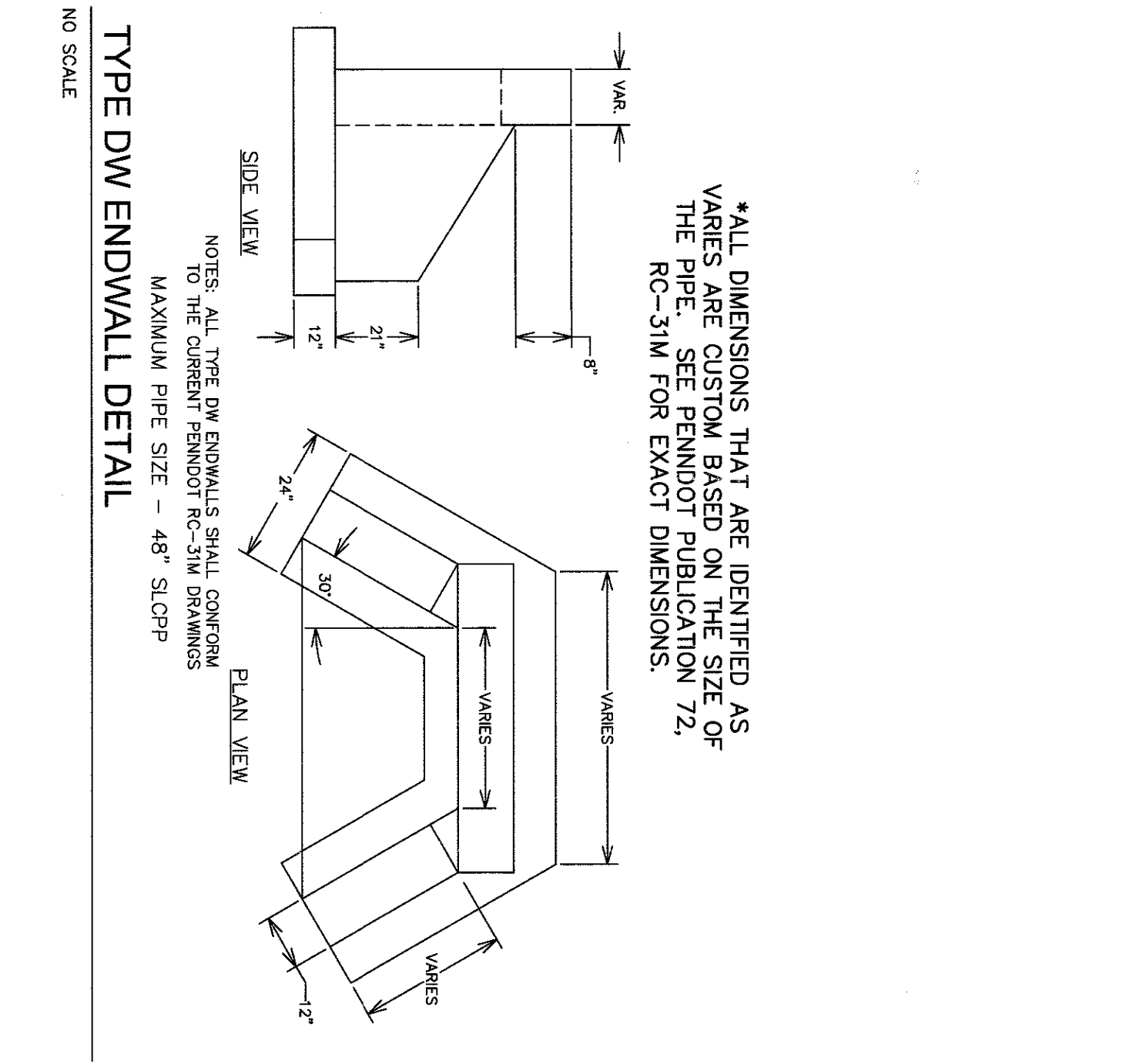
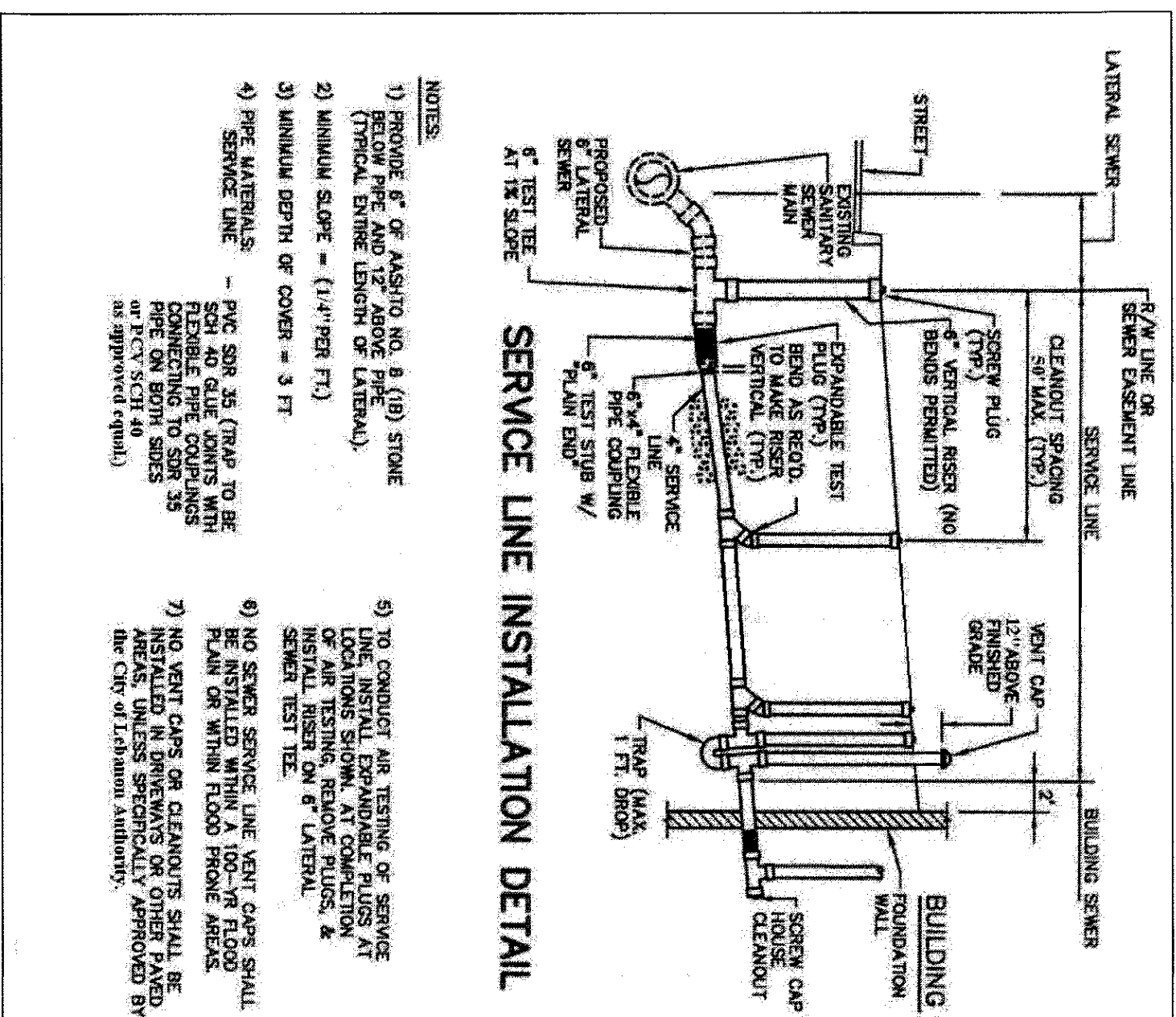
VEGETATED CHANNEL DETAIL
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REVISION	DATE	BY
PER LCCD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

CONSTRUCTION & PCSM DETAILS
FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
FOR
BRYANT BERNHARDT
located in
Cornwall Borough
Lebanon County, Pennsylvania

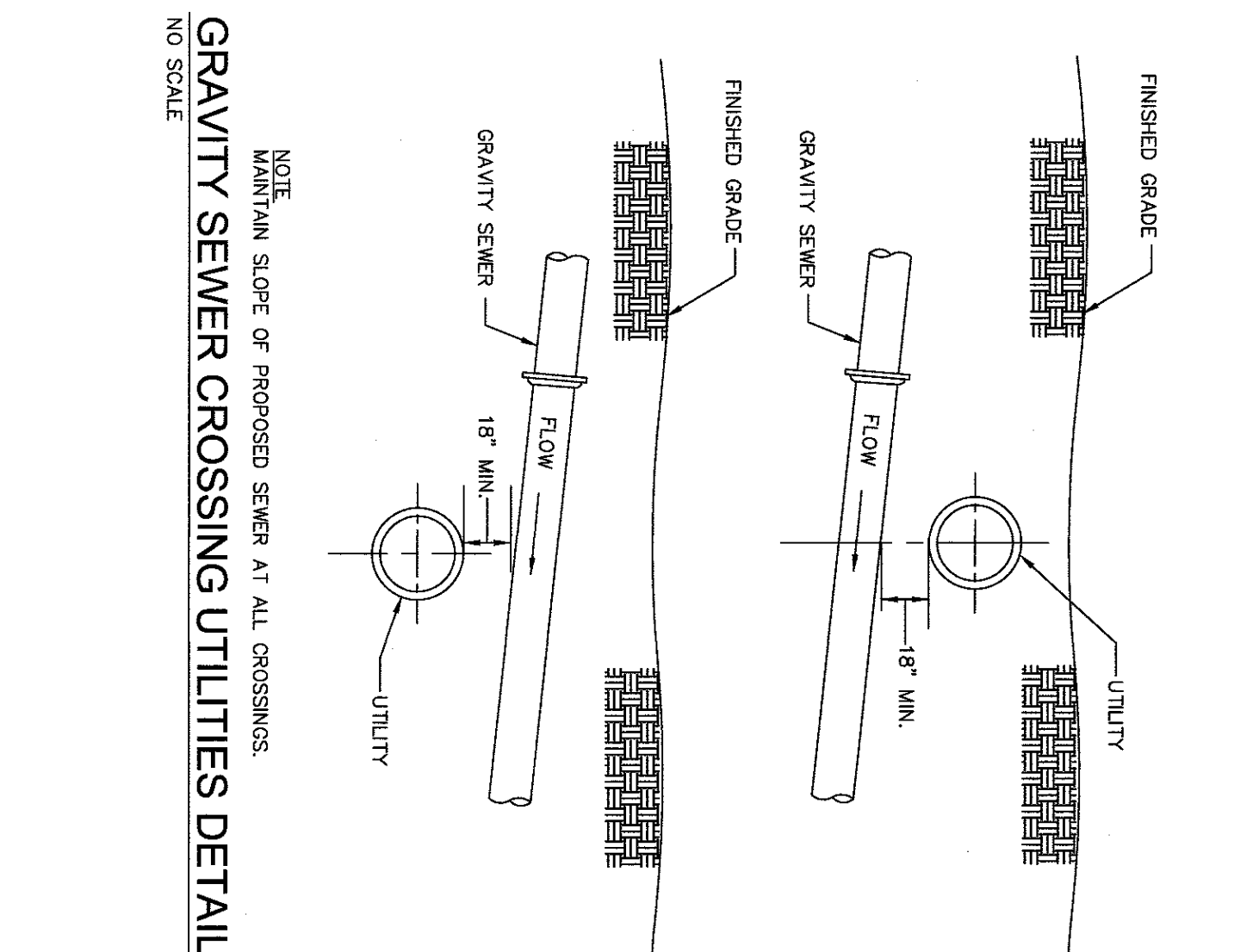
ES&S
Stackbeck Engineering & Surveying Inc.
279 North Zions Mill Road / Suite # A
Lebanon, Pennsylvania 17042
Phone: (717) 272-7110
Fax: (717) 272-7348

FIELD CREW: DY/TB
BASE MAP: JEC
DRAWN: ABR
DESIGN: ABR
CHECKED: ODS
DATE: 5/5/2020
SCALE: PROJECT #16-17-001



PHYSICAL REQUIREMENTS FOR COMPOST (TABLE 1)

PARAMETER	RANGE	TESTING METHOD
pH	6.0-8.5	TIMECC 4.11A
SOLUBLE SALT	< 10 g/5m	TIMECC 4.10A
MOISTURE	30-60% WET WG	SMEMW 2640B
ORGANIC MATTER	30-65% WET WG	TIMECC 5.07-4
PARTICLE SIZE	95% PASS THROUGH SCREEN OR SMALLER	TIMECC 2.02-8
STABILITY (CO ₂ EVOLUTION RATE)	< 8 mg CO ₂ -C PER g OM PER DAY	TIMECC 5.09-8
MATURITY (SEED EMERGENCE AND SEEDLING VIGOR)	< 1% DRY WEIGHT BASIS	TIMECC 5.05-A
PHYSICAL CONTAMINANTS	MEET OR EXCEED US EPA CLASS A STD., 40 CFR SECTION 503.13 TABLES 1 AND 3 LEVELS	TIMECC 3.08-A
CHEMICAL CONTAMINANTS	MEET OR EXCEED US EPA CLASS A STD., 40 CFR SECTION 503.13 TABLES 1 AND 3 LEVELS	TIMECC 4.08-AS
ARSENIC	< 441 PPM	TIMECC 4.09-AD
CADMIUM	< 39 PPM	TIMECC 4.05-CD
COOPER	< 1500 PPM	TIMECC 4.05-CU
LEAD	< 300 PPM	TIMECC 4.08-DB
MERCURY	< 17 PPM	TIMECC 4.09-4G
MOLYBDENUM	< 75 PPM	TIMECC 4.05-4D
NICKEL	< 420 PPM	TIMECC 4.08-4I
SELENIUM	< 100 PPM	TIMECC 4.06-SE
ZINC	< 2,800 PPM	TIMECC 4.06-2N
BIOLOGICAL CONT. (PATHOGENS)	MEET OR EXCEED US EPA CLASS A STD., 40 CFR SECT. 503.32(a) LABELS	TIMECC 7.01
FECAL COLIFORM	< 1,000 MPN PER GRAM, DRY WEIGHT BASIS	TIMECC 7.01
SALMONELLA	< 3 MPN PER 1 GRAM, DRY WEIGHT BASIS	TIMECC 7.02



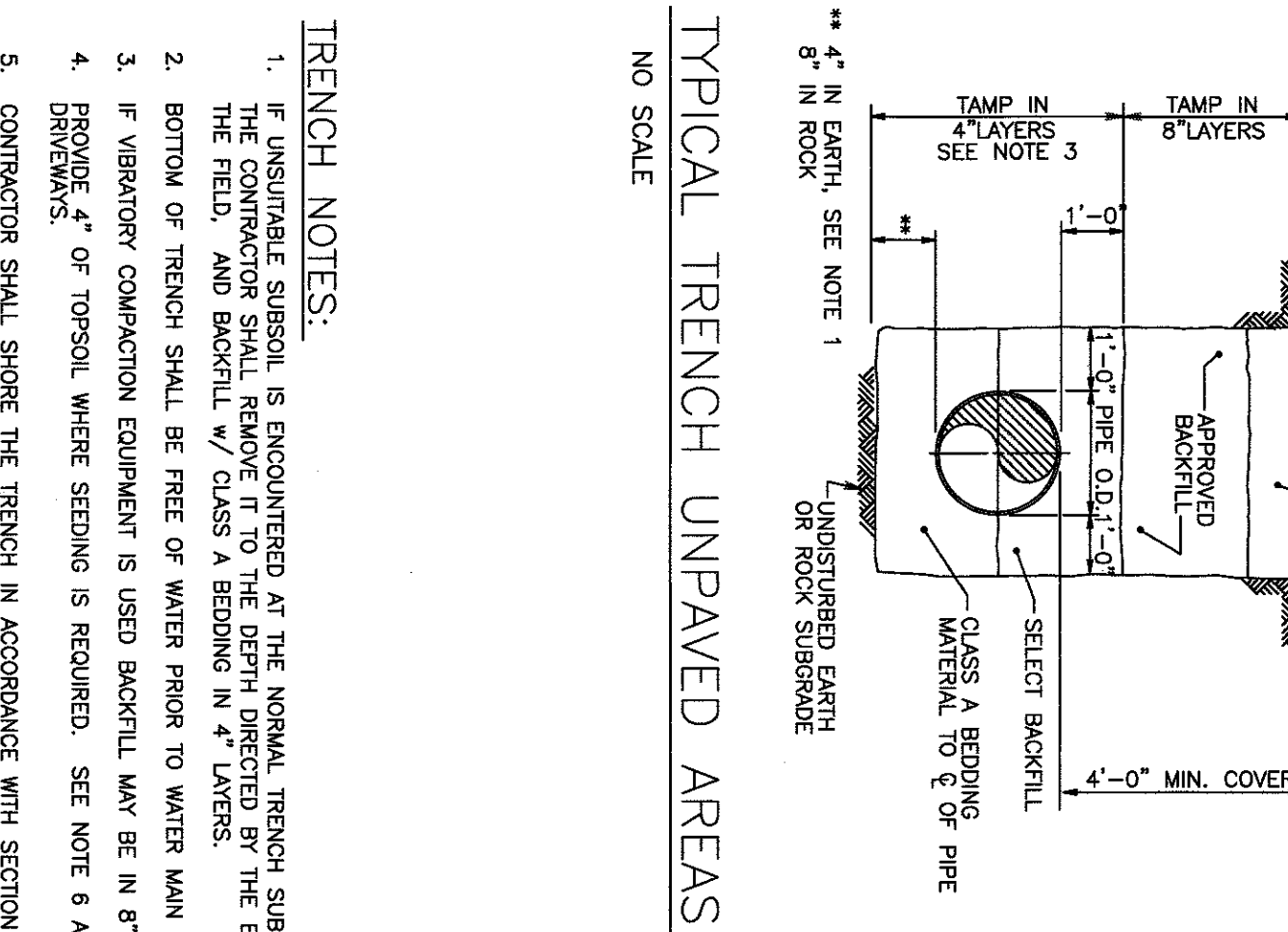
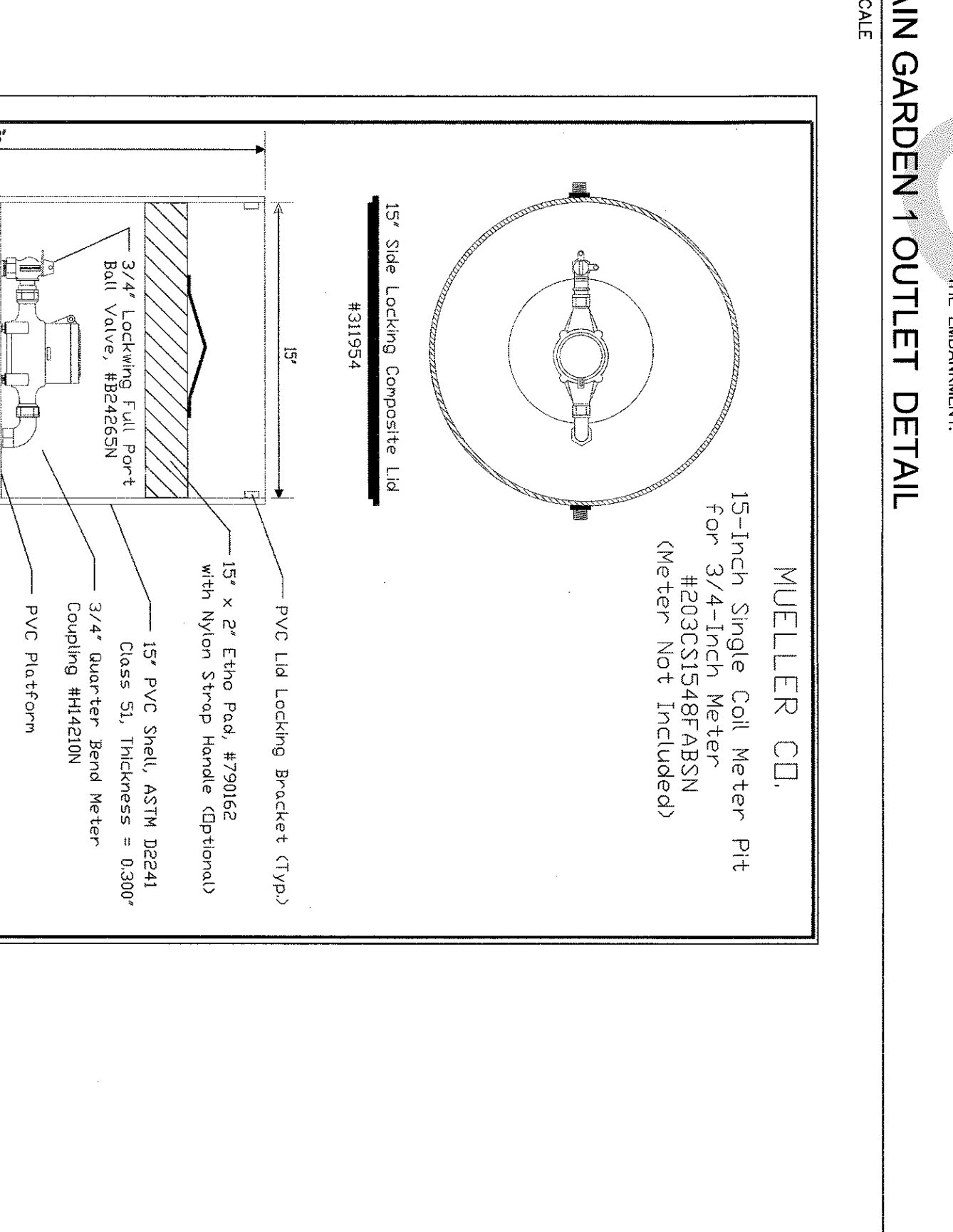
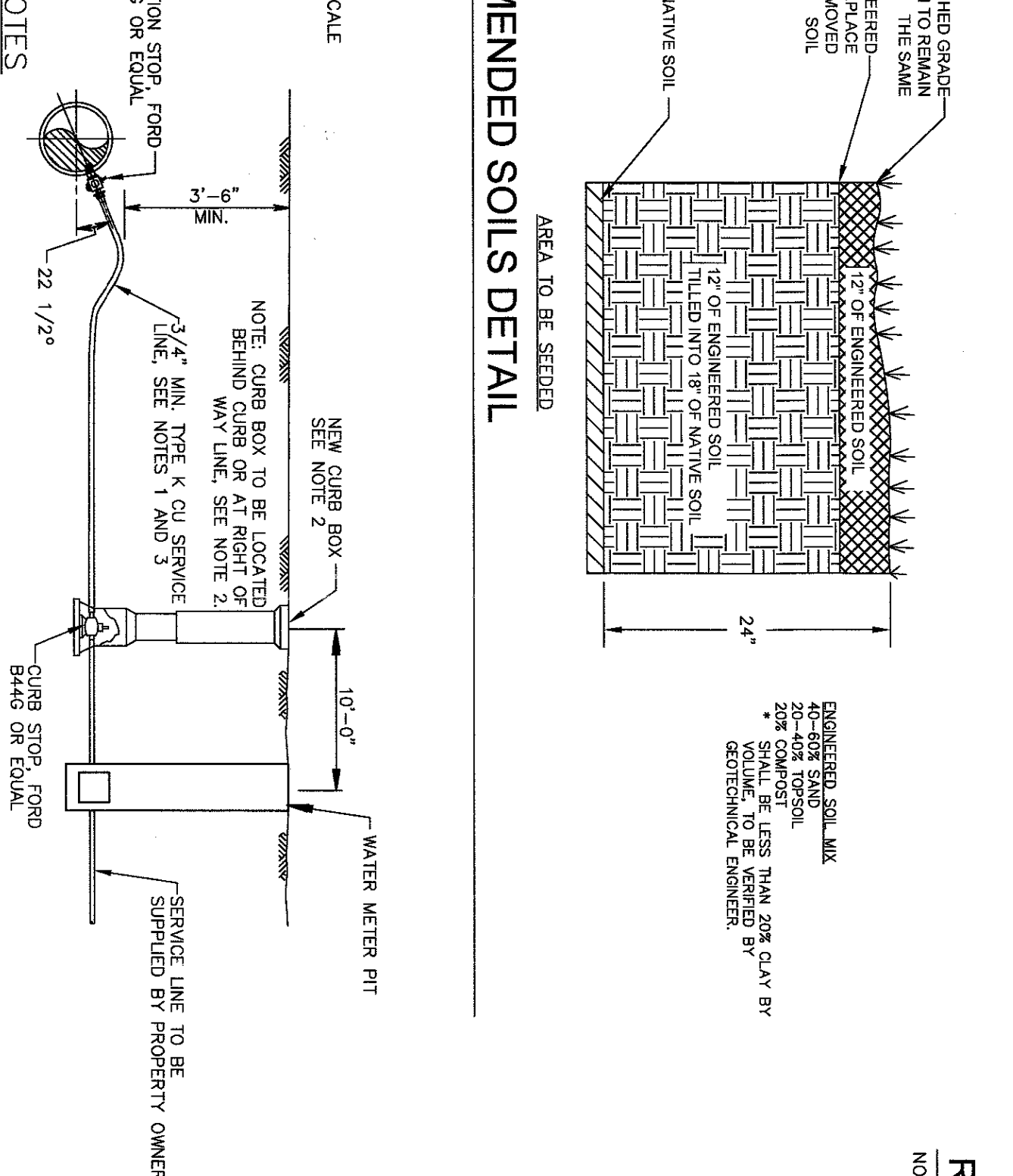
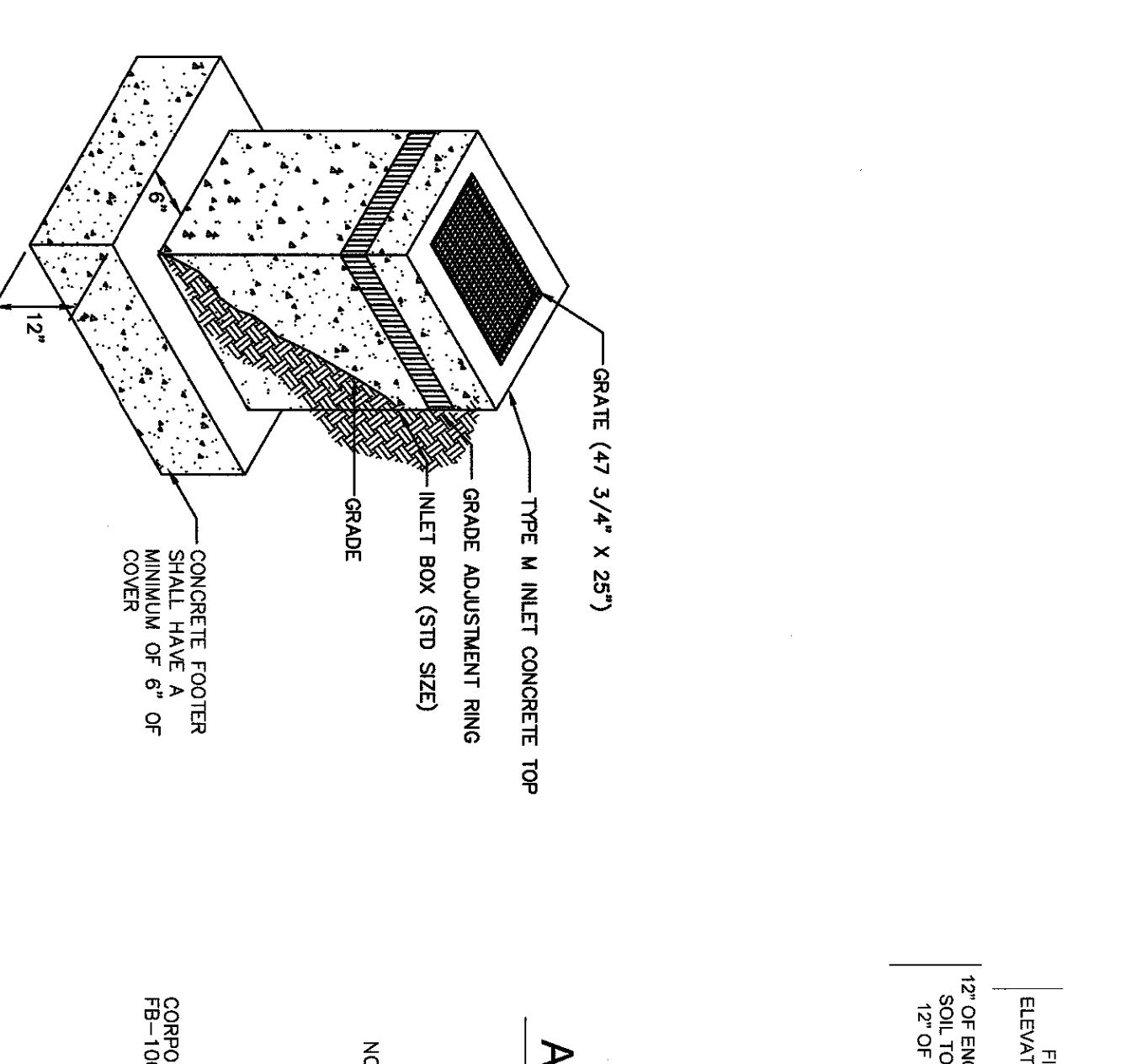
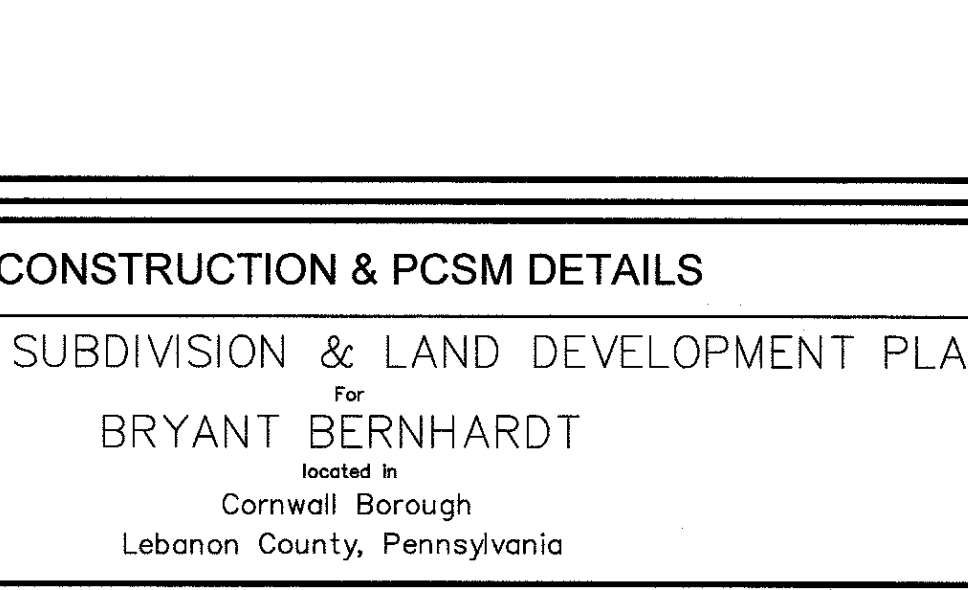
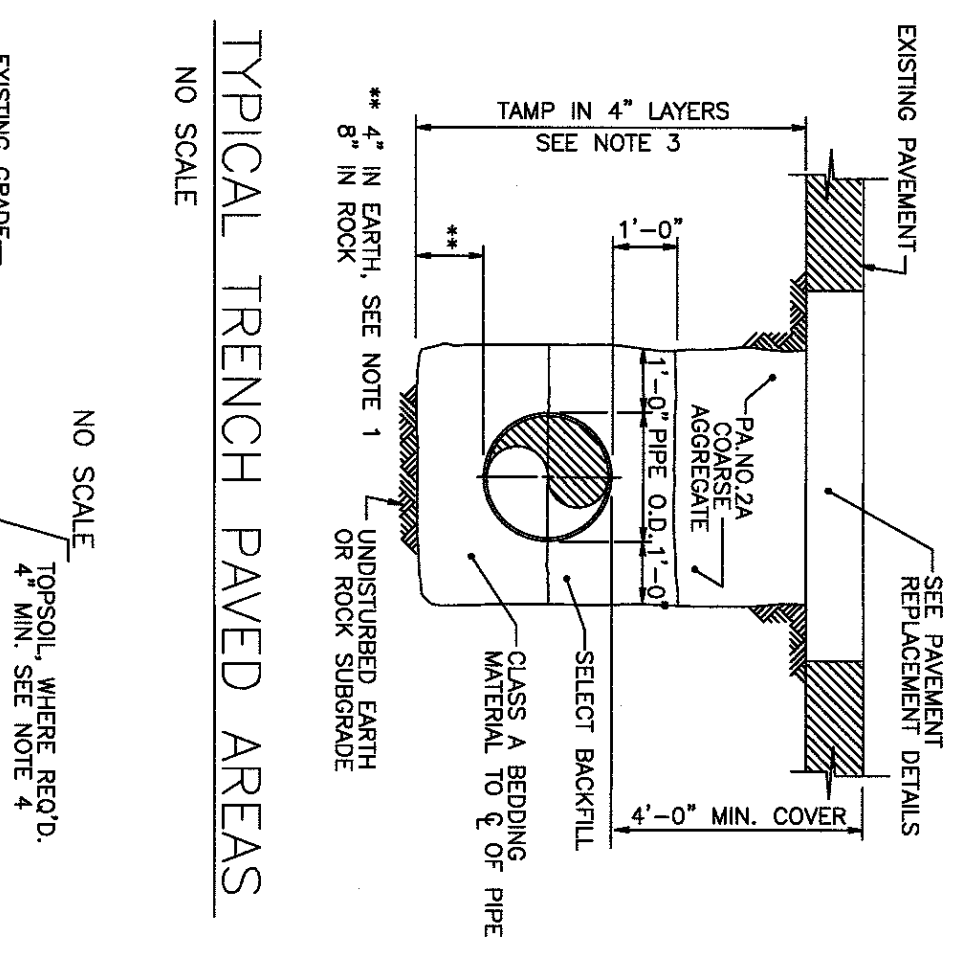
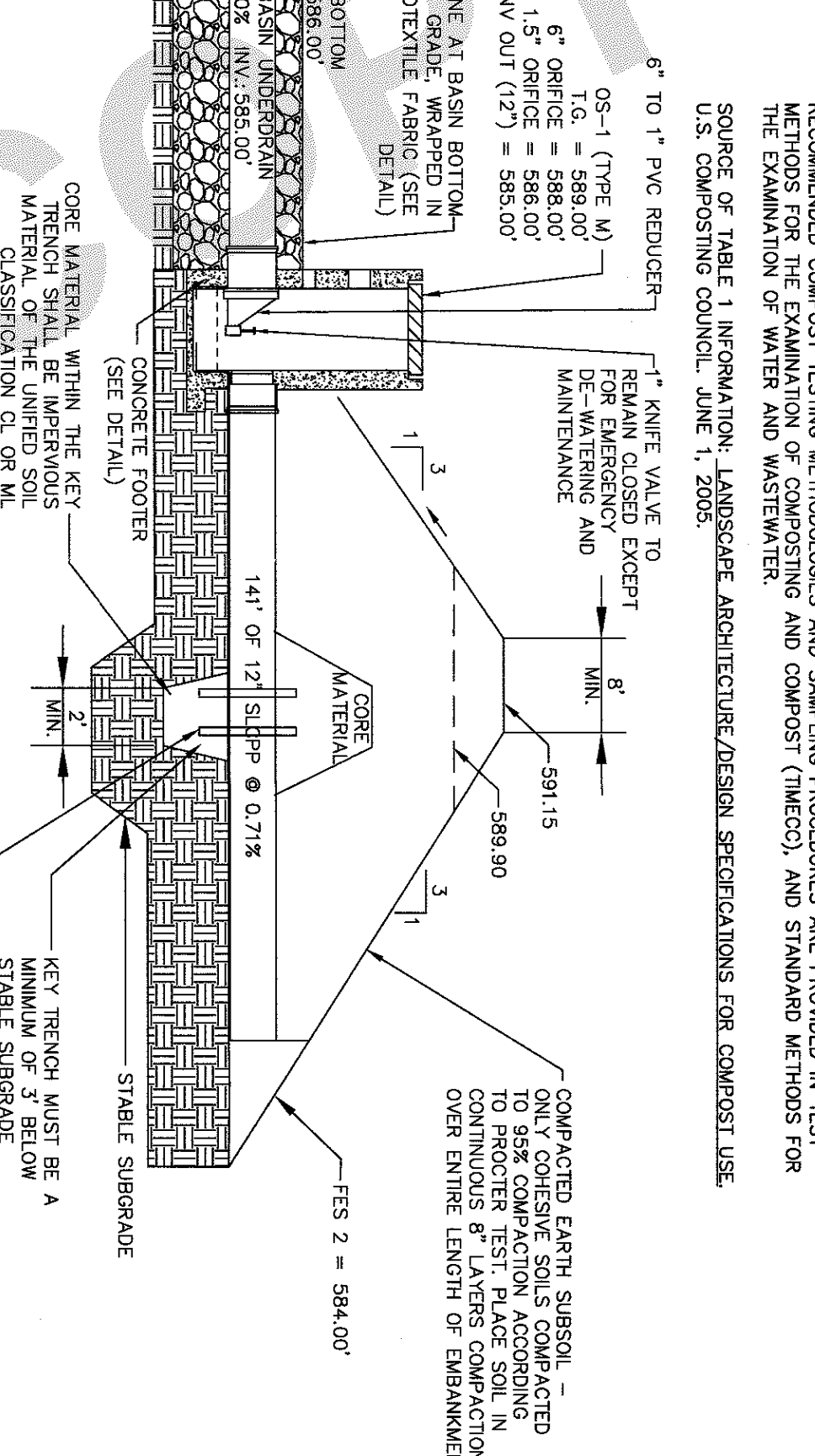
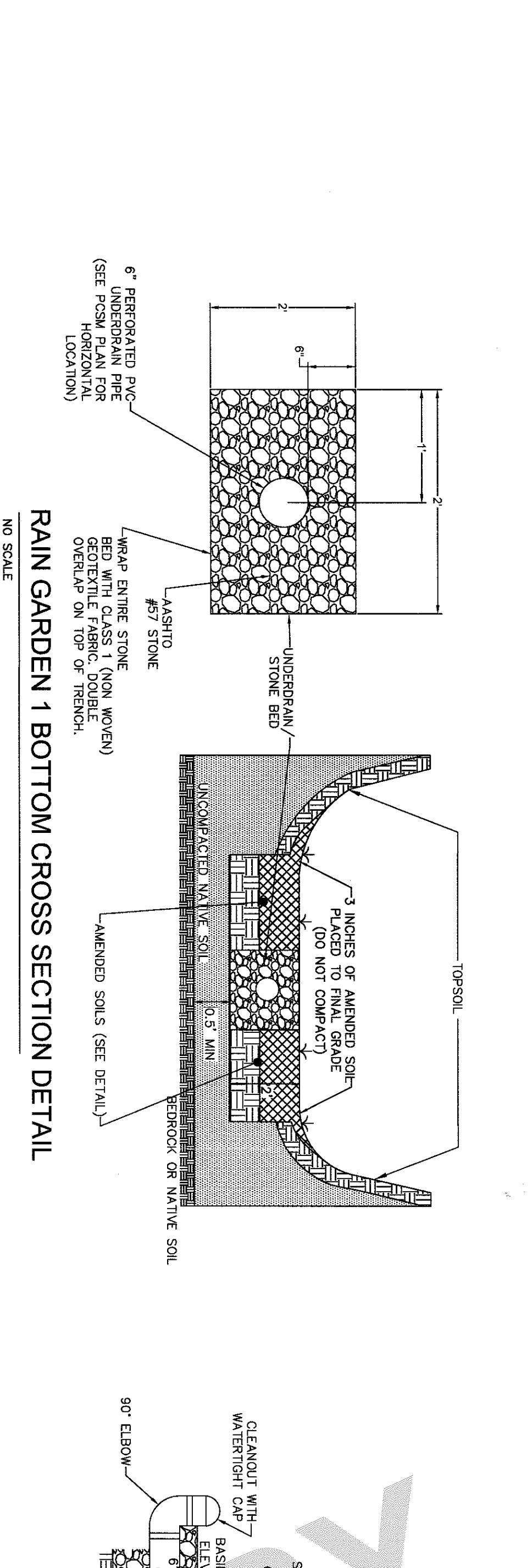
CONSTRUCTION & PCSM DETAILS

FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN

BRYANT BERNHARDT

Cornwall Borough
Lebanon County, Pennsylvania

REVISION	DATE	BY
PER LCCD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 8/1/20	8/19/20	ABK/KME
PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

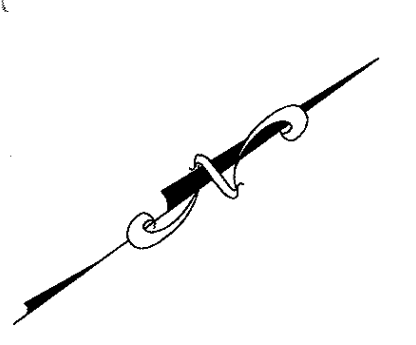
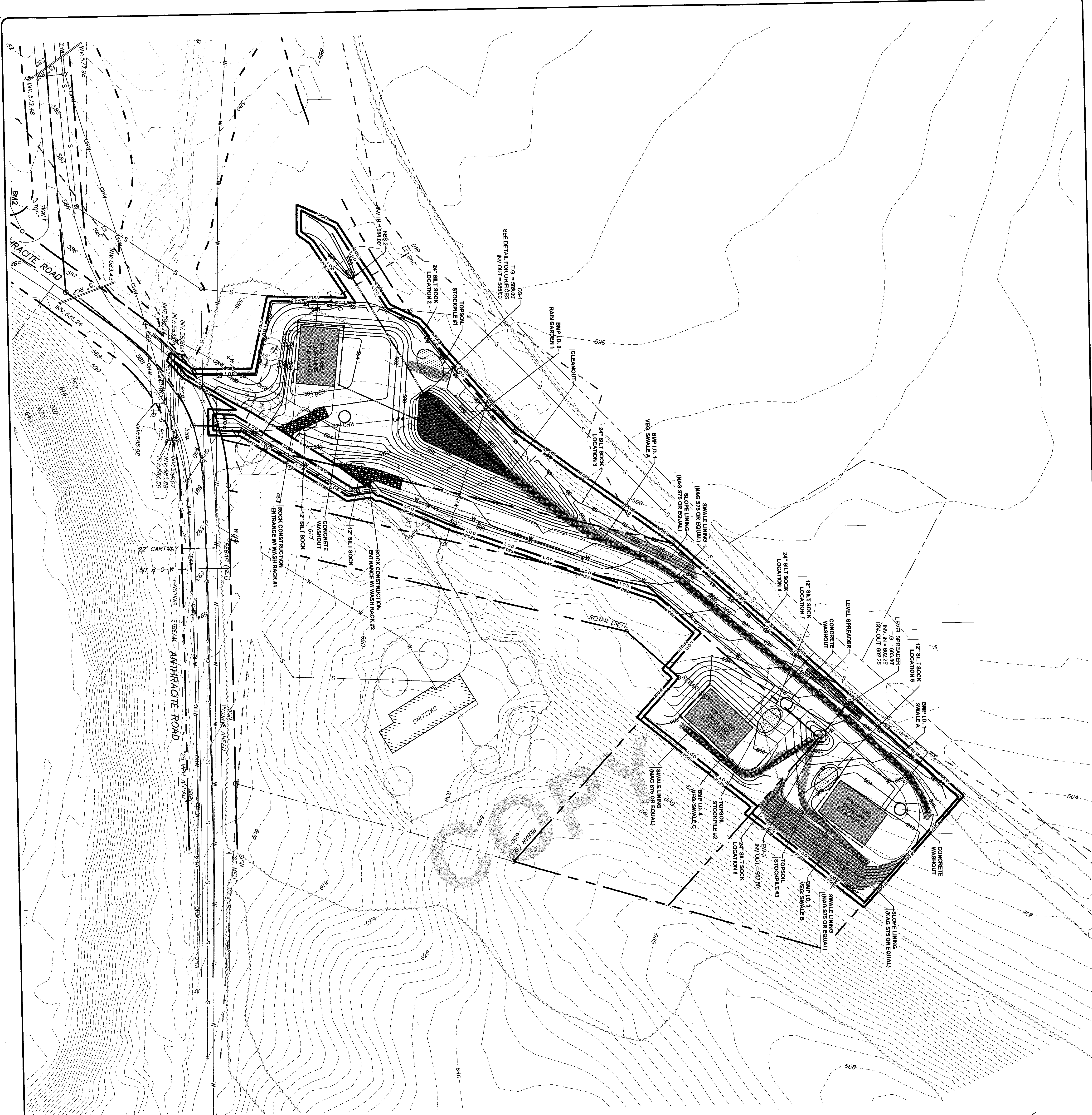


NOTES:
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PA DOT PUBLICATION 408, SECTION 605 & STANDARDS FOR ROADWAY CONST., RC-3A, CONTRACTOR SHALL PRECAST STRUCTURES BASED ON PIPE SIZES & ALIGNMENT PRIOR TO ORDERING.
2. ALL DRAINAGE STRUCTURES SHALL HAVE POURED-IN-PLACE CONCRETE CHANNEL.
3. BOTTOMS OF LARGE CONTROL DEVICES SHALL BE CONSTRUCTED OF STAINLESS STEEL.
4. PROVIDE STEPS IN ACCORDANCE WITH PA DOT RC STANDARDS.

NOTES:
1. REPLACE EXISTING WATER SERVICE LINES WITH MIN. 3/4\"/>

NOTES:
1. REPLACE EXISTING WATER SERVICE LINES WITH MIN. 3/4\"/>

FIELD CREW: D/B/TB
BASE MAP: EC
DRAWN: ABK
DESIGN: ABK
CHECKED: COS
DATE: 5/5/2020
SCALE:
PROJECT #216-17-001



SOIL DATA		HYDROLOGIC GROUP	
B/C	- BRECKENRICK CHANNERY SILT LOAM, 8-15% SLOPES	B	
LS	- LINDSIDE SILT LOAM	C	
NG	- NESHAMINY GRAVELLY SILT LOAM, 3-8% SLOPES	C	
NC	- NESHAMINY GRAVELLY SILT LOAM, 8-15% SLOPES	C	

LEGEND	
	EXISTING FEATURES
	SOILS
	ADJOINERS
	EXISTING CONTOURS
	EXISTING FREE-LINE
	EXISTING BOUNDARY LINE AND CORNERS
	EXISTING EDGE OF PAVEMENT
	EXISTING WATER LATERAL
	EXISTING SEWER
	EXISTING SEWER EASEMENT
	EXISTING FENCE
	EXISTING 100-yr FLOOD PLAN
	PROPOSED FEATURES
	PROPOSED RIGHT-OF-WAY
	PROPOSED CONTOURS
	PROPOSED WATER LATERAL
	PROPOSED SEWER LATERAL
	PROPOSED STORMWATER
	PROPOSED BUILDING SETBACK
	PROPOSED SILT SOCK
	PROPOSED EROSION CONTROL MATTING (NORTH AMERICAN GREEN S75 OR EQUIVALENT)
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED RIPRAP BOUNDARY

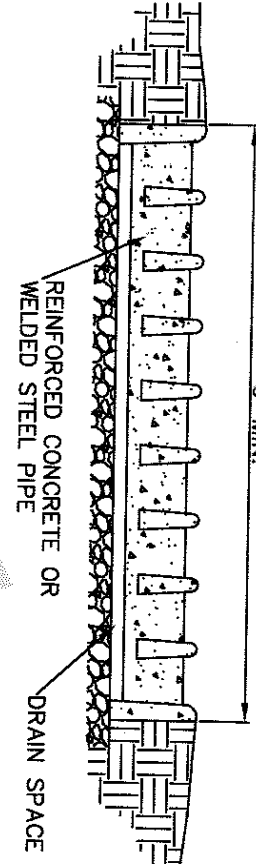
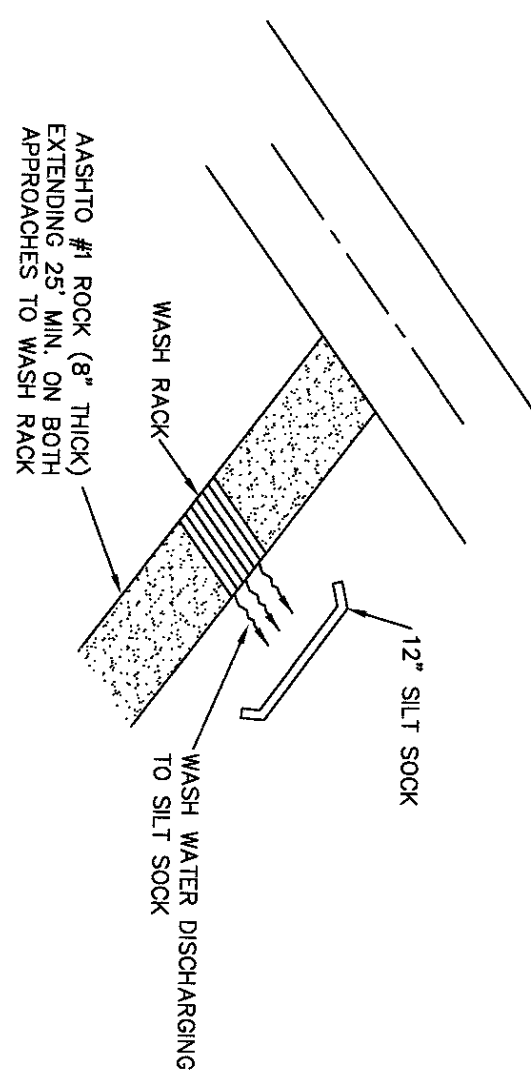
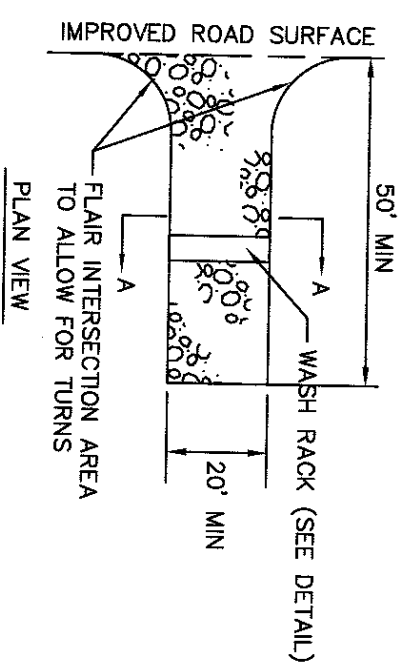
EROSION AND SEDIMENT CONTROL LIABILITY NOTE:
 FAILURE TO CORRECTLY INSTALL SEDIMENT CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE OR FAILURE TO MAINTAIN FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DERIVED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
 SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
 THESE PLANS INDICATE CRITICAL AREAS FOR EROSION AND SEDIMENT CONTROL PLACEMENT BUT DO NOT RELIEVE THE CONTRACTOR FROM PROVIDING ADDITIONAL CONTROLS AS SITE CONDITIONS WARRANT. THE ENVIRONMENTAL COMPLIANCE MANAGER FOR THE PROJECT AND OR THE DISTRICT MAY DIRECT THE CONTRACTOR TO INSTALL EROSION AND SEDIMENT CONTROL MEASURES IN ORDER TO PROTECT CRITICAL AREAS FROM EROSION AND SEDIMENTATION DURING CONSTRUCTION.

EROSION & SEDIMENT CONTROL PLAN
 FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
 For
BRYANT BERNHARDT
 located in
 Cornwall Borough
 Lebanon County, Pennsylvania

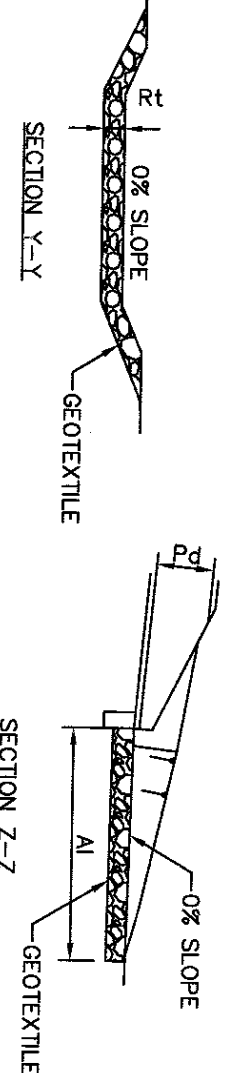
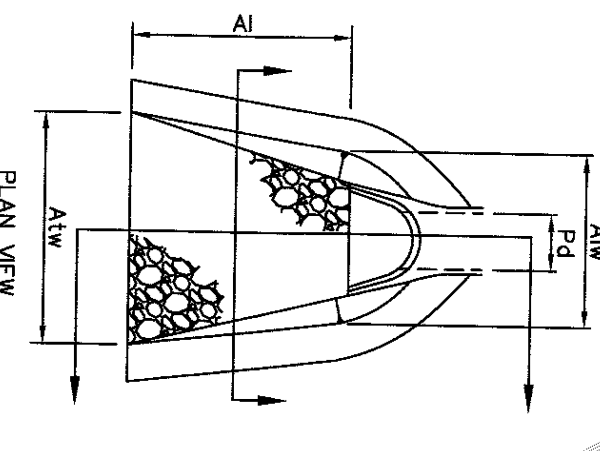
REVISION	DATE	BY
PER LCCD REVIEW LETTER DATED 5/26/2020	5/27/20	EJG
PER BOROUGH COMMENT LETTER DATED 11/4/19	7/14/20	ABK/KME
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PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

SES
 Steckbeck Engineering & Surveying Inc.
 279 North Zinns Mill Road / Suite A
 Lebanon, Pennsylvania 17042
 Phone: (717) 272-7110
 Fax: (717) 272-7348

FIELD CREW:	DV/TB
BASE MAP:	AEG
DRAWN:	ABK
DESIGN:	ABK
CHECKED:	ODS
DATE:	5/5/2020
SCALE:	1" = 50'
PROJECT #	216-17-001



NOTES:
 WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
 WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
 A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THRESHOLDS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK SHALL BE KEPT ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT CLEAR OF ALL DEBRIS. ALL SEDIMENT DEPOSIT SHALL BE REMOVED FROM TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSIT SHALL BE RETURNED TO ROADWAY OR SWEEPING RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING NOT ACCEPTABLE.
ROCK CONSTRUCTION ACCESS WITH WASH RACK
 NO SCALE



OUTLET NO.	PIPE DIA (IN)	RIPRAP SIZE (IN)	RIPRAP THICK (IN)	RIPRAP LENGTH (FT)	APRON INITIAL WIDTH (FT)	APRON TERMINAL WIDTH (FT)
FES-2	12"	3	9.0	6'	3'	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 RAINOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.
RIPRAP APRON AT PIPE OUTLET
 NO SCALE

TABLE 11.1
 CUBIC YARDS OF TOPSOIL REQUIRED FOR APPLICATION TO VARIOUS DEPTHS

DEPTH (IN)	PER 1000 SQUARE FEET	PER ACRE
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074

TOPSOIL SPECIFICATIONS
 NOT TO SCALE

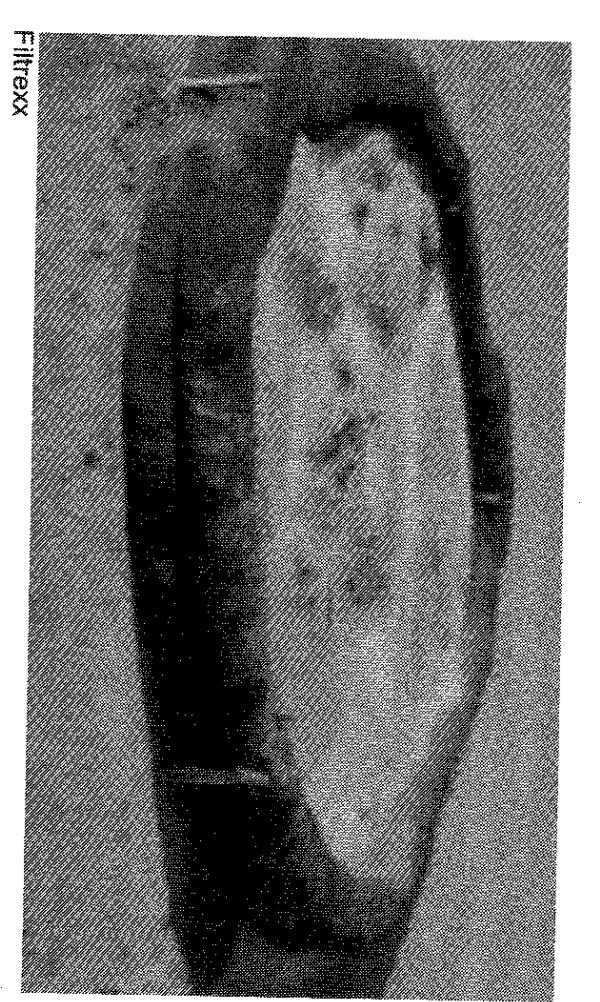
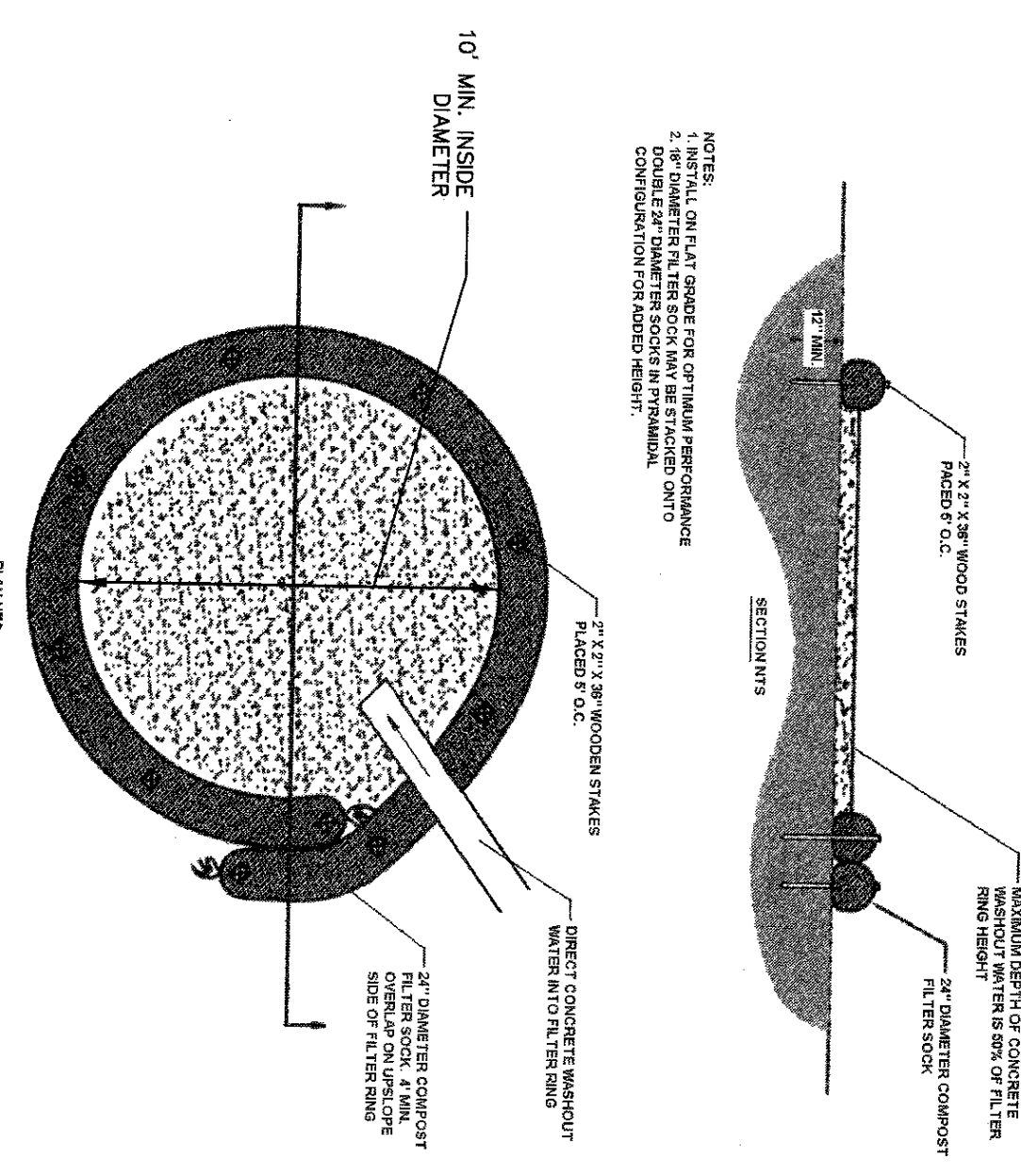
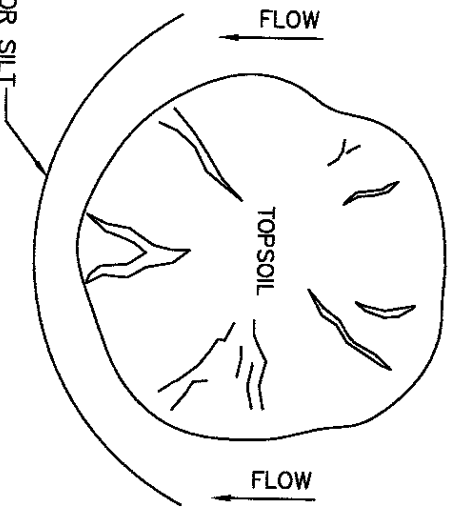


FIGURE 3.18
 Typical Composite Sock Washout Installation



NOTES:
 1. SEE PLAN FOR LOCATION OF RIPRAP FROM CONCRETE.
 2. SEE PLAN FOR LOCATION OF RIPRAP FROM CONCRETE.
 3. SEE PLAN FOR LOCATION OF RIPRAP FROM CONCRETE.
 4. SEE PLAN FOR LOCATION OF RIPRAP FROM CONCRETE.
 5. SEE PLAN FOR LOCATION OF RIPRAP FROM CONCRETE.
 A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
 Adapted from Filtrex
 363-2134-008 / March 31, 2012 / Page 56
COMPOST SOCK WASHOUT INSTALLATION DETAIL
 NO SCALE



NOTES:
 1. STOCKPILE SHALL BE USED TO CONTAIN ALL STRIPPED TOPSOIL IN A LIMITED AREA IN ORDER TO PREVENT CONTAMINATION.
 2. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.
 3. STOCKPILE SLOPES MUST BE STABILIZED IMMEDIATELY.
 4. STOCKPILE SHALL BE LOCATED SO THAT ALL SMALLS CAN FUNCTION AS DESIGNED.
TOPSOIL STOCKPILE DETAIL
 NO SCALE

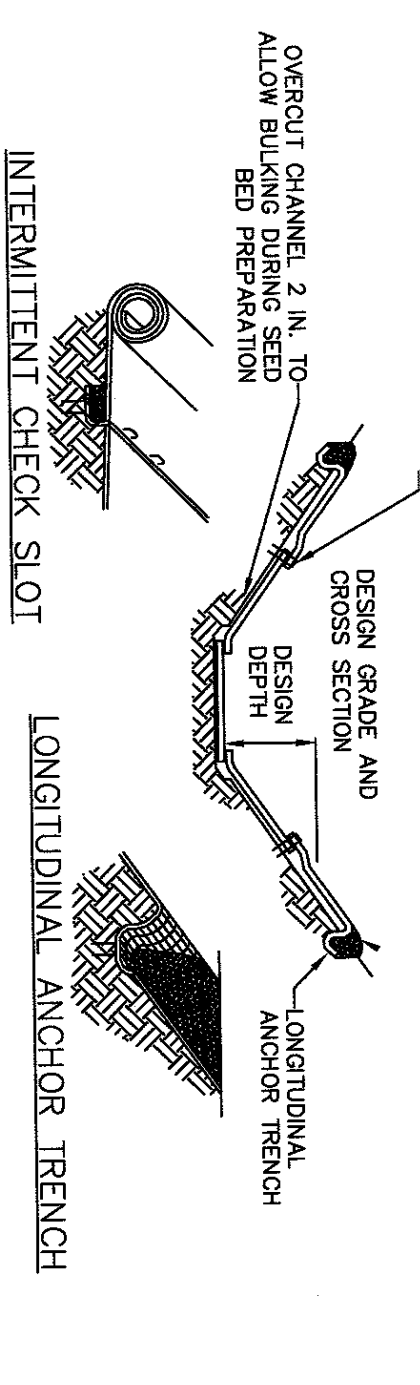
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BASE MAP:	JEC
DRAWN:	AKR
DESIGN:	AKR
CHECKED:	QDS
DATE:	5/5/2020
SCALE:	
PROJECT #:	216-17-001



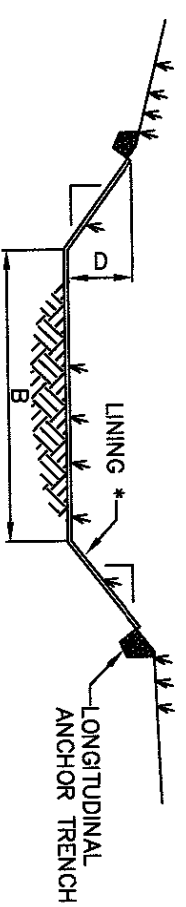
EROSION & SEDIMENT CONTROL DETAILS
FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN
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PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK

13 OF 15 SHEETS



ISOMETRIC VIEW



CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

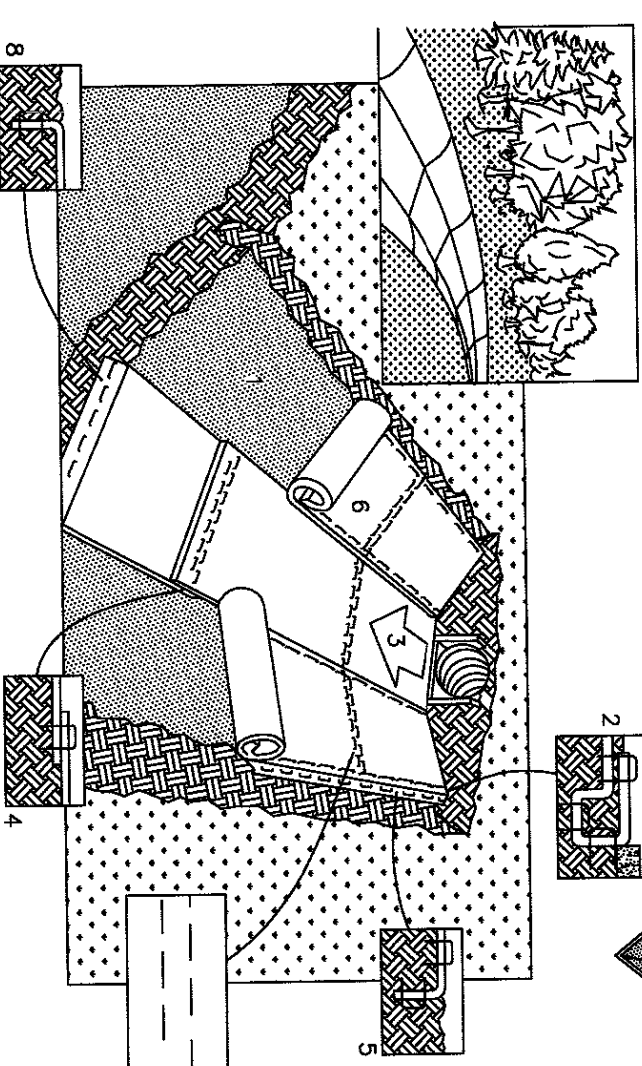
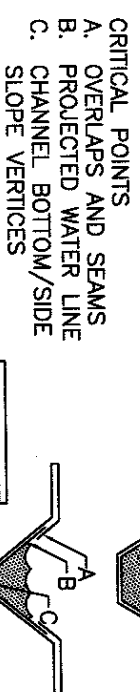
CHANNEL STATIONS	BOTTOM WIDTH (FT)	DEPTH (FT)	TOP WIDTH (FT)		LINING * STAPLE PATTERN
			Z1	Z2	
STAPLE A	1.0	1.0	3'	3'	NAG S7/S OR EQUAL
STAPLE B	1.0	1.0	6.0	6.0	NAG S7/S OR EQUAL
STAPLE C	6.0	1.0	12.0	3'	NAG S7/S OR EQUAL

NOTES:
 1. CHANNELS SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
 2. CHANNELS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.
 3. CHANNELS SHALL BE REPAIRED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
 4. NO MORE THAN ONE THIRD OF THE SHOULDER (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 INCHES TO 4 INCHES. STAPLE PATTERNS SHALL BE REPAIRED OR REPLACED FROM REMOVED CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

VEGETATED CHANNEL DETAIL

NO SCALE

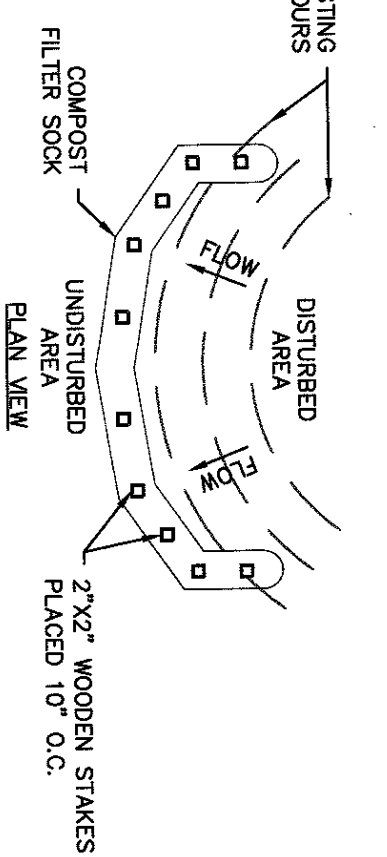
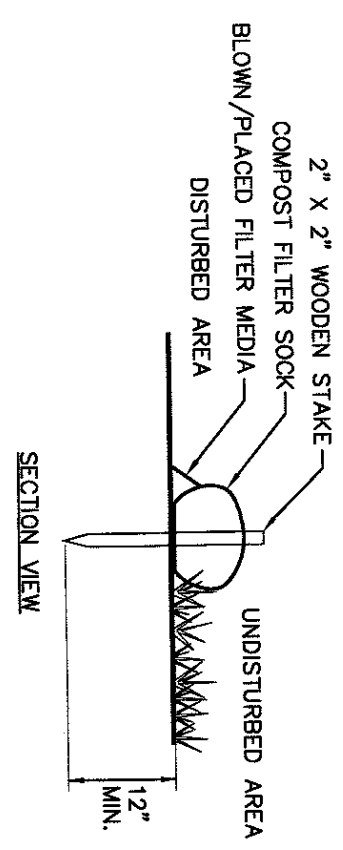
NOTE:
 HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO PENETRATE CORRECT STAPLE RECOMMENDATIONS FOR CHANNELS. REFER TO GENERAL STAPLE PATTERN GUIDE FOR



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME.
2. FERTILIZER AND SEED. THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" TRENCH AT THE TOP OF THE CHANNEL. THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAPLED STRIPS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
5. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C550 MATING). A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
6. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

EROSION LINING INSTALLATION DETAIL

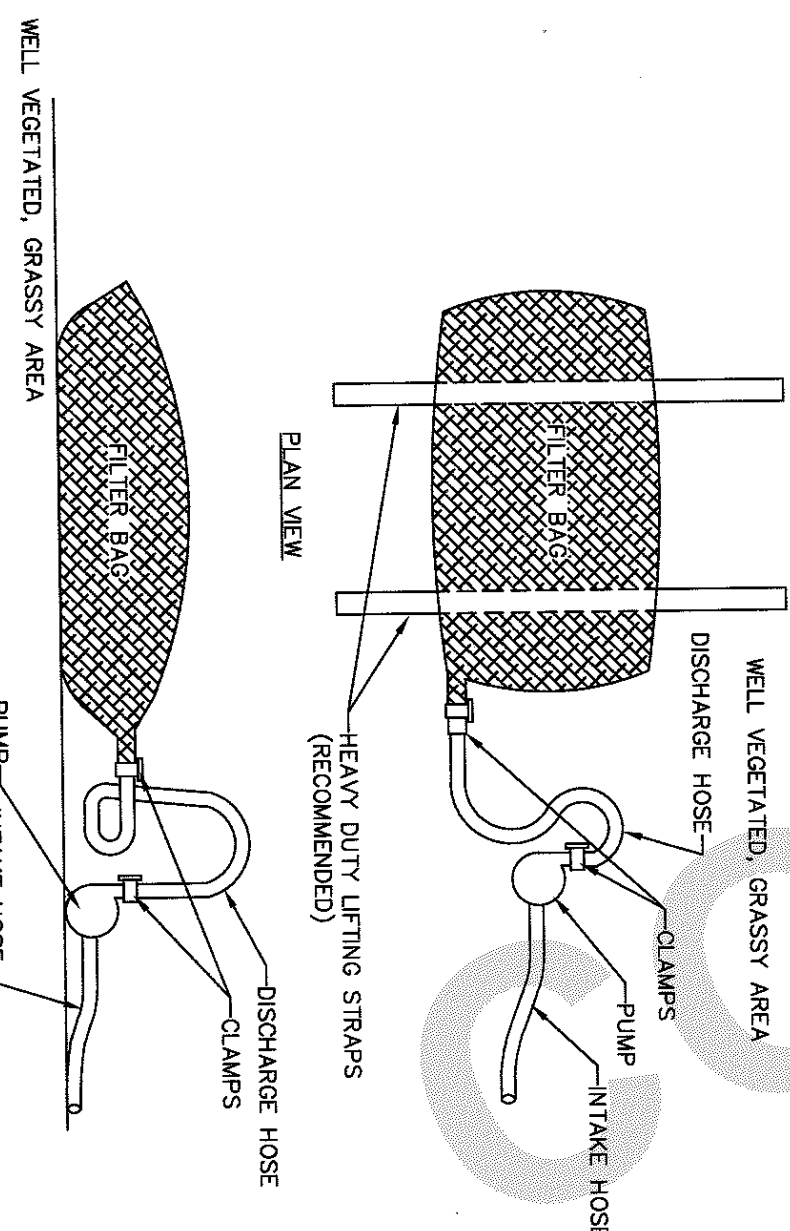
NO SCALE



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.
 COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN SPECIFIED BY THE MANUFACTURER. SOAK SHALL BE SPREAD BY THE MANUFACTURER. TRAFFIC SHALL NOT BE PERMITTED TO CROSS THE FILTER SOCKS.
 ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED OF IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
 SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
 BIODEGRADABLE FILTER SOCKS SHALL BE PLACED AFTER 6 MONTHS. PHOTOGRAPHS OF SOCKS AFTER 1 YEAR. NON-BIODEGRADABLE SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAPLES SHALL BE REMOVED. THE SOCK SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

FILTREXX SILT-SOXX DETAIL

NO SCALE



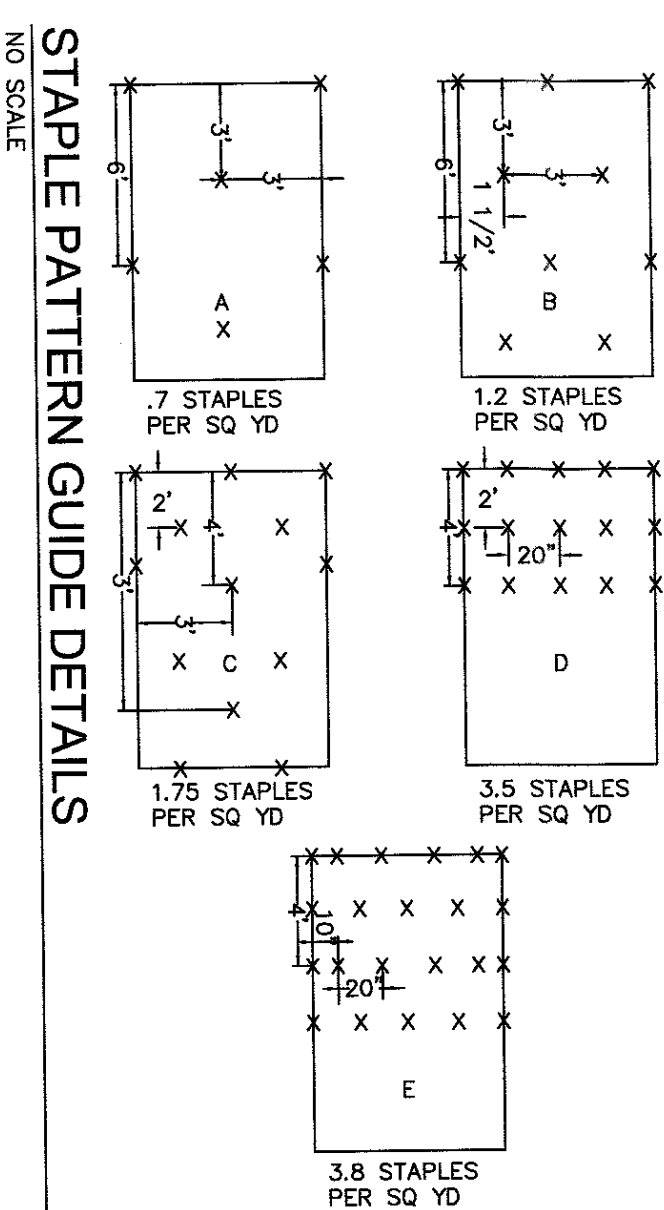
PROPERTY	TEST METHOD	MINIMUM STANDARD
Avg. Wet Tensile Strength	ASTM D-4884	60 LB/LIN
Avg. Dry Tensile Strength	ASTM D-4832	205 LB
Puncture	ASTM D-4833	110 LB
Mullen Burst	ASTM D-3786	350 PSI
UV Resistance	ASTM D-4355	70%
AOS % Retained	ASTM D-4751	80 Sieve

NOTE:
 LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TREATING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL, PUMP-ROSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. BAGS SHALL BE KEPT AVAILABLE FOR REMOVAL, UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED TO STRAPS TO FACILITATE REMOVAL.
 BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE INTO STABLE EROSION RESISTANT AREAS. THE DISCHARGE HOSE SHALL BE PLACED ON SLOPES GREATER THAN 3% FOR SLOPES EXCEEDING 3% CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STRESS.
 NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN A DISTURBED AREA.
 THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
 THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SUNKEN.
 FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEMS ARE DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

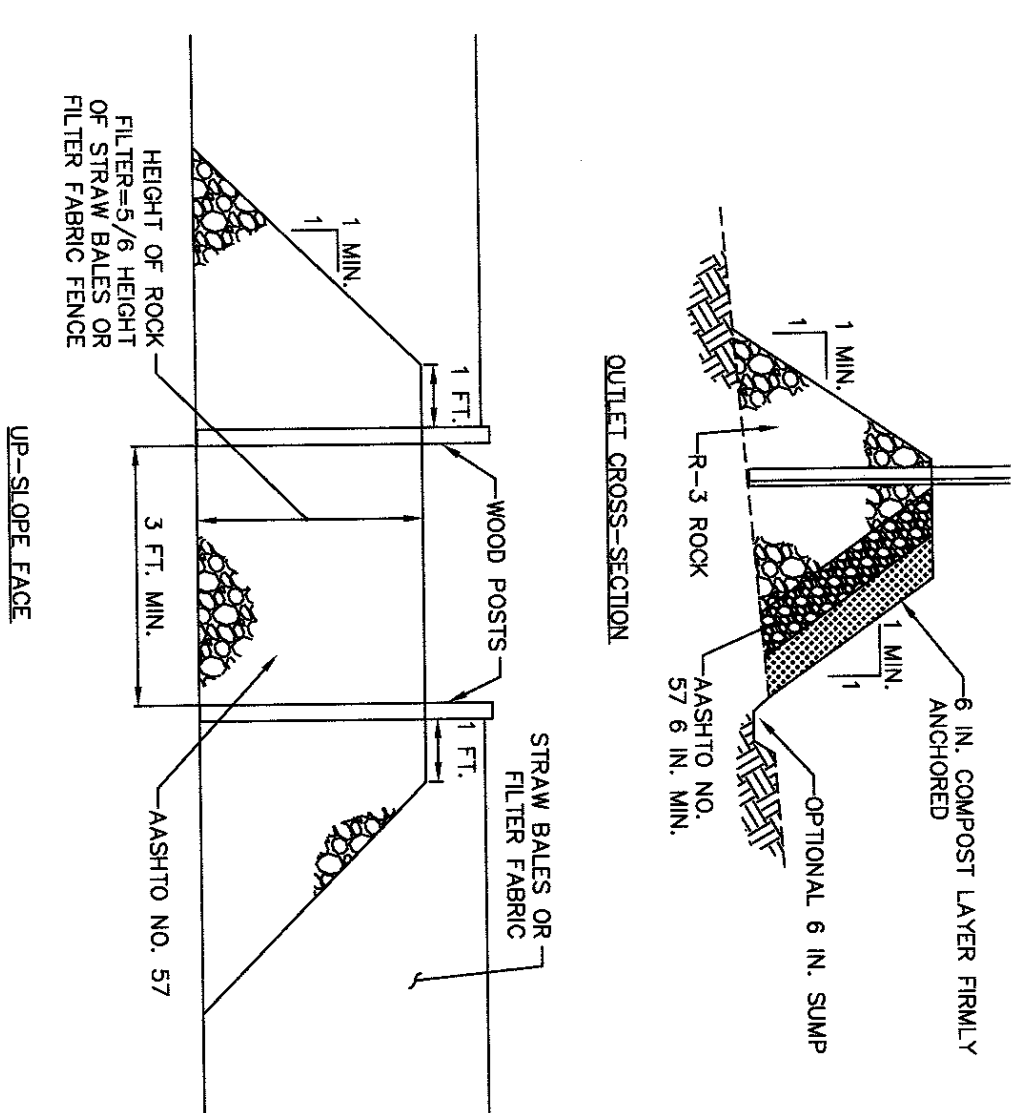
PUMPED WATER FILTER BAG DETAIL

NO SCALE



STAPLE PATTERN GUIDE DETAILS

NO SCALE



NOTE:
 1. A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE NOTED ON THE PLANS AND WHERE FAILURE OF A SILT SOCK BARRIER HAS OCCURRED DUE TO EXCESSIVE FLOW.
 2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

ROCK FILTER OUTLET WITH COMPOST DETAIL

NO SCALE

EROSION & SEDIMENT CONTROL DETAILS

FINAL MINOR SUBDIVISION & LAND DEVELOPMENT PLAN

For BRYANT BERNHARDT

located in Cornwall Borough, Lebanon County, Pennsylvania

SES
 Steckbeck Engineering & Surveying Inc.
 279 North Zions Mill Road / Suite A
 Lebanon, Pennsylvania 17042
 Phone: (717) 272-7110
 Fax: (717) 272-7348

FIELD CREW:	DV/TB
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DRAWN:	ABK
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PER BOROUGH COMMENT LETTER DATED 9/3/20	9/22/20	ABK



COUNTY OF LEBANON
 RECORDER OF DEEDS
 Dawn Blauch, Recorder of Deeds
 Dawn Ebersole, 1st Deputy
 400 South 8th Street Room 107
 Lebanon, Pennsylvania 17042-6794

Instrument Number - 202106664
 Recorded On 4/20/2021 At 9:25:16 AM
 * Instrument Type - PLAN-SUBDIVISION
 Invoice Number - 348853
 * Grantor - BERNHARDT, BRYANT D
 *

* Total Pages - 16

* FEES
 STATE WRIT TAX \$0.50
 RECORDING FEES - \$69.50
 RECORDER OF DEEDS
 PARCEL CERTIFICATION \$10.00
 FEE
 COUNTY ARCHIVES FEE \$2.00
 ROD ARCHIVES FEE \$3.00
 TOTAL PAID \$85.00

This is a certification page
DO NOT DETACH
 This page is now part
 of this legal document.

Lebanon County UPI Certification
 On April 20, 2021 By YES

I hereby CERTIFY that this document is
 recorded in the Recorder of Deeds Office
 of Lebanon County, Pennsylvania.

Dawn Blauch

Dawn Blauch
 Recorder of Deeds



Lebanon County Planning Department
 Reviewed On April 20, 2021
Janice L. Chagnery

* Information denoted by an asterisk may change during
 the verification process and may not be reflected on this page.

Book: 96 Starting Page: 151 Ending Page: 166