

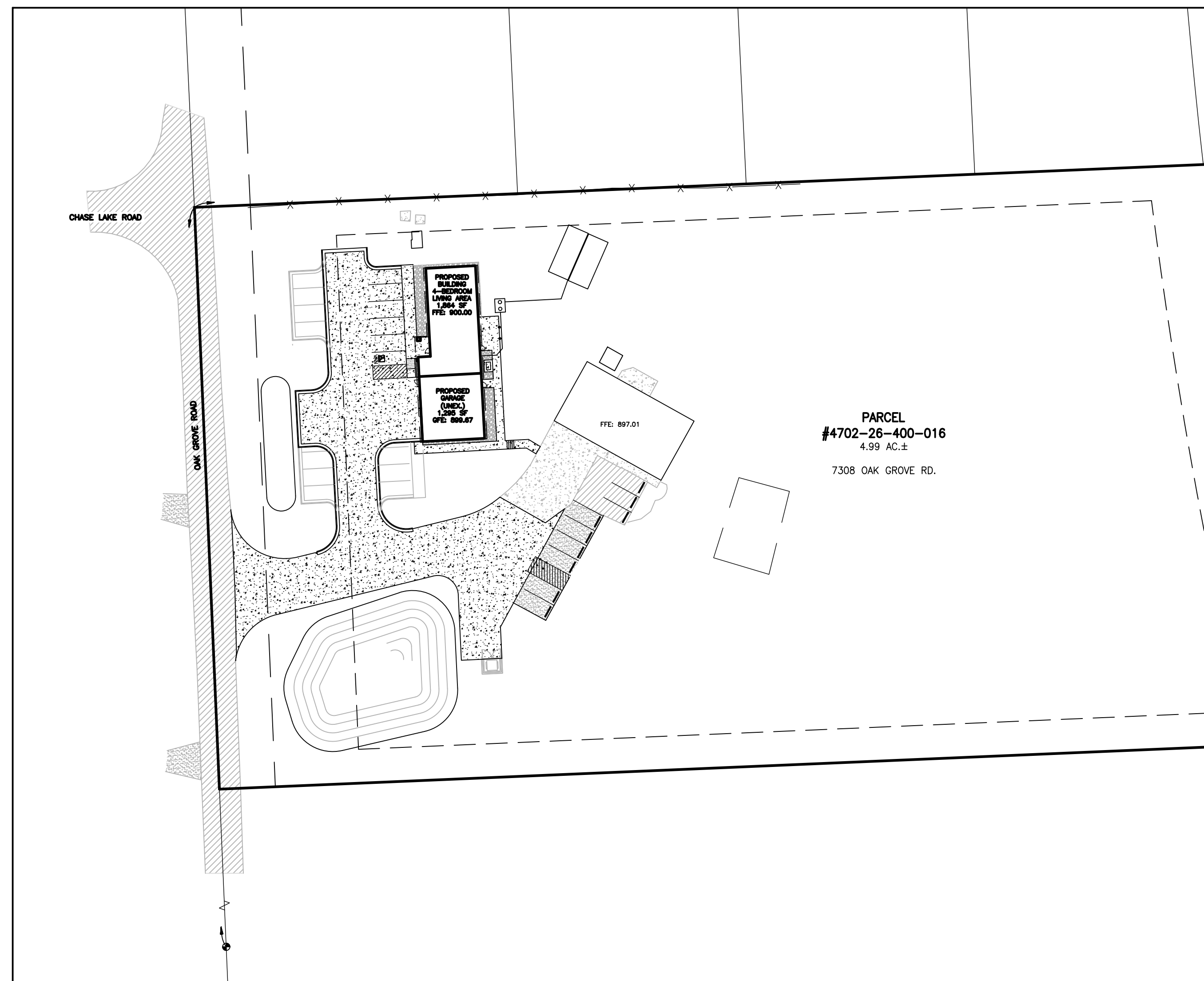
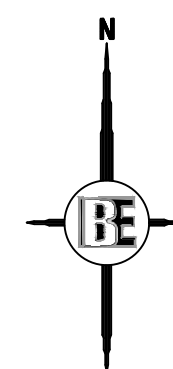
PROPERTY DESCRIPTION:

DESCRIPTION OF PARCEL PER
LIVINGSTON COUNTY TAX ROLL:
SEC 26 T4N R4E N 5 AC OF N 1/2 OF
SE 1/4 OF SEC 26 WHICH IS LYING W
OF ANN ARBOR RAILROAD ROW SPLIT
FROM 400-001

PRELIMINARY SITE PLAN FOR LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION PART OF SE QUARTER, SECTION 26 COHOCTAH TOWNSHIP, LIVINGSTON COUNTY, MI



LOCATION MAP
NO SCALE

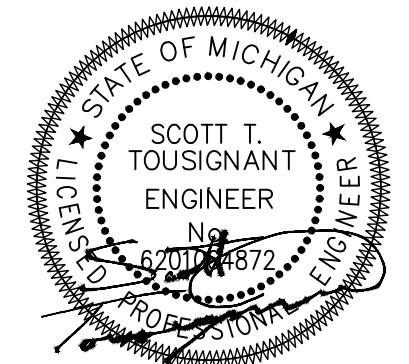


OVERALL SITE MAP
NO SCALE

| SHEET INDEX | |
|-----------------|---|
| SHEET NO. | DESCRIPTION |
| 1 | COVER |
| 2 | GENERAL NOTES & LEGEND |
| 3 | EXISTING CONDITIONS & DEMOLITION PLAN |
| 4 | SITE PLAN |
| 5 | GRADING & DRAINAGE PLAN |
| 6 | SOIL EROSION & SEDIMENTATION CONTROL PLAN |
| 7 | UTILITY PLAN |
| 8 | BASIN DETAILS |
| 9 | STORM PLAN & PROFILE |
| 10 | LANDSCAPE PLAN |
| 11 | NATURAL FEATURES PLAN |
| 12 | CONSTRUCTION DETAILS |
| PLANS BY OTHERS | |
| 1 | LIGHTING PLAN (GASSER BUSH) |
| A1.0 | FLOOR PLAN (LINDHOUT ASSOCIATES) |
| A2.1 | EXTERIOR ELEVATIONS (LINDHOUT ASSOCIATES) |
| A2.2 | EXTERIOR ELEVATIONS (LINDHOUT ASSOCIATES) |
| A3.0 | RENDERED VIEWS (LINDHOUT ASSOCIATES) |

PREPARED FOR:

LINDHOUT ASSOCIATES ARCHITECTS
10465 CITATION DRIVE
BRIGHTON, MI 48116
CONTACT: BRAD ALVORD
PHONE: 810.227.5668
EMAIL: BMA@LINDHOUT.COM



LIGHTING BY:

GASSER BUSH ASSOCIATES
30984 INDUSTRIAL RD.
LIVINGSTON, MI 48150
CONTACT: BRAD ALVORD
PHONE: 810.227.5668
EMAIL: BMA@LINDHOUT.COM

PREPARED BY:

BEBOSS
Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670
CONTACT: SCOTT TOUSIGNANT
EMAIL: SCOTT@BOSSENG.COM

| PERMITS & APPROVALS | | |
|---------------------|----------------|---------------|
| AGENCY | DATE SUBMITTED | DATE APPROVED |
| • COHOCTAH TOWNSHIP | - | - |
| • LCDC - SESC | - | - |
| • LIRC | - | - |

INDEMNIFICATION STATEMENT

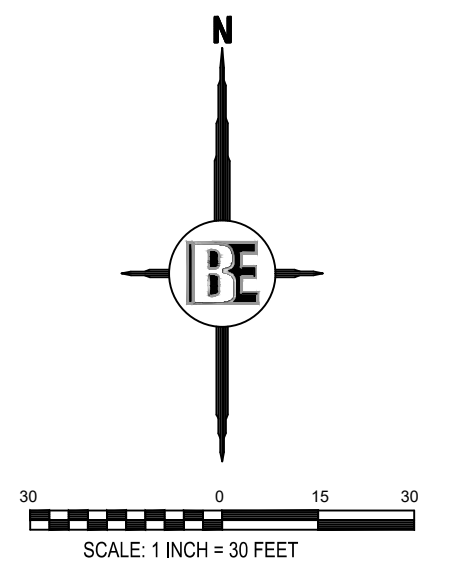
THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

| | |
|---------------------------------------|----------|
| | 1 |
| NO BY CK REVISION | DATE |
| ISSUE DATE: 9/10/24 JOB NO: 24-176 | |

DESCRIPTION OF PARCEL PER LIVINGSTON COUNTY TAX ROLL:
 SEC 26 T4N R4E N 5 AC OF N 1/2 OF SE 1/4 OF SEC 26 WHICH IS LYING W OF ANN ARBOR RAILROAD ROW SPLIT FROM 400-001

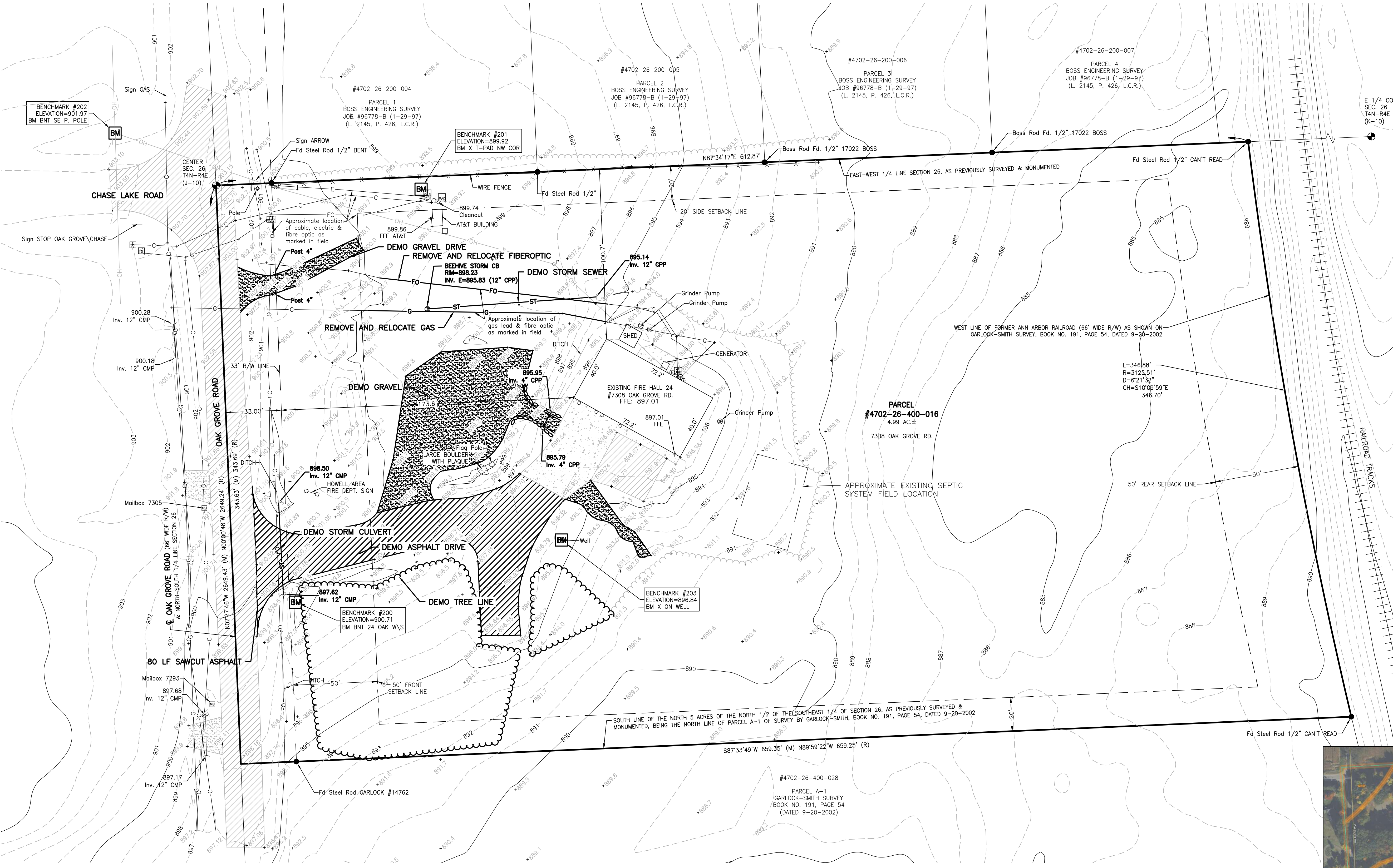
- GENERAL SURVEY NOTES:**
- BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.
 - SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
 - EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
 - ELEVATIONS WERE ESTABLISHED WITH GPS USING OPUS GPS POST-PROCESSING. (NAVD83 DATUM)
 - CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
 - THE LOCATIONS OF UNDERGROUND UTILITIES, AS SHOWN ON THIS DRAWING ARE APPROXIMATE.
 - THE LOCATIONS ARE BASED ON PHYSICAL FIELD LOCATIONS OF STRUCTURES ALONG WITH MISS DIG MARKINGS.
 - ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
 - ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

CURRENT ZONING: SUBURBAN RESIDENTIAL DISTRICT (SR)
 MINIMUM SETBACK REQUIREMENTS:
 FRONT = 50 FEET
 SIDES = 20 FEET
 REAR = 50 FEET
 MAXIMUM LOT COVERAGE = 30%
 MAXIMUM BUILDING HT. = 35 FEET



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO RESPONSIBILITY IS ASSUMED FOR THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.
 BE ENGINEERING
 1-800-482-7171
 www.be-engineering.com



BE ENGINEERING
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
 PREPARED FOR: LINDHOUT ASSOCIATES AIA, PC
 10465 CITATION DRIVE
 BRIGHTON, MI 48116
 810.227.5668
 TITLE: EXISTING CONDITIONS & DEMOLITION PLAN

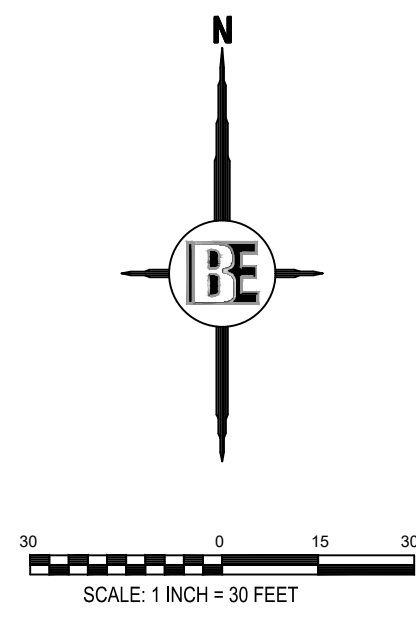
| NO | BY | DATE | REVISION |
|----|----|------|----------|
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DESIGNED BY: ST
 DRAWN BY: MJD
 CHECKED BY:
 SCALE: 1" = 30'
 JOB NO: 24-176
 DATE: 9/10/2024
 SHEET NO.



SOIL MAP (WEB SOIL SURVEY)
 NOT TO SCALE
 SOILS:
 Ls - LAMSON FINE SANDY LOAM
 MoB - WAWASEE LOAM, 2 TO 6 PERCENT SLOPES
 MoC - WAWASEE LOAM, 6 TO 12 PERCENT SLOPES

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

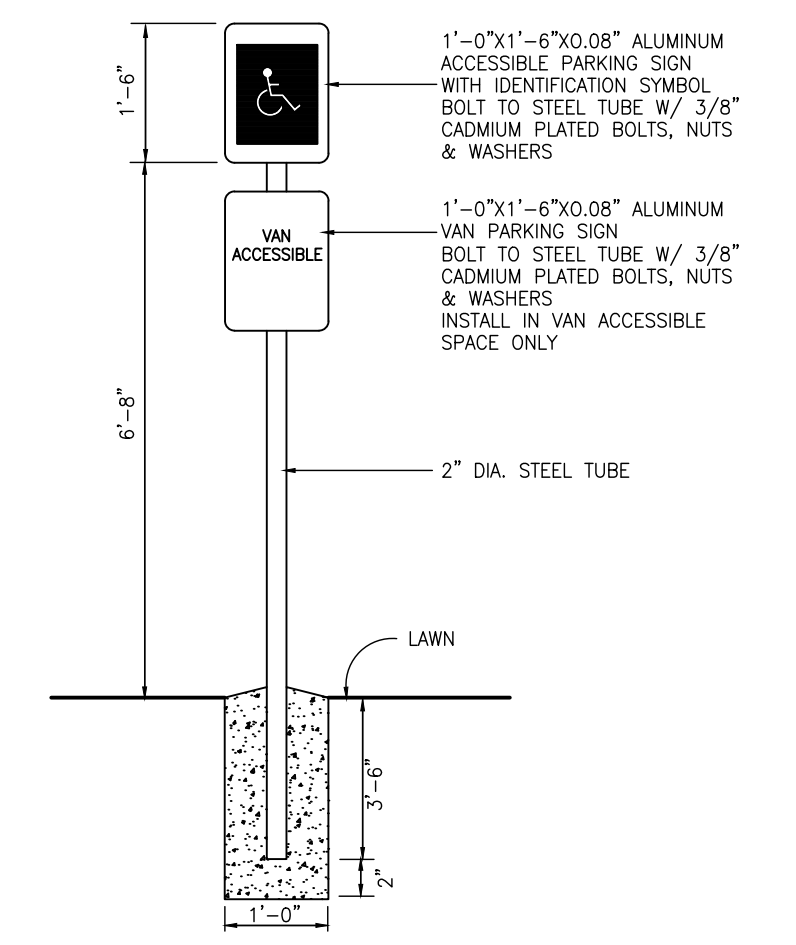
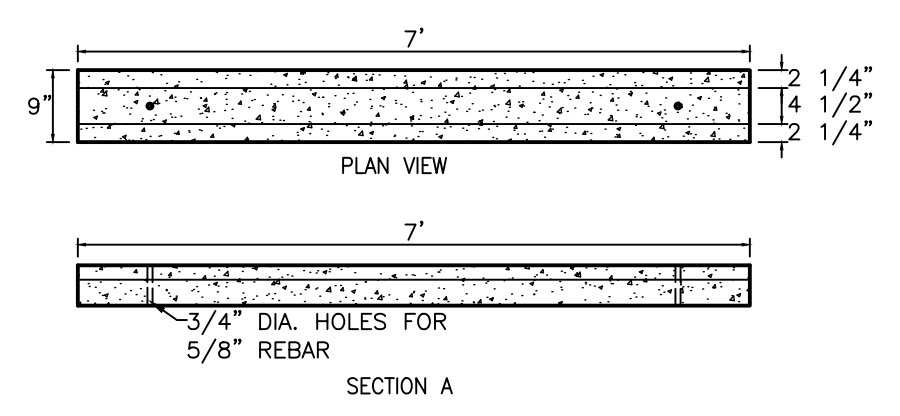
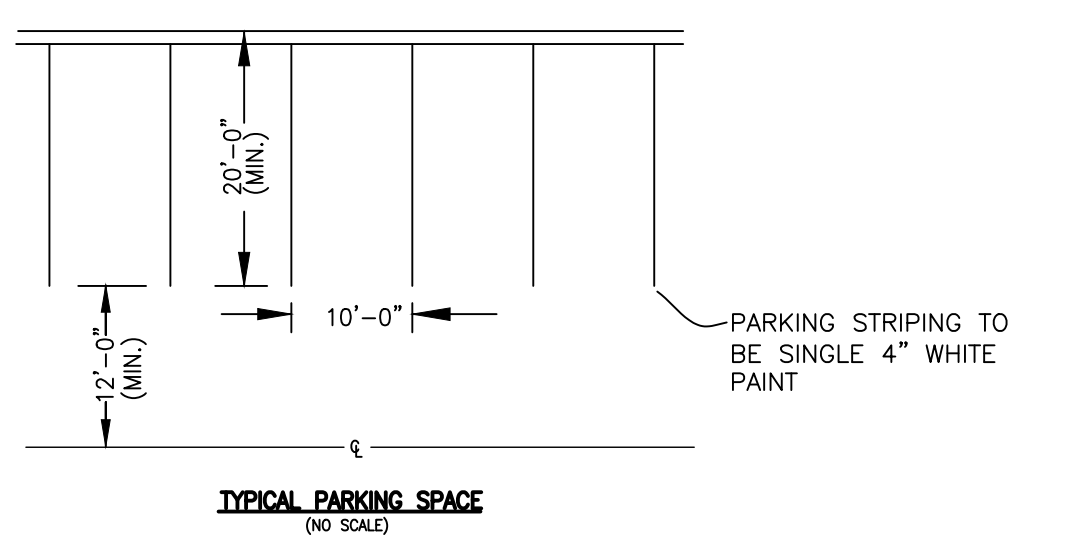
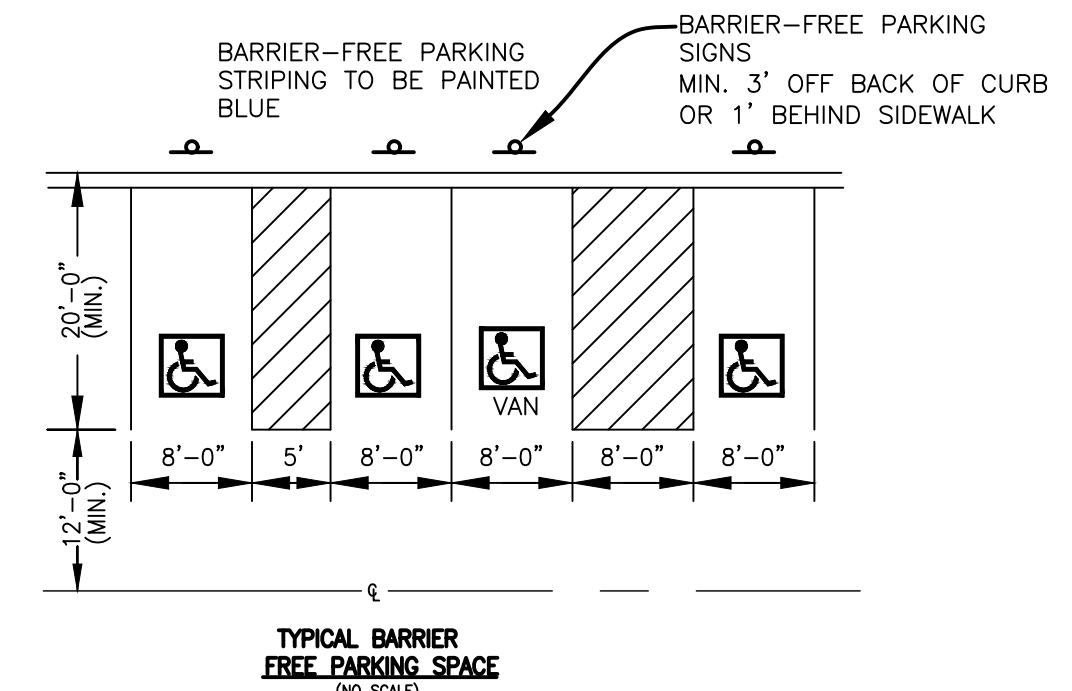
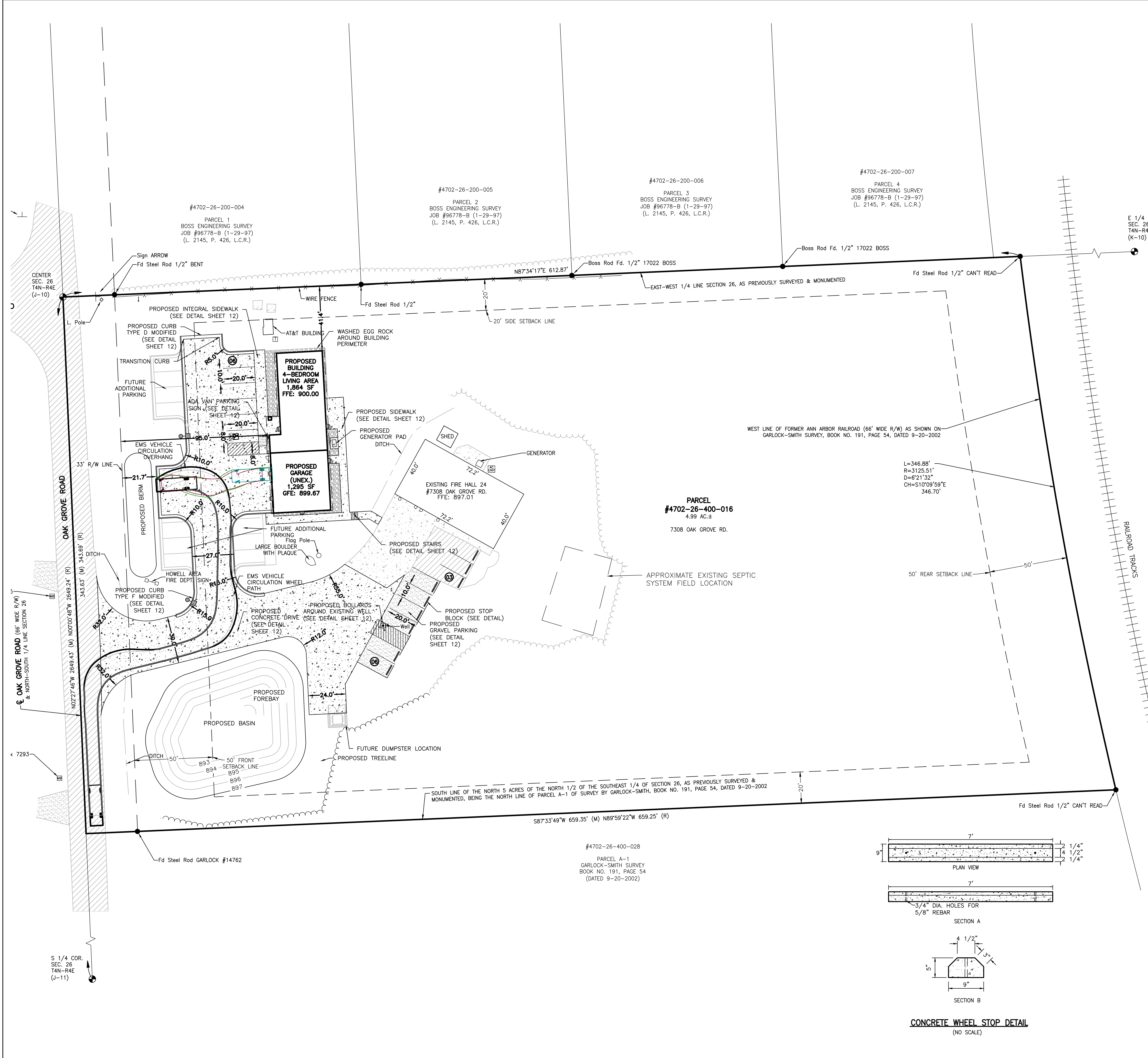


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BE ENGINEERING
CALL MSS DIG
1-800-467-7171
www.be-engineering.com

SITE DATA:
CURRENT ZONING: SUBURBAN RESIDENTIAL DISTRICT (SR)
MINIMUM SETBACK REQUIREMENTS:
FRONT = 50 FEET
SIDES = 20 FEET
REAR = 50 FEET
MAXIMUM LOT COVERAGE = 30%
MAXIMUM BUILDING HT. = 35 FEET

PROPOSED BUILDING SETBACKS
FRONT: 95 FT
SIDE: 41 FT
REAR: 335 FT
LOT COVERAGE: 3%



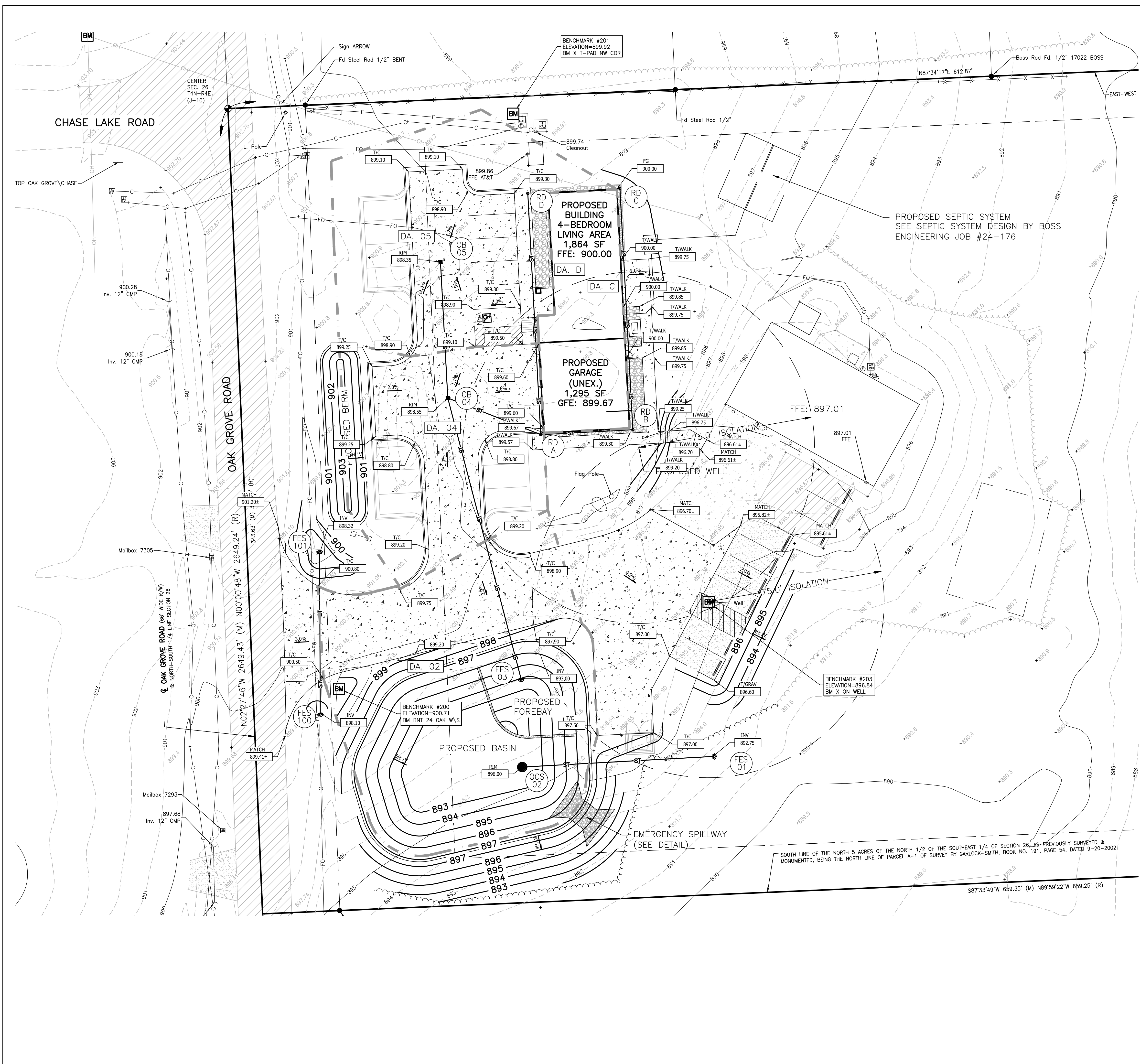
BE ENGINEERING
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

PROJECT: LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
PREPARED FOR: LINDHOUT ASSOCIATES AIA, PC
10462 CITATION DRIVE
BRIGHTON, MI 48116
810.227.5668

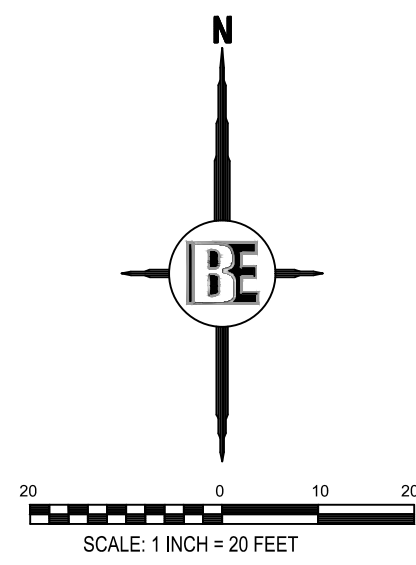
TITLE: SITE PLAN

| NO. | BY | DATE | REVISION |
|-----|----|------|----------|
| | | | |
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| | | | |

DESIGNED BY: ST
DRAWN BY: MJD
CHECKED BY:
SCALE: 1" = 30'
JOB NO: 24-176
DATE: 9/10/2024
SHEET NO. 4



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

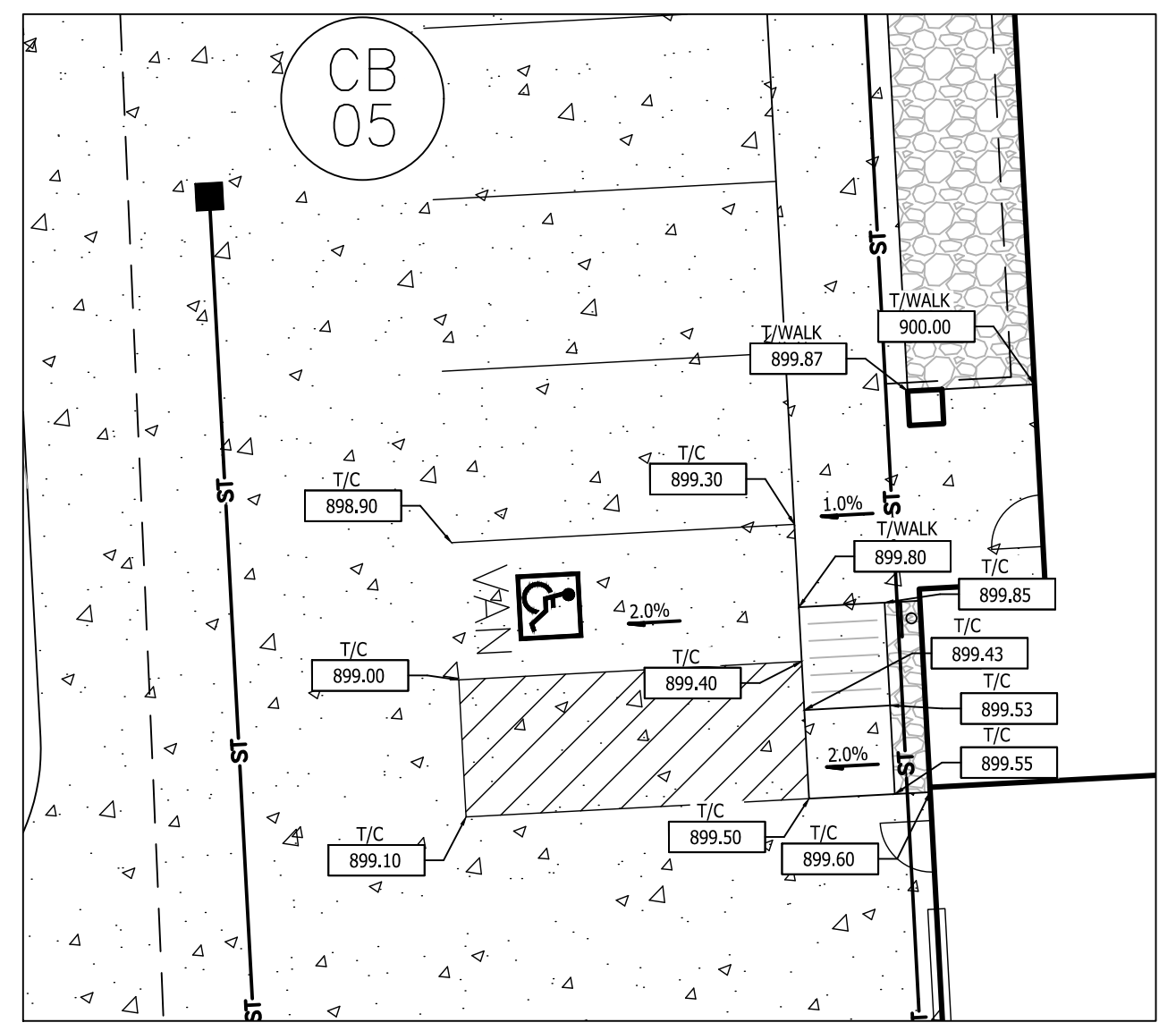


| DRAINAGE AREA TABLE | | | | |
|---------------------|-----------------|----------------|-------------|-------------|
| DRAINAGE AREA | TOTAL AREA (AC) | IMP. AREA (AC) | C VALUE | A°C |
| 2 | 0.29 | 0.08 | 0.40 | 0.12 |
| 4 | 0.17 | 0.13 | 0.74 | 0.13 |
| 5 | 0.19 | 0.11 | 0.60 | 0.11 |
| C | 0.04 | 0.04 | 0.90 | 0.03 |
| D | 0.04 | 0.04 | 0.90 | 0.03 |
| TOTALS | 0.73 | 0.40 | 0.58 | 0.43 |

EXISTING DRAINAGE:
 THE EXISTING SITE IS PARTIALLY DEVELOPED. SITE IMPERVIOUS RUNNOFF SHEET FLOWS TO GRASSED AREAS AND SWALES AROUND THE EXISTING DRIVE AND BUILDING. THE SITE SLOPES FROM THE NORTHWEST CORNER IN THE EAST AND SOUTHEASTERLY DIRECTION.

PROPOSED DRAINAGE:
 THE SITE WILL CONTINUE TO DRAIN FROM THE NORTHWEST CORNER TO THE EAST. ALL NEW IMPERVIOUS IS PROPOSED TO BE CAPTURED BY THE PROPOSED STORM NETWORK. A SERIES OF CATCH BASINS ARE PROPOSED WITHIN THE SITE TO CAPTURE AND TRANSMIT STORM WATER TO THE PROPOSED DETENTION BASIN ALONG SOUTHERN EDGE OF THE EXISTING DRIVE.

THE BASIN CONSISTS OF A FOREBAY, WITH THE USE OF GABION BASKET WALLS WITHIN THE BASIN TO CREATE A SEPARATE FOREBAY SPACE. THE BASIN WILL UTILIZE AN OUTLET CONTROL STRUCTURE TO DISCHARGE STORM WATER AT A PREDEVELOPMENT RATE TO THE EAST AS LIKE THE EXISTING CONDITION. A RIP RAP EMERGENCY OVERLAND OVERFLOW SPILLWAY IS PROPOSED WHICH WILL DIRECT OVERFLOW STORM WATER TO THE SAME EAST DISCHARGE LOCATION.



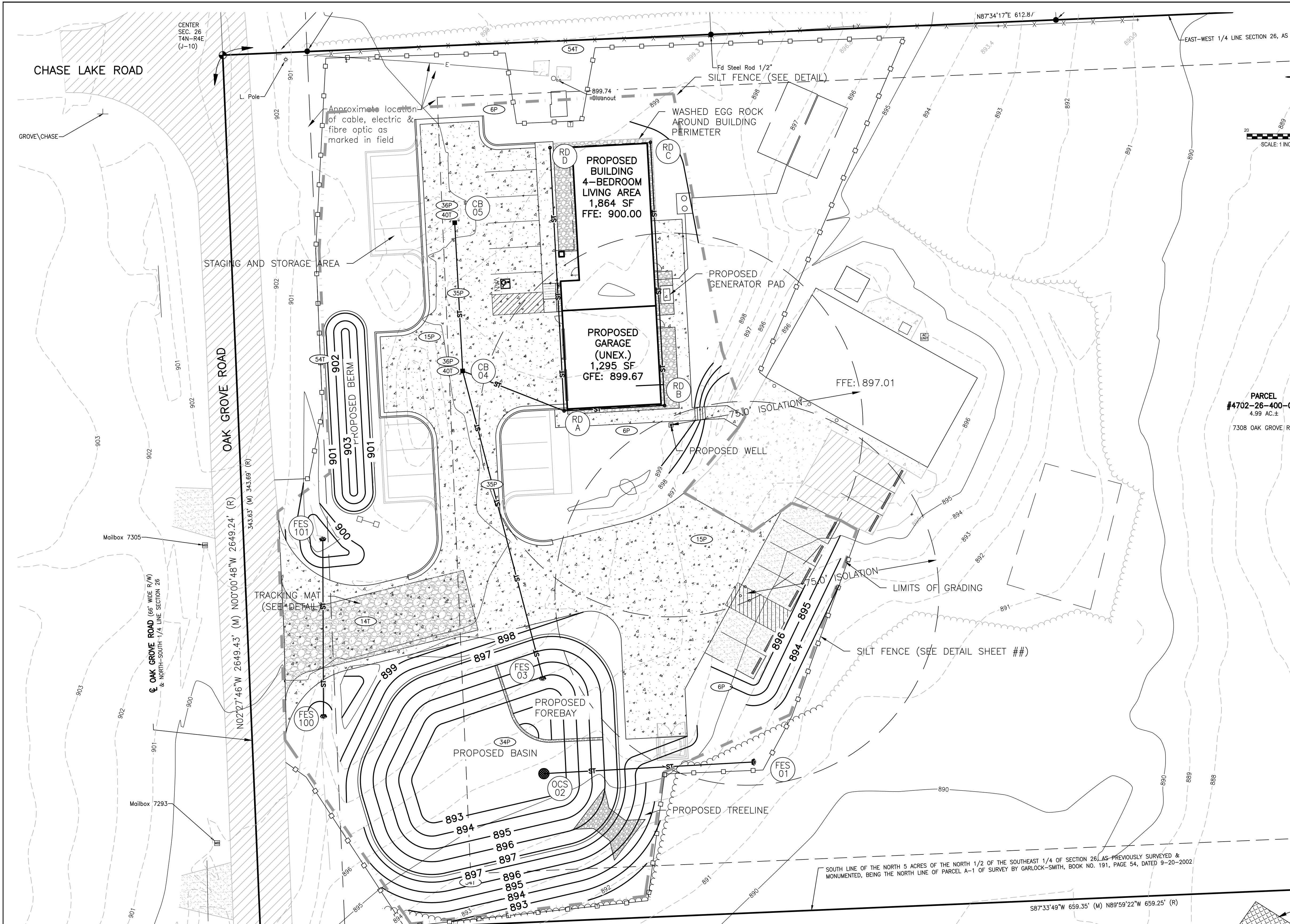
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BE
 BE Engineering
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
PREPARED FOR: LINDHOOT ASSOCIATES AIA, PC
 10462 CITATION DRIVE
 BRIGHTON, MI 48116
 810.227.5568

| NO. | REVISION | DATE | BY | PER |
|-----|----------|------|----|-----|
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DESIGNED BY: ST
 DRAWN BY: MJD
 CHECKED BY:
 SCALE: 1" = 20'
 JOB NO: 24-176
 DATE: 9/10/2024
 SHEET NO. **5**



SECTION "A"-A"

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
NO SCALE

TEMPORARY INLET SEDIMENT FILTER DETAIL
(NO SCALE)

NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE PROVIDED AND INSTALLED ON ALL PAVEMENT CATCH BASINS. PROVIDE ULTRATECH "DRAINGUARD" (SPILLCONTAINMENT.COM) OR ACF ENVIRONMENTAL "SILTSACK" (ACFENVIRONMENTAL.COM) OR EQUIVALENT SUBJECT TO APPROVAL BY MUNICIPALITY

SURFACE WATER & COUNTY DRAINS

WETLAND - ON SITE
LAKES - APPROXIMATELY 9140 FT NORTHEAST TO HIDDEN LAKE
STREAMS - APPROXIMATELY 2890 FT EAST TO BOGUE CREEK
BASINS - APPROXIMATELY 205 FT SOUTH AT 7500 SANFORD ROAD
DRAINS - APPROXIMATELY 1890 FT WEST TO IRA ACRES DRAIN
PONDS - APPROXIMATELY 205 FT SOUTH AT 7500 SANFORD ROAD

PROPOSED CONST. SCHEDULE FOR THE YEAR 2025

| ACTIVITY | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV |
|-----------------------|-----|------|------|-----|------|-----|-----|
| DEMO & CLEAR | | | | | | | |
| MASS GRADING | | | | | | | |
| UNDERGROUND UTILITY | | | | | | | |
| BUILDING CONSTRUCTION | | | | | | | |
| FINAL GRADING | | | | | | | |
| SEED & MULCH | | | | | | | |

CONSTRUCTION SEQUENCE

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS PROJECT.

1. INSTALL SILT FENCE AS SHOWN ON PLANS.
2. ROUGH GRADE AND INSTALL STORM DRAINAGE.
3. INSTALL INLET PROTECTION ON STORM INLETS.
4. START BLDG. CONSTRUCTION
5. INSTALL PAVEMENT
6. FINE GRADE AROUND BUILDING, SPREAD TOPSOIL, SEED OR SOD AS APPLICABLE.
7. REMOVE ALL EROSION CONTROL STRUCTURES.
8. REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.

CONTROLS & MEASURES NARRATIVE

| ACTIVITY | DESCRIPTION |
|-------------------------------------|--|
| MAINTAIN LANDSCAPING, REPLACE MULCH | COLLECT GRASS, TREE, AND SHRUB CLIPPINGS. DISPOSE IN APPROVED CONTAINER. REPLACE DEAD SOD, TREES AND SHRUBS. |
| CLEAN INLETS | REMOVE LITTER, SEDIMENT, AND DEBRIS. DISPOSE OF IN APPROVED LANDFILL. |
| COLLECT LITTER | DISPOSE OF WITH INLET DEBRIS. |
| SWEEP PARKING LOT | REMOVE MUD, DIRT, GREASE AND OIL WITH PERIODIC SWEEPING |
| DUST CONTROL | SPRINKLE WATER AS NEEDED |

CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE

| ACTIVITY | WEEKLY | MONTHLY | AS REQUIRED |
|-------------------------------------|--------|---------|-------------|
| MAINTAIN LANDSCAPING, REPLACE MULCH | X | X | X |
| CLEAN INLETS | | X | X |
| COLLECT LITTER | X | | X |
| SWEEP PARKING LOT | | X | X |

PROJECT: LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
PREPARED FOR: LINDHOUT ASSOCIATES AIA, PC
10465 CITATION DRIVE
BRIGHTON, NC 28116
810.227.5668

TITLE: SOIL EROSION & SEDIMENTATION CONTROL PLAN

| DESIGNED BY: | DATE |
|--------------|------|
| ST | |

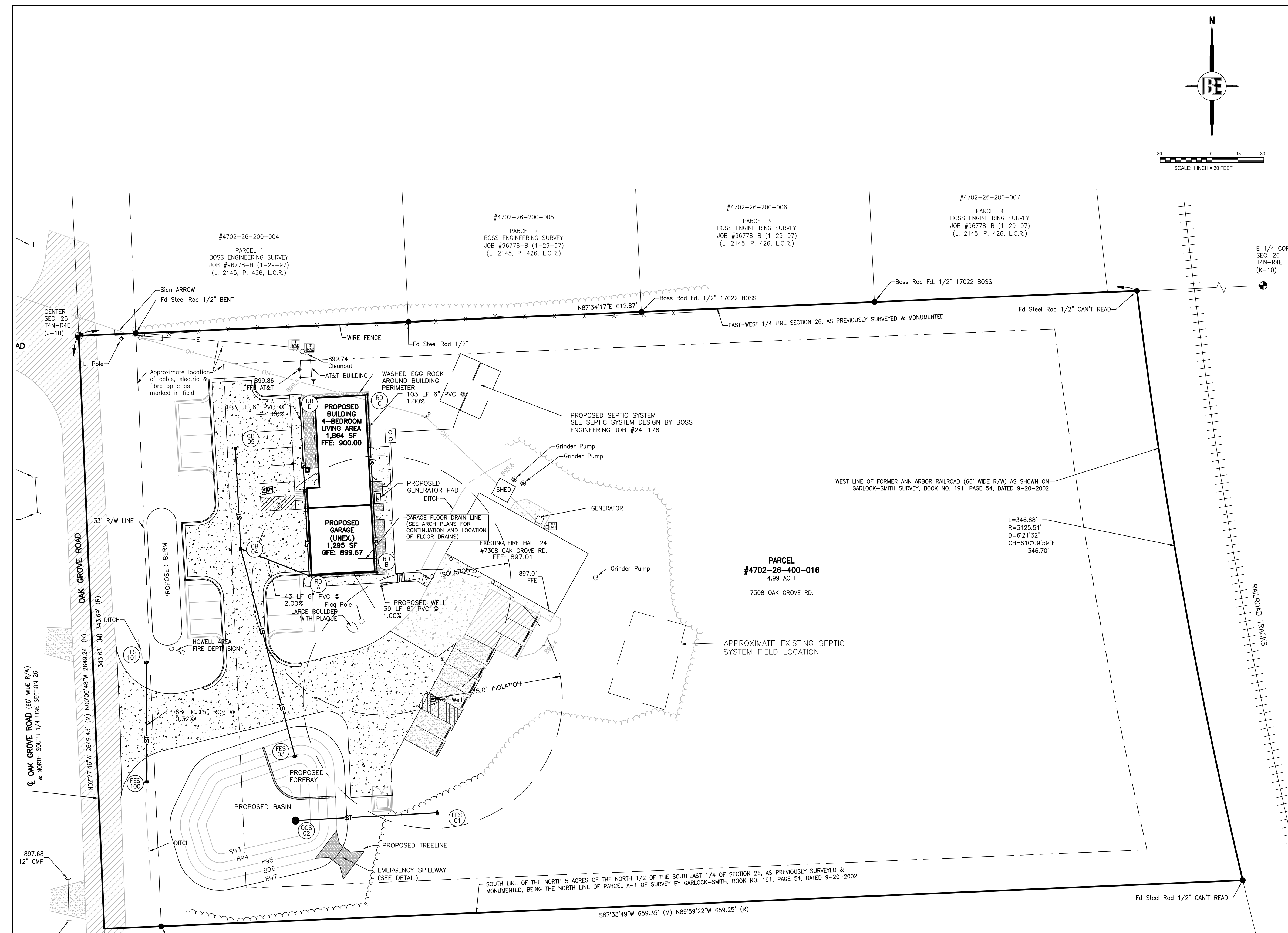
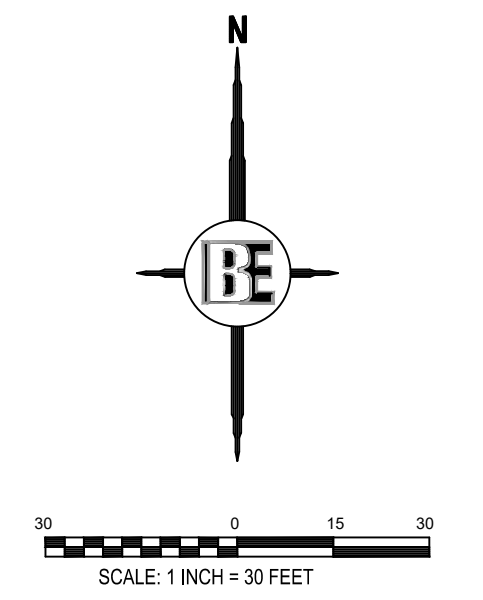
| DRAWN BY: | DATE |
|-----------|------|
| MJD | |

| CHECKED BY: | DATE |
|-------------|------|
| | |

SCALE: 1" = 20'
JOB NO: 24-176
DATE: 9/10/2024
SHEET NO. 6

BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



100-YEAR PIPE FLOW CALCULATION FOR OCS

| FROM | TO | DRAIN AREA | ACRES | RUNOFF COEFF | EQUIV. AREA A * C | INTEN-SITY I | TIME OF CONC. Tc | ADD'L RUNOFF Q | RUNOFF (CFS) Q | PIPE LENGTH (LF) | PIPE DIA. (IN) | VELOCITY FLOWING FULL (FPS) | HYDRAULIC GRADIENT SLOPE % | ACTUAL SLOPE USED | MANNING COEFFICIENT | MANNING FLOW CAPACITY | MANNING'S VELOCITY (FT/SEC) | TIME (MIN) | HG ELEV UPPER END | HG ELEV LOWER END | RIM ELEV UPPER END | RIM ELEV LOWER END | INVERT UPPER END | INVERT LOWER END |
|------|----|------------|-------|--------------|-------------------|--------------|------------------|----------------|----------------|------------------|----------------|-----------------------------|----------------------------|-------------------|---------------------|-----------------------|-----------------------------|------------|-------------------|-------------------|--------------------|--------------------|------------------|------------------|
| C | B | C | 0.04 | 0.90 | 0.03 | 4.38 | 15.00 | 0.15 | 103 | 6 | 2.01 | 0.49% | 1.00% | 0.013 | 0.56 | 2.87 | 0.60 | 897.49 | 896.46 | 900.00 | 900.00 | 897.09 | 896.06 | |
| B | A | B | - | - | - | - | 15.60 | 0.15 | 0.30 | 39 | 6 | 2.55 | 0.79% | 1.00% | 0.013 | 0.56 | 2.87 | 0.23 | 896.46 | 896.06 | 900.00 | 900.00 | 896.06 | 895.66 |
| A | 4 | A | - | - | - | - | 15.83 | - | 0.30 | 43 | 6 | 3.24 | 1.28% | 2.00% | 0.013 | 0.80 | 4.05 | 0.18 | 896.06 | 895.21 | 900.00 | 898.55 | 895.66 | 894.81 |
| 5 | 4 | 5 | 0.19 | 0.60 | 0.11 | 4.38 | 15.00 | 0.50 | 0.50 | 58 | 12 | 1.80 | 0.16% | 0.32% | 0.013 | 2.02 | 2.57 | 0.38 | 895.40 | 895.21 | 898.35 | 898.55 | 894.60 | 894.41 |
| 4 | 3 | 4 | 0.17 | 0.74 | 0.13 | 4.33 | 15.38 | 0.30 | 1.36 | 129 | 12 | 2.38 | 0.27% | 0.32% | 0.013 | 2.02 | 2.57 | 0.83 | 895.21 | 894.80 | 898.55 | - | 894.41 | 894.00 |
| D | A | D | 0.04 | 0.90 | 0.03 | 4.38 | 15.00 | 0.15 | 103 | 6 | 2.01 | 0.49% | 1.00% | 0.013 | 0.56 | 2.87 | 0.60 | 897.09 | 896.06 | 900.00 | 900.00 | 896.69 | 895.66 | |
| 2 | 1 | ALL | 0.73 | 0.58 | 0.42674 | 6.14 | 15.83 | 2.62 | 81 | 12 | 3.34 | 0.54% | 0.32% | 0.013 | 2.02 | 2.57 | 0.53 | 893.98 | 893.54 | 895.00 | - | 893.00 | 892.74 | |

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO ATTEMPT WILL BE MADE TO VERIFY THE LOCATION OR DEPTH OF SUCH UTILITIES UNLESS INDICATED OTHERWISE. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES DISCOVERED IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES DISCOVERED IN THE FIELD PRIOR TO CONSTRUCTION.

BOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: **LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION**
 PREPARED FOR: **LINDHOUT ASSOCIATES AIA, PC**
 10462 CITATION DRIVE
 BRIGHTON, MI 48116
 810.227.5668
 TITLE: **UTILITY PLAN**

| NO | BY | REVISION | PER | DATE |
|----|----|----------|-----|------|
| | | | | |
| | | | | |

DESIGNED BY: ST
 DRAWN BY: MJD
 CHECKED BY:
 SCALE: 1" = 30'
 JOB NO: 24-176
 DATE: 9/10/2024
 SHEET NO. **7**

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS

| AREA (ACRES) | IMPERVIOUS FACTOR | ACRE IMPERVIOUS |
|--------------|-------------------|-----------------|
| 0.40 | 0.9 | 0.36 |
| 0.00 | 0.7 | 0.00 |
| 0.33 | 0.2 | 0.07 |

COMPOUND C: 0.58
TOTAL DRAINAGE AREA: 0.73 ACRES

WATER QUALITY VOLUME V_{WQ}
 $V_{WQ} = 3.830(C)A = 1537 \text{ FT}^3$
 Are upstream infiltration BMP's provided? No
 $V_e = 0.15(V_{WQ}) = 231 \text{ FT}^3$

WATER QUALITY RATE FOR MECHANICAL STRUCTURE
 $T_c = \text{MAX TIME OF CONCENTRATION} = 15.83 \text{ MIN}$
 $Q_{WQ} = (C)A(30.2 / (T_c + 9.17))^{0.81} = 0.94 \text{ CFS}$

CHANNEL PROTECTION VOLUME CONTROL - REQUIRED
 $V_{CP-R} = 4.719(C)A = 1998 \text{ FT}^3$

CHANNEL PROTECTION VOLUME CONTROL - PROVIDED
 In-Situ Infiltration rate = 1 IN/HR
 Are upstream infiltration BMP's provided? No
 Basin Footprint Infiltration Area Required = 799 FT²
 $V_{CP-P} = 0 \text{ FT}^3$

CHANNEL PROTECTION RATE CONTROL (EXTENDED DETENTION VOLUME)
 $V_{ED} = 6.897(C)A = 2920 \text{ FT}^3$

EXTENDED DETENTION OUTLET RATE
 $Q_{ED} = V_{ED} / (48 \text{ hr}) = 0.017 \text{ CFS}$
 $H_{ED} = V_{ED} / (4,800 (H)^{1/2}) = 1.0 \text{ 1" HOLES}$
 $H = 3.00 \text{ FT}$
 $ELEV_{ED} = 895.15 \text{ FT}$

100-YEAR ALLOWABLE OUTLET RATE
 $Q_{DRAIN} = \text{Restricted Drain Rate} = 0.1 \text{ CFS/ACRE}$
 $Q_{VIR} = 1.1055 - 0.206LN(A) = 1.000 \text{ CFS/ACRE}$
 $Q_{100P} = (\text{LESSER OF } Q_{DRAIN} \text{ \& } Q_{VIR})^A = 0.073 \text{ CFS}$

CONTACT LIVINGSTON COUNTY DRAIN COMMISSION FOR ALLOWABLE RELEASE RATE

100-YEAR DETENTION VOLUME
 $V_{100R} = 18985 (C)A = 8038 \text{ FT}^3$
 $Q_{100IN} = (C)A(83.3 / (T_c + 9.17))^{0.81} = 2.80 \text{ CFS}$
 $R = 0.206 - 15 \ln(Q_{100P} / Q_{100IN}) = 0.7420$
 $V_{100D} = V_{100R} - R \cdot V_{CP-P} = 5964 \text{ FT}^3$
 Is $V_{100D} \geq V_{ED}$? YES
 $V_{100D} = 5964 \text{ FT}^3$

FOREBAY STORAGE VOLUME PROVIDED:

| ELEVATION | AREA | VOLUME | TOTAL VOLUME | DHWL |
|-----------|------|--------|--------------|-------------------|
| 896 | 1130 | 972 | 2,105 | DHWL |
| 895 | 814 | 1,133 | 1,133 | |
| 894 | 545 | 681 | 681 | BOTTOM OF STORAGE |
| 893 | 319 | 0 | 0 | SUMP |
| 892 | 136 | 0 | 0 | SUMP |
| 891 | 21 | 0 | 0 | SUMP |

BASIN STORAGE PROVIDED

| ELEVATION | AREA | DEPTH | VOLUME | TOTAL VOLUME | |
|-----------|------|-------|--------|--------------|-------------------|
| 897 | 6467 | 1 | 5,254 | 11,767 | FREEBOARD |
| 896 | 4040 | 1 | 3,797 | 6,513 | DHWL |
| 895 | 3553 | 1 | 2,717 | 2,717 | |
| 894 | 2653 | 1 | 1,332 | 1,332 | |
| 893 | 1880 | | | | BOTTOM OF STORAGE |

PROVIDED FOOTPRINT OF BASIN BOTTOM AREA: 1880 FT²

OUTLET CONTROL STRUCTURE
 $Q_{ED-ACTUAL} = 1 (1" \text{ HOLES}) = 0.0055 \text{ FT}^2$
 $Q_{ED-ACTUAL} = (A_{ED}) (0.62 \times (2 \times 32.2 \times h)^{0.5}) = 0.047 \text{ CFS}$

100-YEAR OUTLET
 $Q_{100-ACTUAL} = Q_{100P} - Q_{ED-ACTUAL} = 0.026 \text{ CFS}$
 $A_{100} = Q_{100-ACTUAL} / (0.62 \times (2 \times 32.2 \times (ELEV_{DHWL} - ELEV_{ED}))^{0.5}) = 0.006 \text{ FT}^2$
 AREA OF 1 INCH DIAMETER ORIFICE = 0.005 FT²
 # ORIFICES = $A_{100} / 0.005 = 1.0$ ORIFICES

OVERFLOW SPILLWAY DESIGN
 Design Flow Rate: $Q_{100RN} = 2.60 \text{ CFS}$
 Depth of Spillway: $D_{SPILL} = 6 \text{ INCHES}$
 Width of Spillway: $W_{SPILL} = Q_{100RN} / (3.33 D_{SPILL}^{3/2}) = 2.2 \text{ FT}$

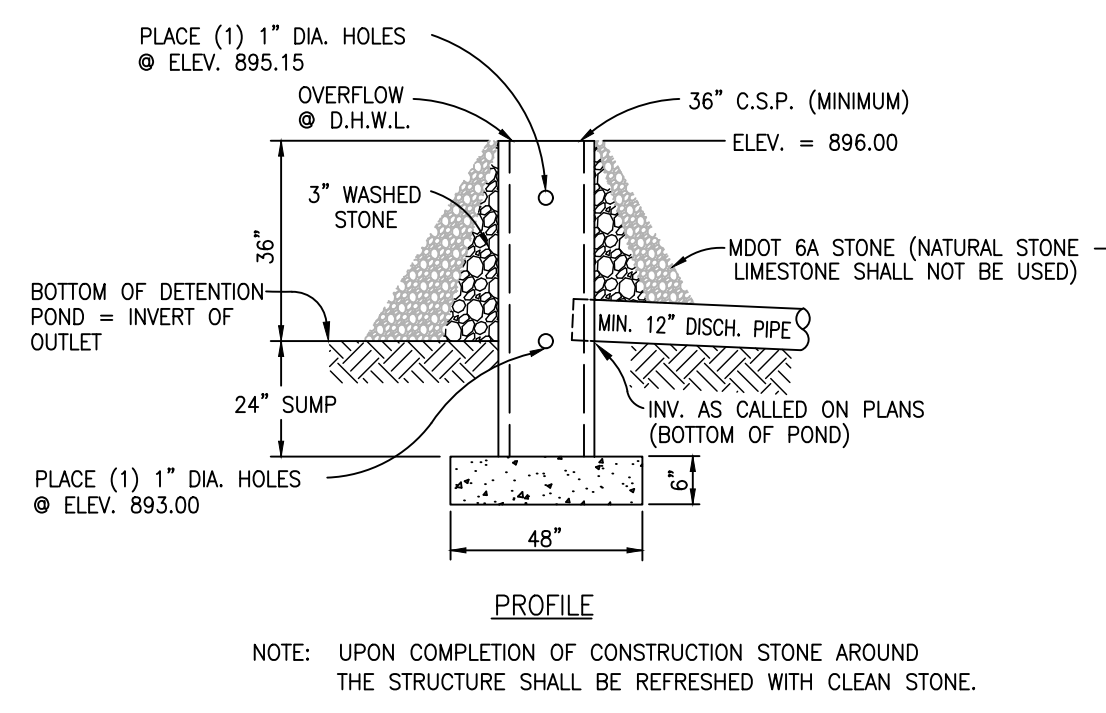
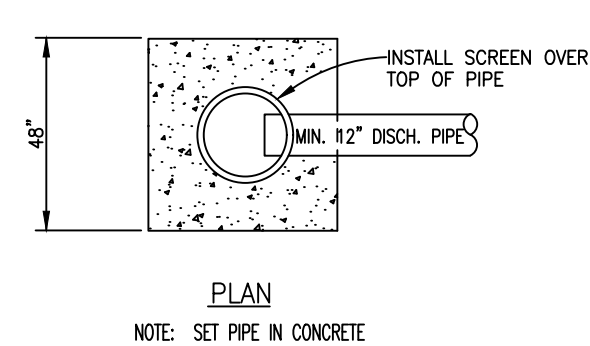
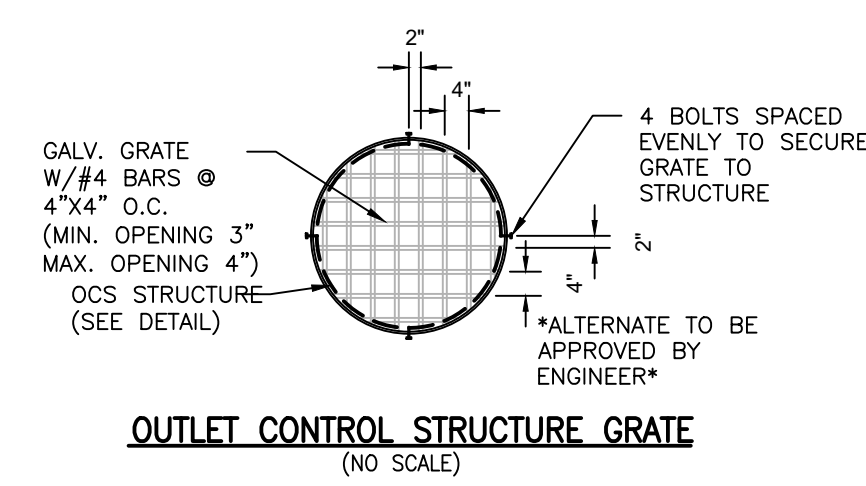
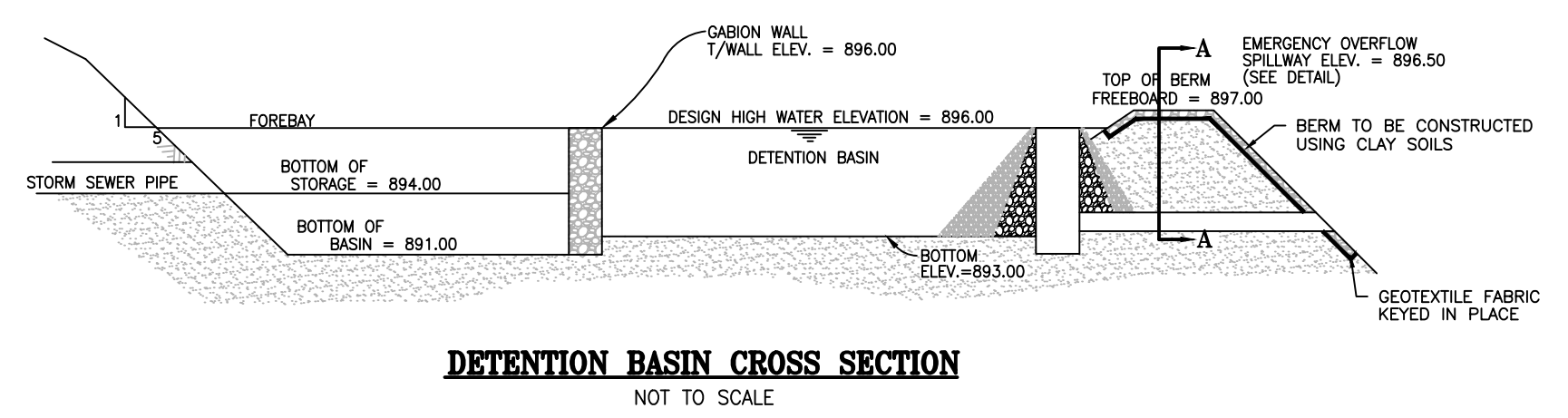
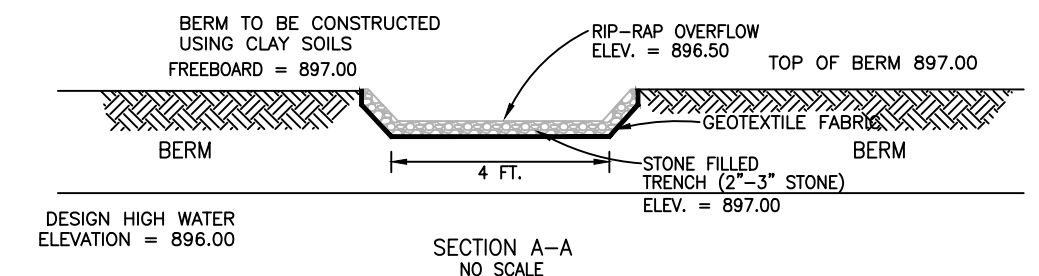
BASIN DESIGN SUMMARY

| | |
|-------------------------|-----------------------|
| FOREBAY SIZE REQUIRED = | 1537 FT ³ |
| FOREBAY SIZE PROVIDED = | 2105 FT ³ |
| BASIN SIZE REQUIRED = | 5964 FT ³ |
| BASIN SIZE PROVIDED = | 6,513 FT ³ |

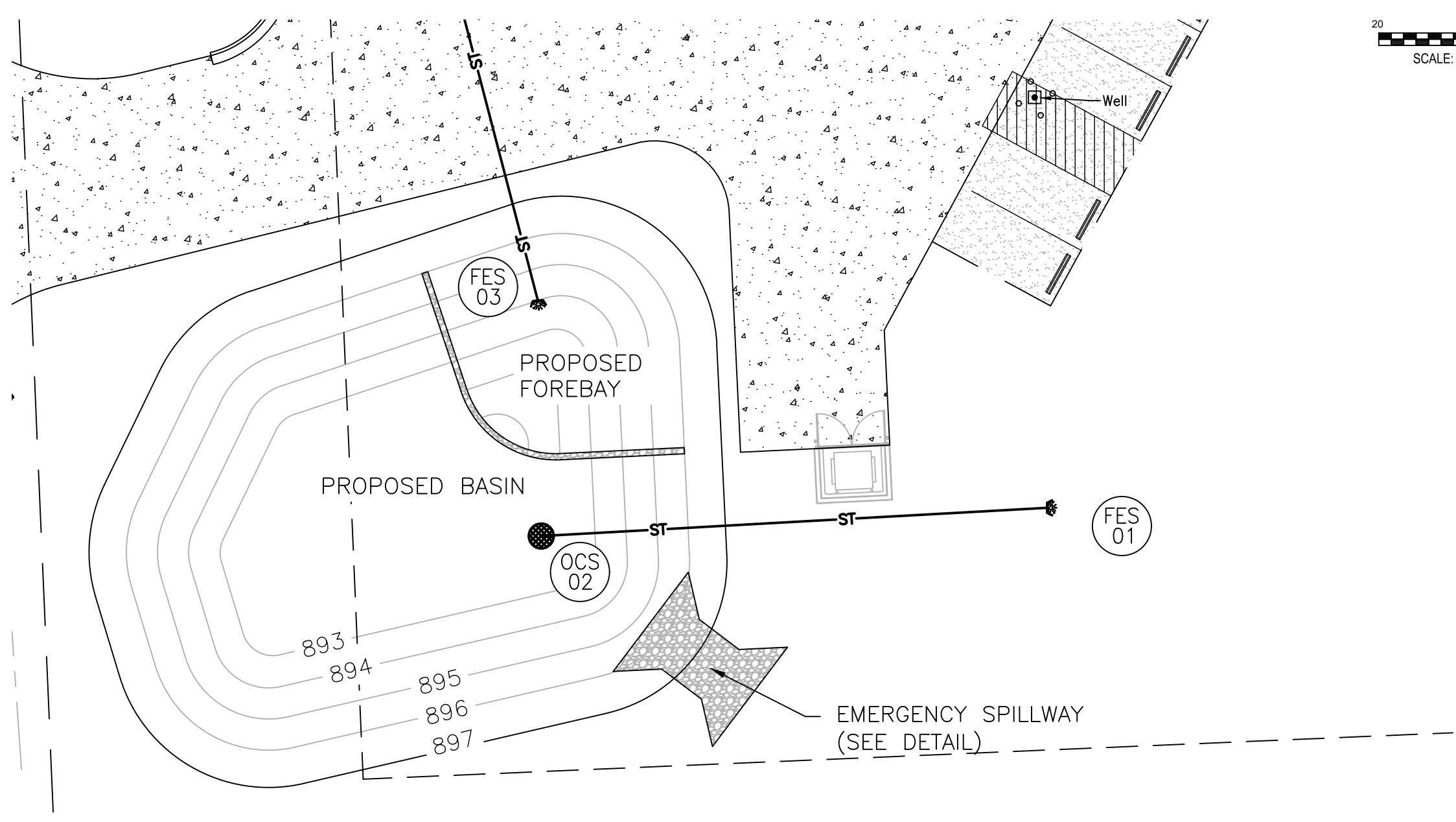
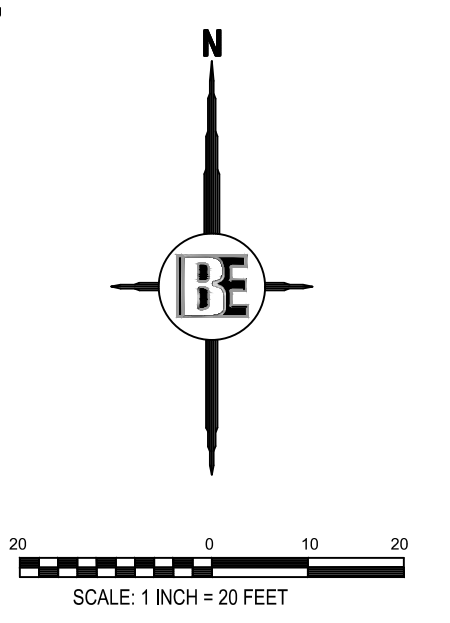
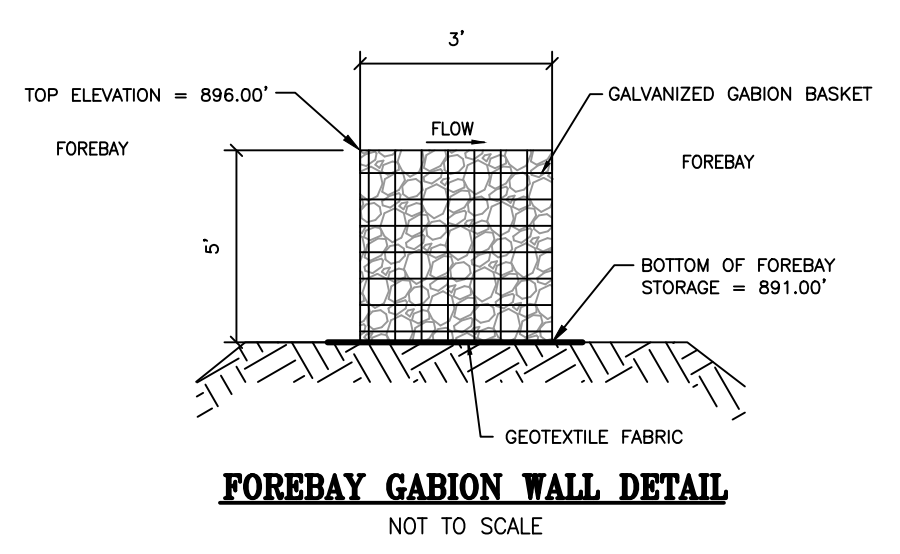
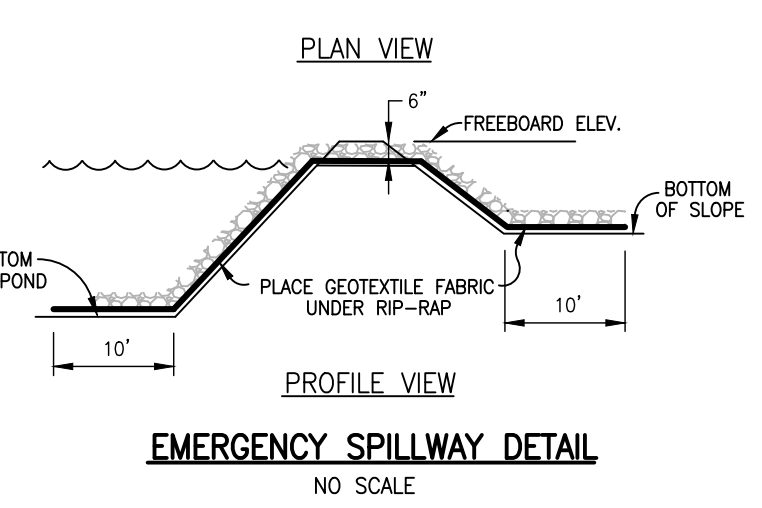
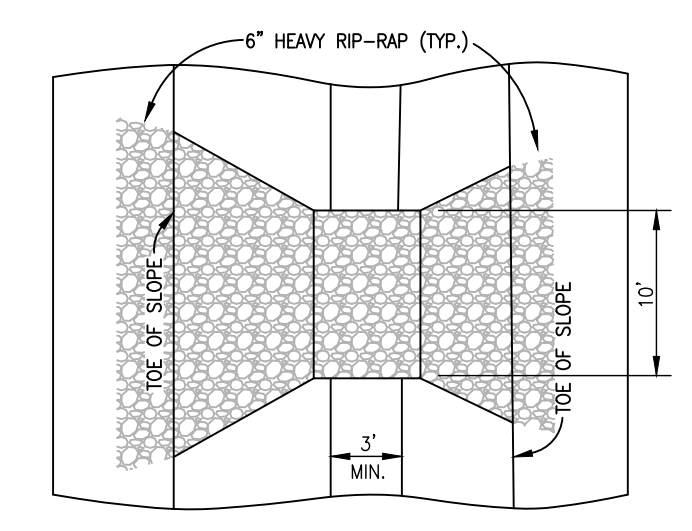
ORIFICE DESIGN SUMMARY

| ELEVATION | # OF HOLES | DIAMETER OF HOLES |
|-----------|------------|-------------------|
| 893.00 | 1.0 | 1-INCH |
| 895.15 | 1.0 | 1-INCH |

OVERFLOW SPILLWAY SUMMARY
 WIDTH OF OVERFLOW SPILLWAY = 3 FT



LCDC DETENTION/SEDIMENTATION POND OUTLET CONTROL STRUCTURE (NO SCALE)
 NOTE: UPON COMPLETION OF CONSTRUCTION STONE AROUND THE STRUCTURE SHALL BE REFRESHED WITH CLEAN STONE.



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO ASSURANCE IS MADE BY THE CONTRACTOR AS TO THE ACCURACY, COMPLETENESS OR ADEQUACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

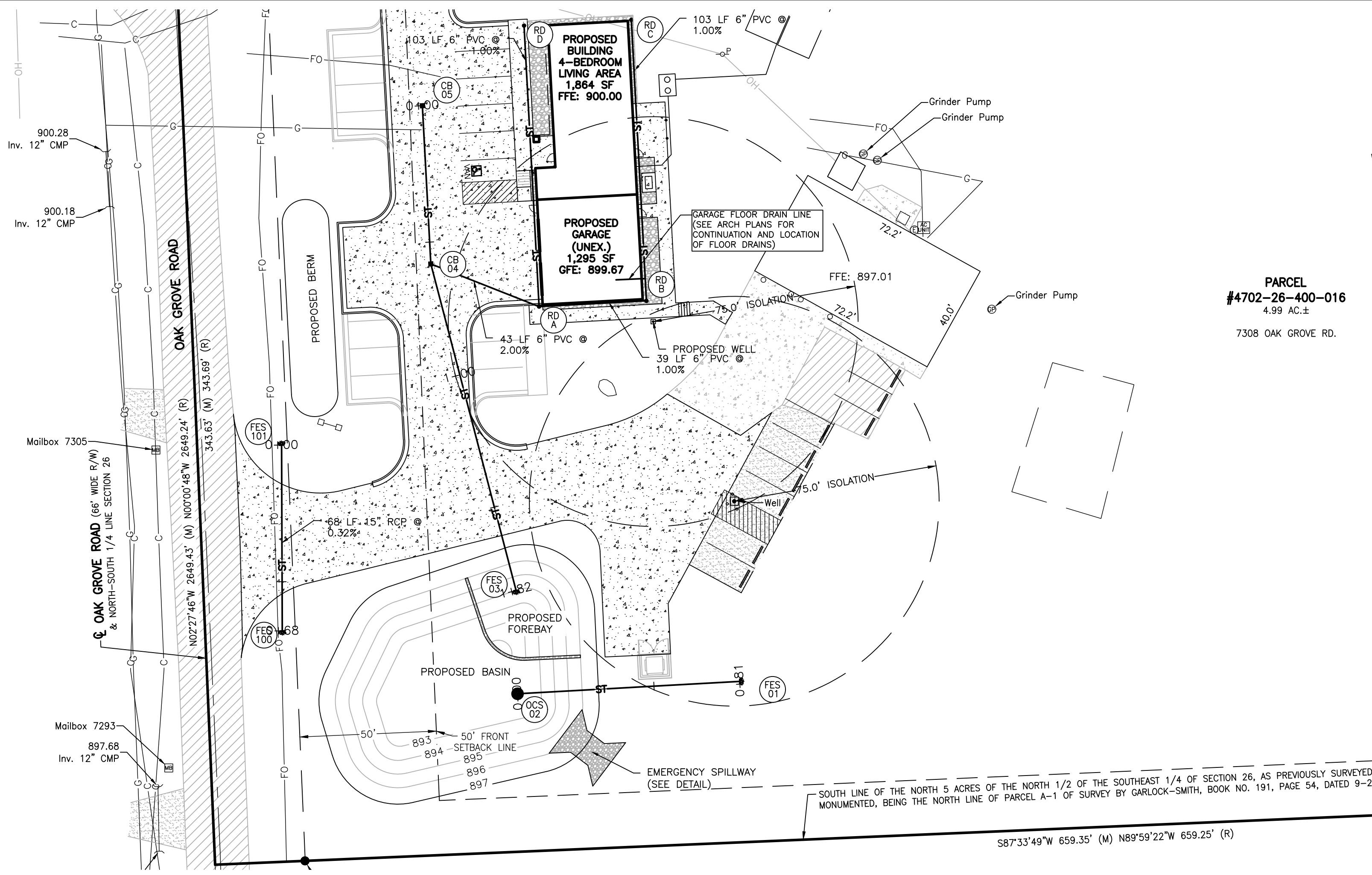
BEBOSSEngineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
 PREPARED FOR: LINDHOUT ASSOCIATES AIA, PC
 10465 CITATION DRIVE
 BRIGHTON, MI 48116
 810.227.5568

| NO. | BY | DATE | REVISION PER |
|-----|-----|------|--------------|
| 1 | ST | | |
| 2 | MJD | | |

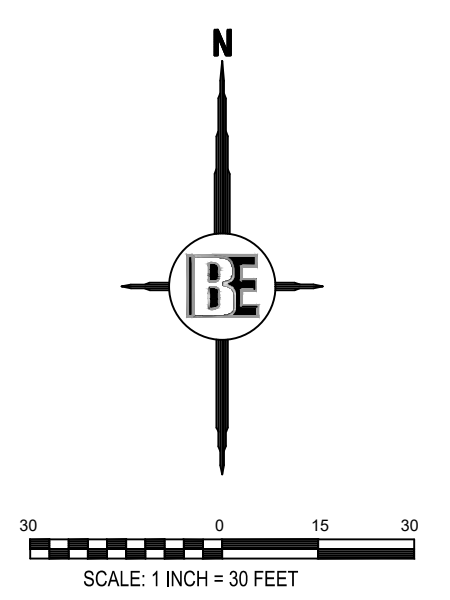
DESIGNED BY: ST
 DRAWN BY: MJD
 CHECKED BY:
 SCALE: 1" = 20'
 JOB NO: 24-176
 DATE: 9/10/2024
 SHEET NO. 8

BEBOSSEngineering



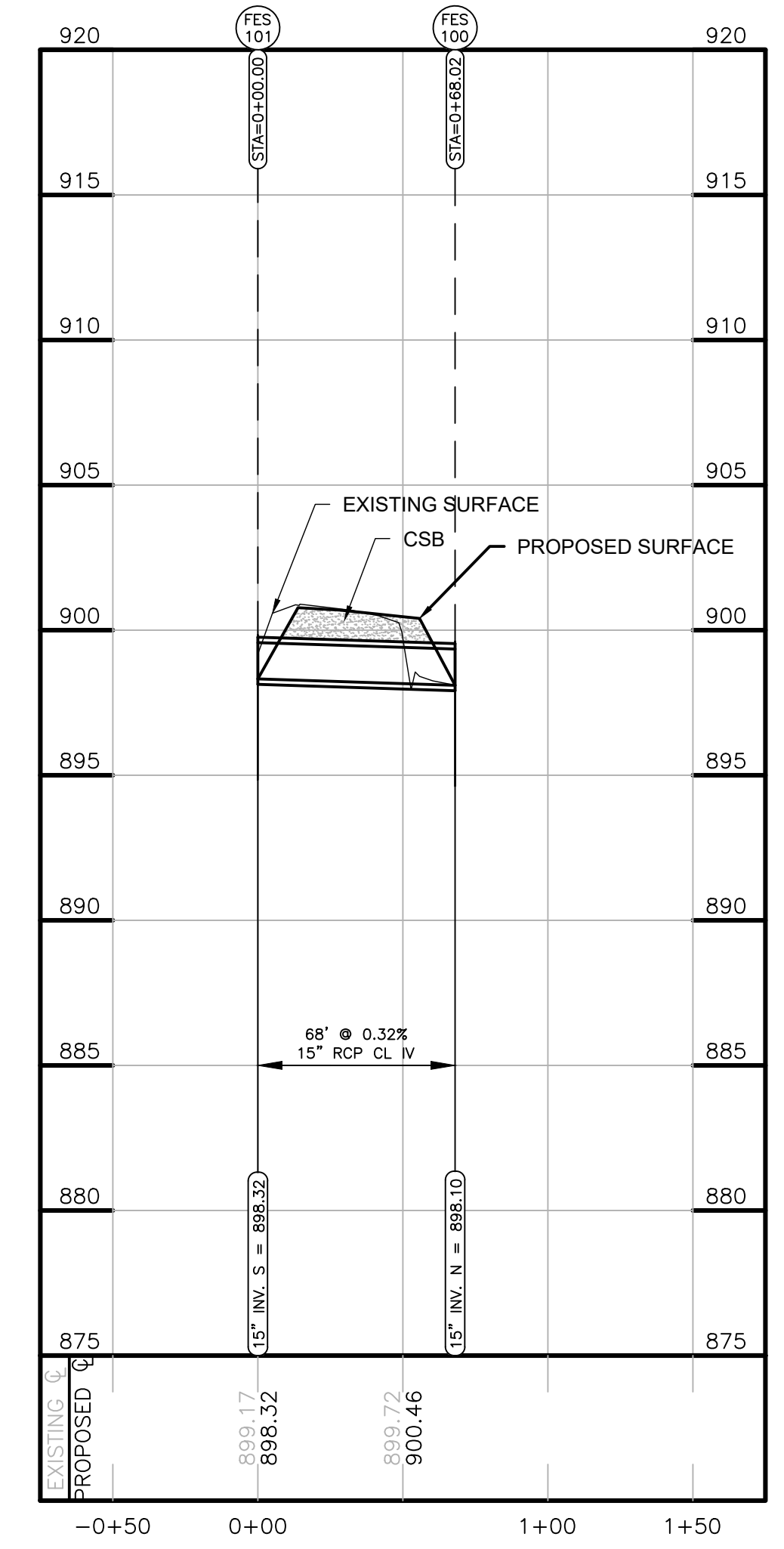
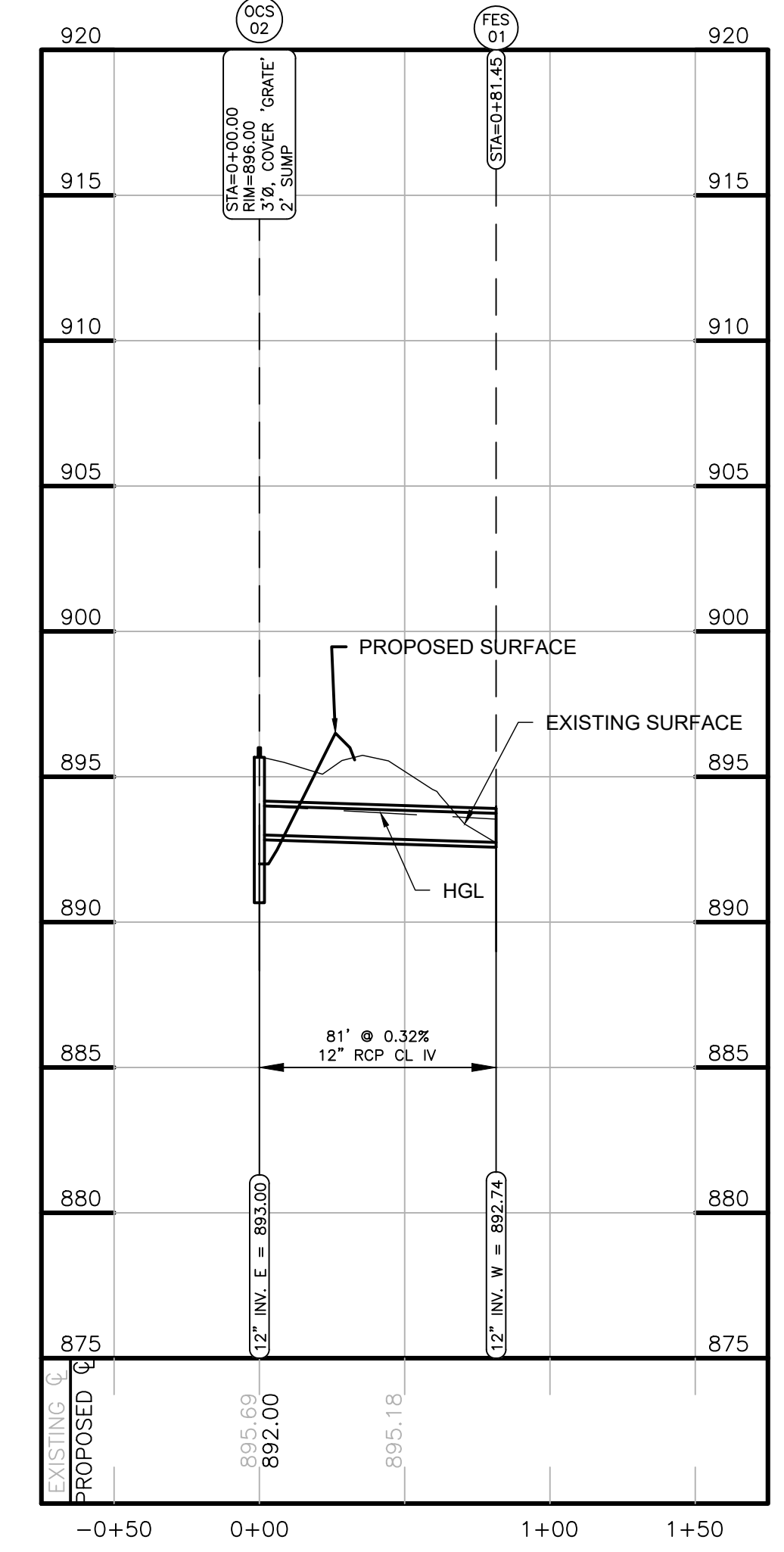
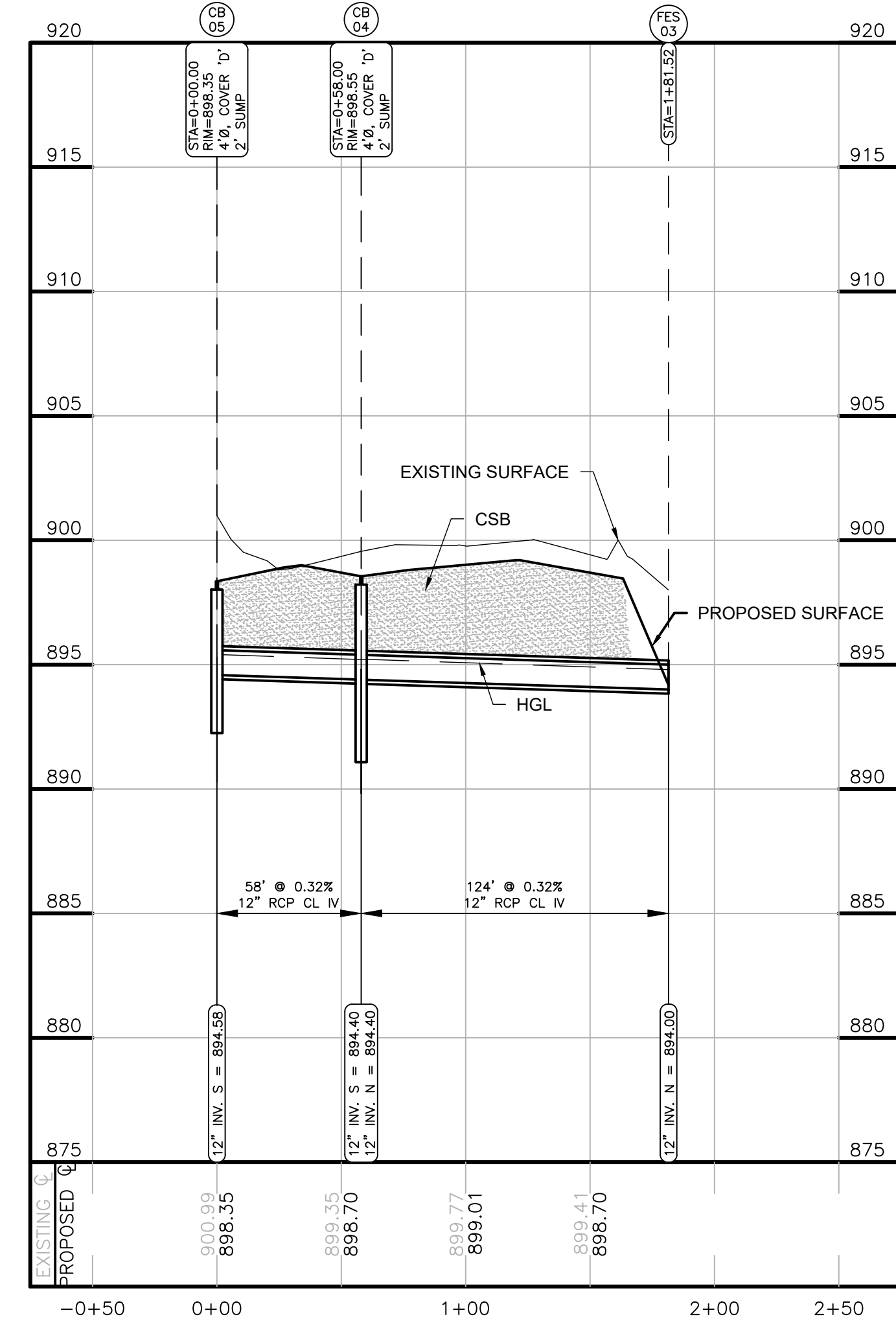
PARCEL #4702-26-400-016
4.99 AC.±
7308 OAK GROVE RD.

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION.

BE ENGINEERING, INC.
CALL MSS DIG
1-800-487-7171
www.be-engineering.com



SCALE: 1" = 5' (VERT)
1" = 50' (HORIZ)

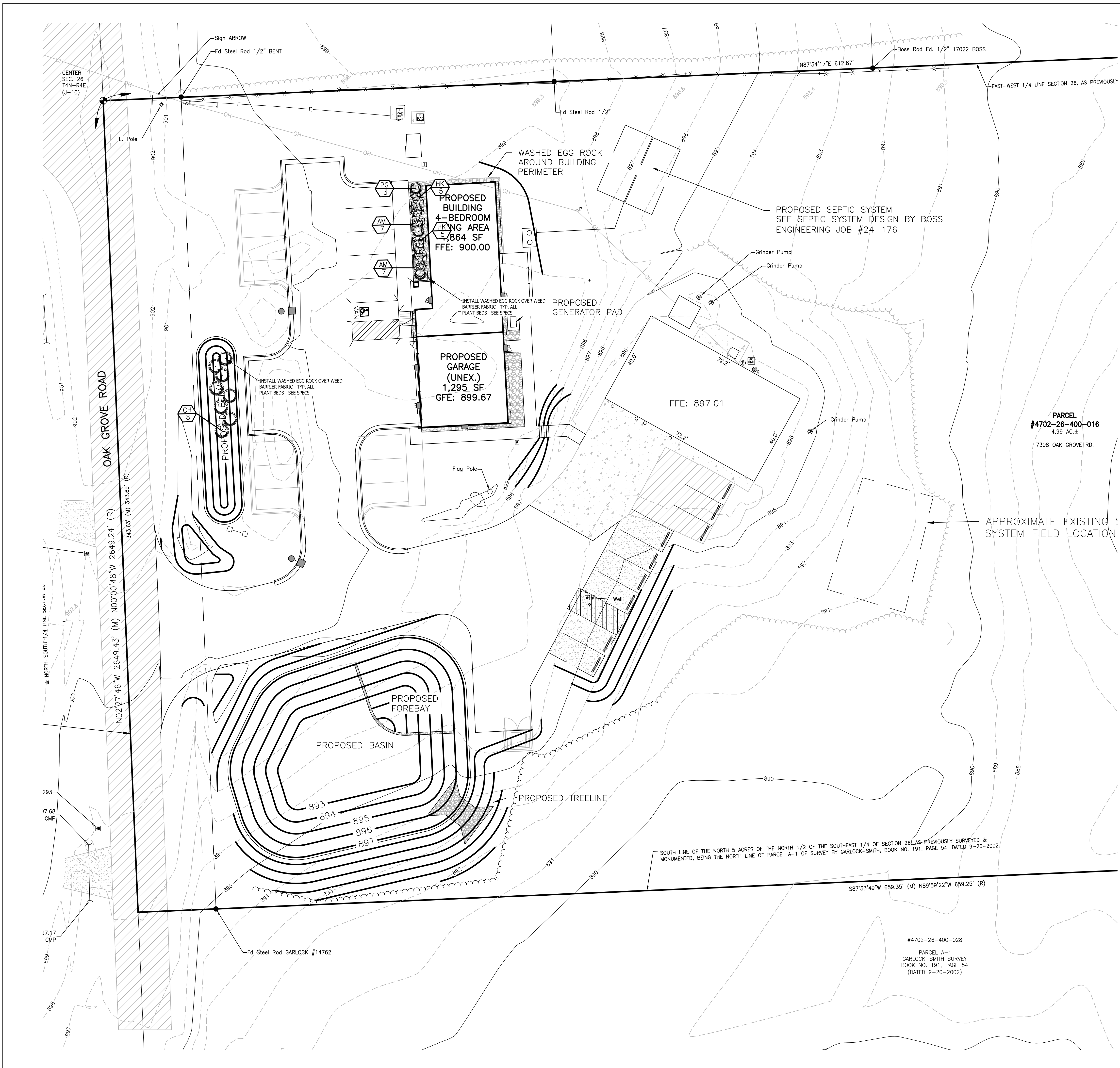
PROJECT: COHOCTAH EMS SUB STATION
PREPARED FOR: LINDHOUT ASSOCIATES AIA, PC
10462 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

TITLE: STORM PLAN & PROFILE

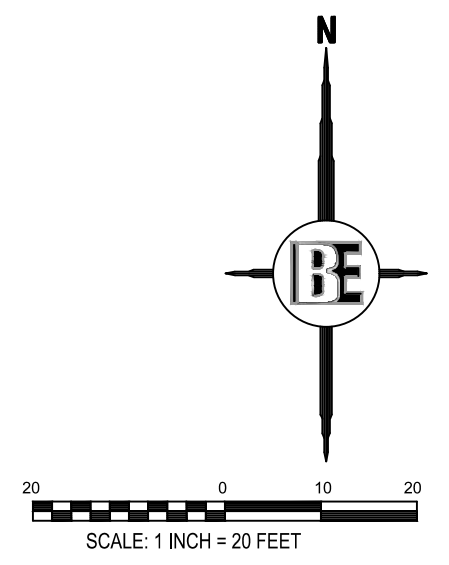
| NO | BY | REVISION | PER | DATE |
|----|----|----------|-----|------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

DESIGNED BY: ST
DRAWN BY: MJD
CHECKED BY:
SCALE: 1" = 30'
JOB NO: 24-176
DATE: 06/04/2024
SHEET NO.





SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



ZONING: SR, SUBURBAN RESIDENTIAL

ADJACENT ZONING
NORTH: SR, SUBURBAN RESIDENTIAL
EAST: SR, SUBURBAN RESIDENTIAL
SOUTH: SR, SUBURBAN RESIDENTIAL
WEST: SR, SUBURBAN RESIDENTIAL

PLANT LIST

| KEY | QUAN. | BOTANICAL NAME | COMMON NAME | SIZE | REMARK |
|-------------------------|-------|---|---------------------------|------------------|--------|
| DECIDUOUS SHRUBS | | | | | |
| AM | 14 | <i>Aronia melanocarpa</i> 'UCONNAM165' | Low Scape Mound Aronia | 24" ht./#3 Cont. | |
| HP | 10 | <i>Hypericum prolificum</i> | Shrubby St. Johnswort | 24" ht./#3 Cont. | |
| EVERGREEN SHRUBS | | | | | |
| PG | 3 | <i>Picea glauca</i> 'Conica' | Dwarf Alberta Spruce | 24" ht./#3 Cont. | |
| CH | 8 | <i>Cephalotaxus harringtonia</i> 'Fastigiata' | Upright Japanese Plum Yew | 24" ht./#3 Cont. | |

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO WARRANTY IS MADE BY THE CONTRACTOR FOR THE ACCURACY OF THE LOCATION, DEPTH, OR COMPLETENESS OF ANY UTILITIES SHOWN THEREON. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BE BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

PROJECT: COHOCTAH EMS SUB STATION

PREPARED FOR: LINDHOUT ASSOCIATES AIA, PC
10465 CITATION DRIVE
BRIGHTON, MI 48116
810.227.5668

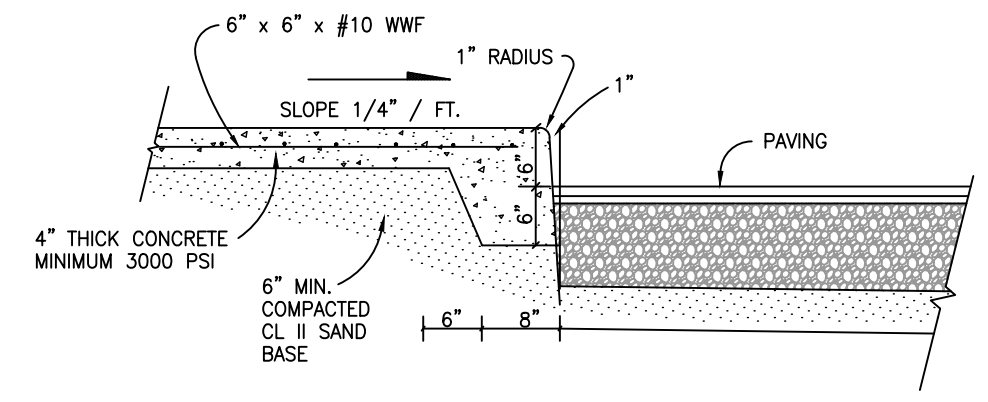
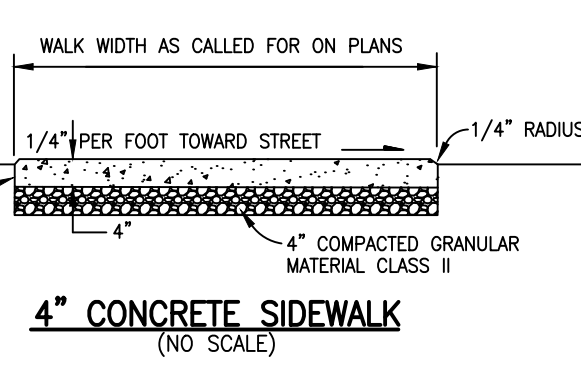
TITLE: LANDSCAPE PLAN

| NO | BY | REVISION PER | DATE |
|----|----|--------------|------|
| | | | |
| | | | |
| | | | |
| | | | |

DESIGNED BY: TC
DRAWN BY: TC
CHECKED BY: PC
SCALE: 1" = 20'
JOB NO: 24-176
DATE: 06/04/2024
SHEET NO. 10

BOSS Engineering

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



INTEGRAL CONCRETE WALK / CURB DETAIL (NO SCALE)

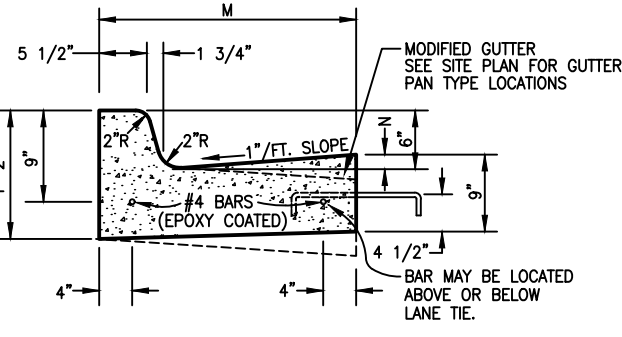
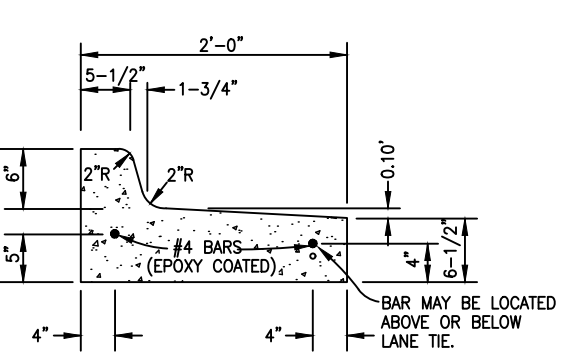
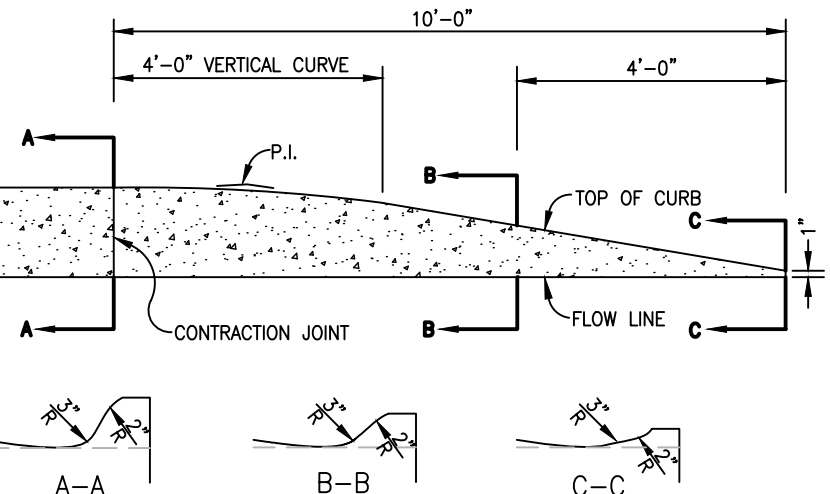


Table with 2 columns: DETAIL (F1-F6) and DIMENSIONS (M, T, LANE TIES, CONCRETE CU.YD./LIN.FT.).

CONCRETE CURB & GUTTER TYPE F (NO SCALE)



MODIFIED BARRIER (M.D.O.T. TYPE F4) (FOR ISLANDS ONLY) (NO SCALE)



CONCRETE CURB AND GUTTER ENDINGS (NO SCALE)

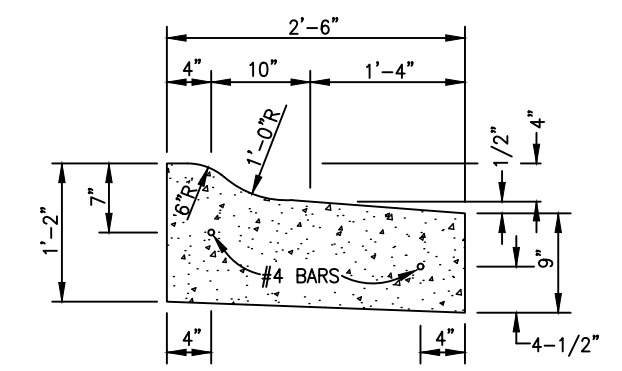
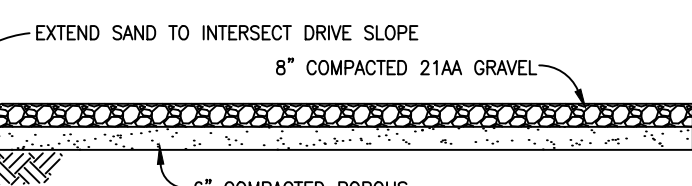
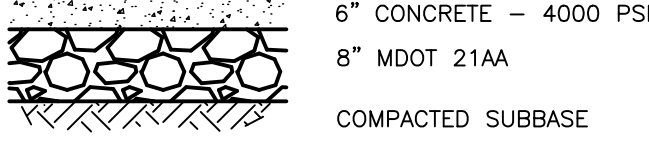


Table with 2 columns: DETAIL (D1-D3) and DIMEN. T (LANE TIES, CONCRETE CU.YD./LIN.FT.).

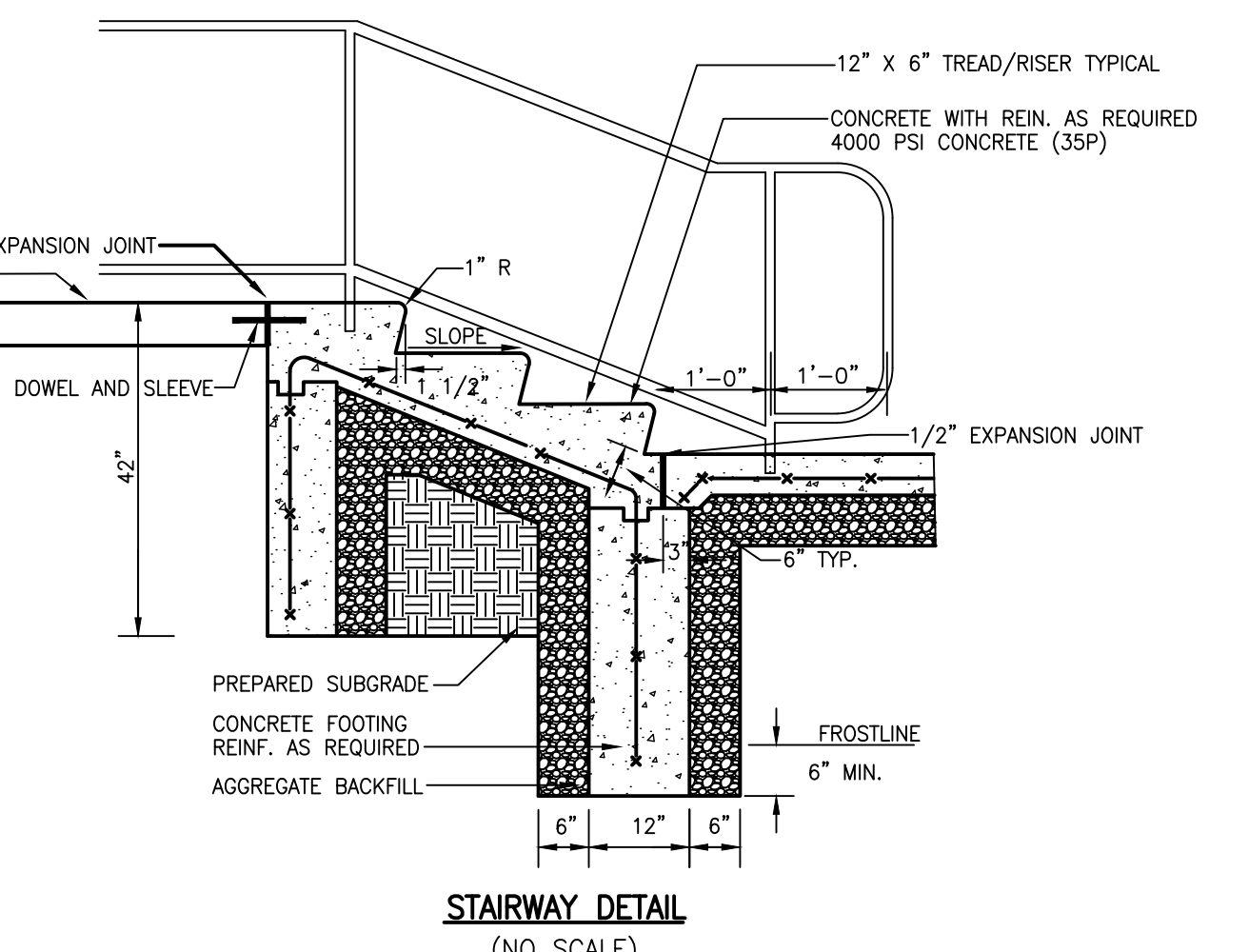
MODIFIED TYPE D CURB (REF. MDT DETAIL 1-300) (NO SCALE)



GRAVEL PARKING CROSS SECTION (NO SCALE)



CONCRETE PAVEMENT CROSS SECTION (NO SCALE)



STAIRWAY DETAIL (NO SCALE)

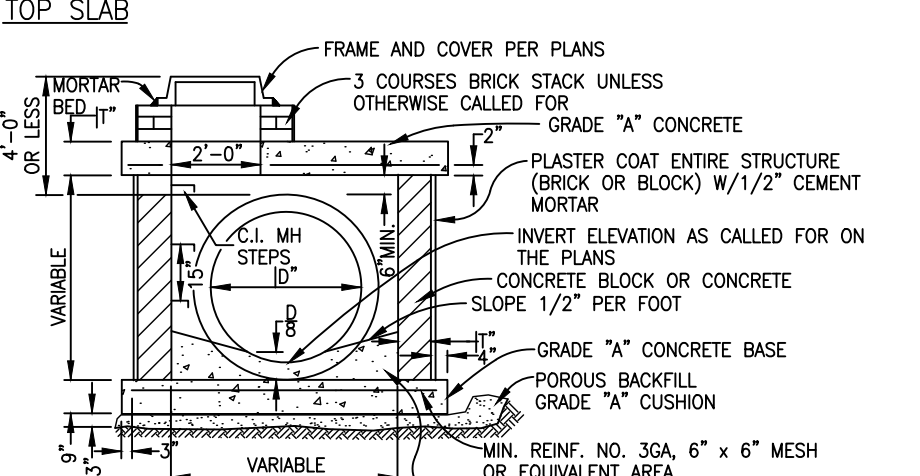
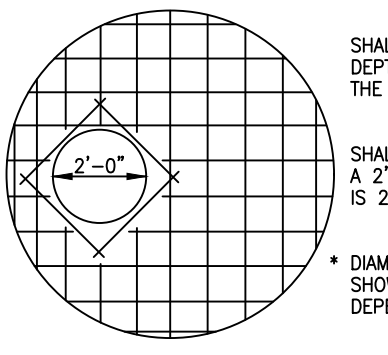
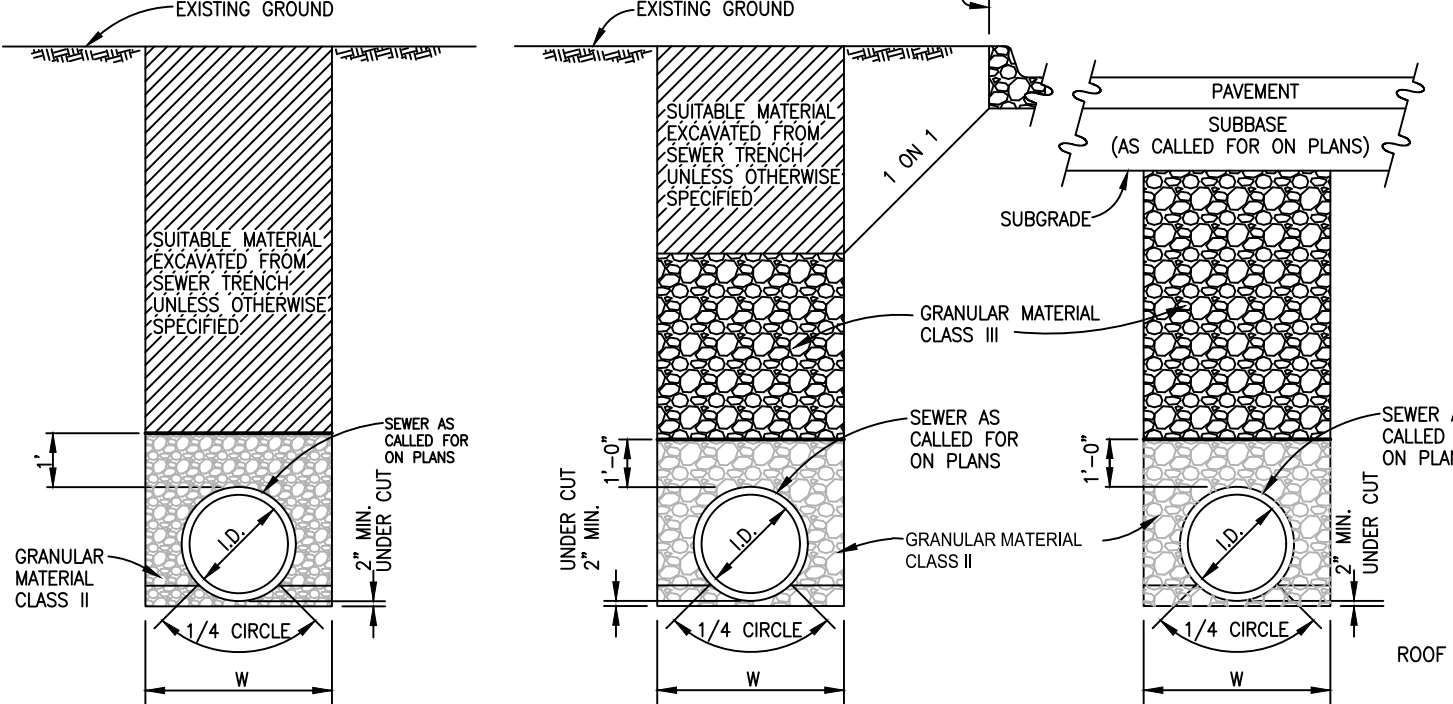
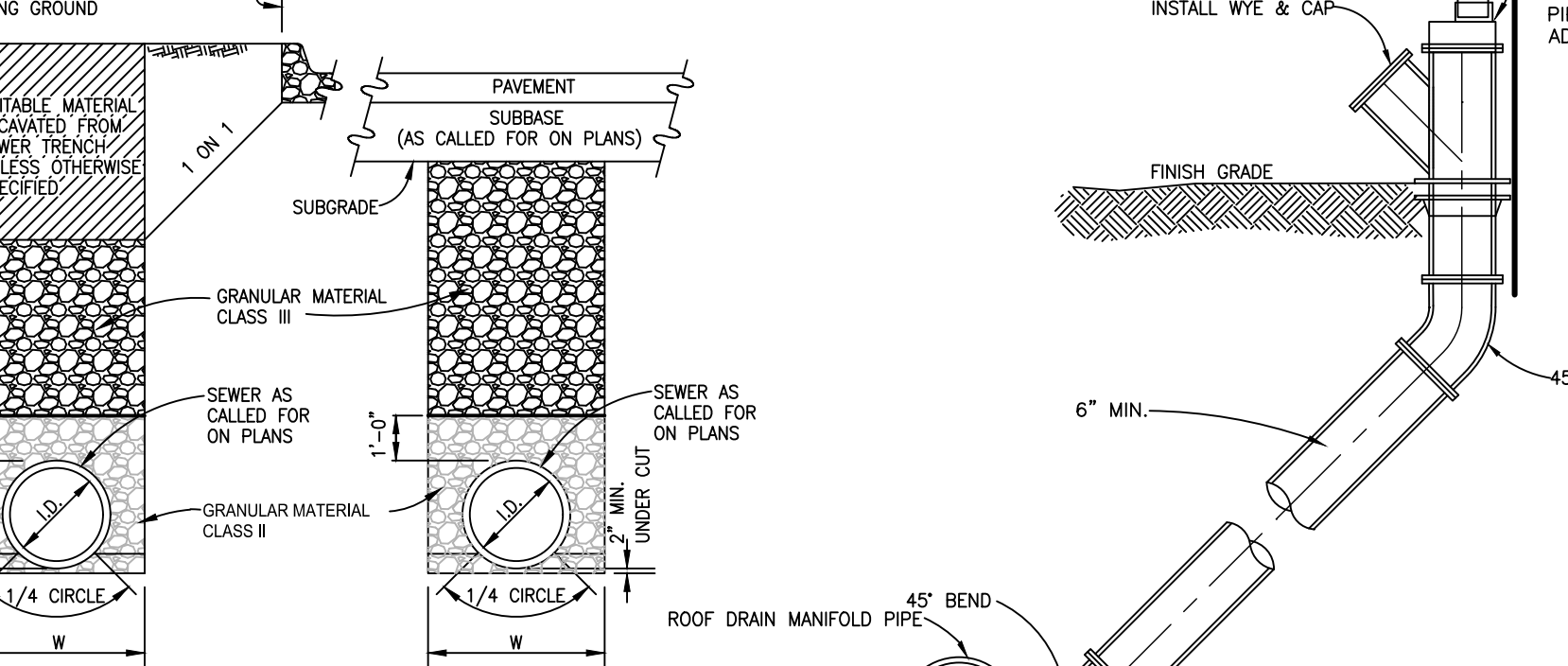


Table with 2 columns: OUTLET ID" (M.H. I. DIA., TOP SLAB 12" WALLS 12") and REINFORCED STEEL.

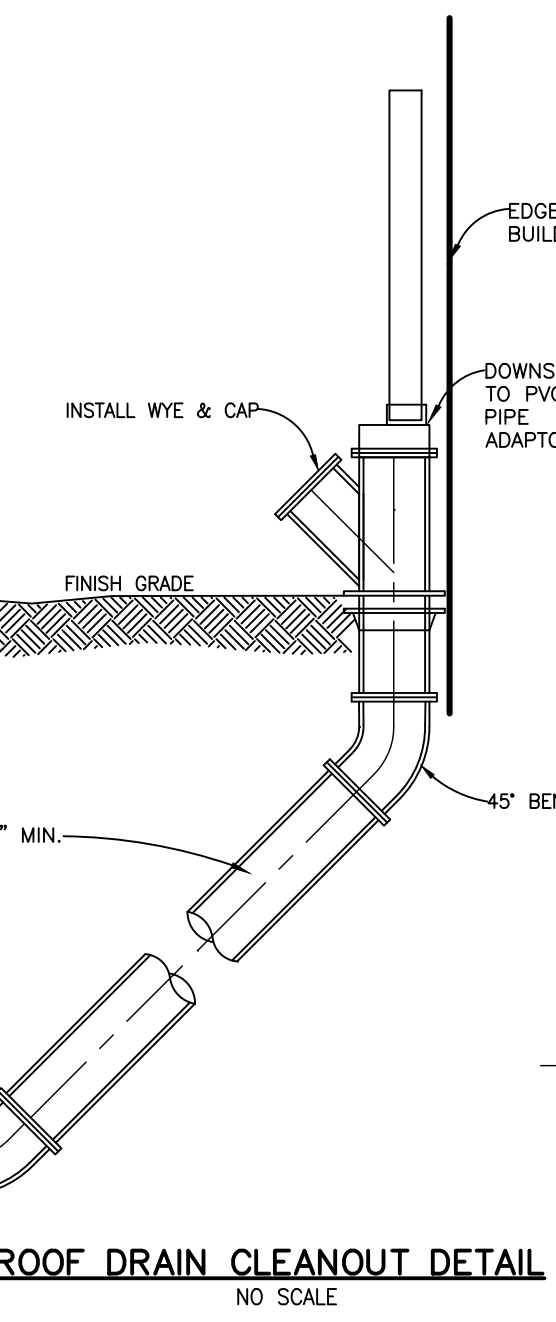
SHALLOW C.B./M.H. DETAIL (NO SCALE)



SEWER NOT UNDER ROADBED (REF. MDT DETAIL IV-830) (NO SCALE)



SEWER UNDER ROADBED OR WITHIN INFLUENCE OF ROADBED (REF. MDT DETAIL IV-830) (NO SCALE)



ROOF DRAIN CLEANOUT DETAIL (NO SCALE)

- 1. NOTIFY LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE 24 HOURS PRIOR TO START OF GRADE WORK.
2. IN ACCORDANCE WITH PUBLIC ACT NO. 53, OF 1974 THE PERMIT HOLDER SHALL CALL MISS DIG FOR STAKING AND LOCATING OF UTILITIES...
3. (IMPORTANT NOTICE) RETENTION/RETENTION PONDS SHALL BE EXCAVATED...
4. 36" M.D.O.T SPECIFICATION TYPE SILT FABRIC FENCE AS SHOWN ON PLANS SHALL BE PLACED AND MAINTAINED ALONG PERIMETER ON ALL LOW LYING AREAS...
5. ALL TEMPORARY EROSION CONTROL DEVICES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO THE START OF MASSIVE EARTH DISTRIBUTION...
6. PLAN DOES DENOTE A DETAILED EROSION CONTROL DEVICE TO RESTRICT TRACKING OF MATERIAL ONTO THE HIGHWAY...
7. RETENTION/RETENTION/SEDIMENTATION PONDS SHALL BE EXCAVATED...
8. DETENTION POND OUTLETS SHALL BE OF THE STANDPIPE AND STONE FILTER STABILIZATION SYSTEM...
9. THE EMERGENCY SPILLWAY FROM THE DETENTION POND SHALL BE SODDED AND PEDED, OR RIP RAPPED...
10. DIKES AND BERMS SHALL BE FREE OF ALL ORGANIC MATTER...
11. RETENTION/RETENTION PONDS SHALL BE FENCED WITH A 4' CHAIN LINK FENCE...
12. ALL UNIMPROVED DISTURBED AREAS SHALL BE STRIPPED OF TOPSOIL WHICH WILL BE STORED ON SITE DURING THE EXCAVATING STAGE...
13. SOIL EROSION CONTROLS SHALL BE MONITORED DAILY BY THE ON-SITE ENGINEER...
14. ON SITE DITCHES SHALL BE OF THE FLAT BOTTOM TYPE...
15. DITCHES WITH STEEP SLOPES WILL NEED FLOW CHECKS TO PREVENT SCOURING...
16. SLOPES IN EXCESS OF 3 HORIZONTAL TO 1 VERTICAL SHALL NOT BE USED EXCEPT WITH A MECHANICAL DEVICE...
17. STORM DRAINS
18. STORM WATER INLETS SHALL HAVE AS A TEMPORARY CONTROL A STRAW BALE BARRIER AND STONE FILTER...
19. BURLAP AND PEA STONE FILTERS WILL NEED TO BE CHANGED AFTER EACH RAINFALL...
20. COUNTY CODE REQUIRES A MINIMUM PIPE SIZE OF 12" IN DIAMETER...
21. ALL STORM DRAIN OUTLETS 15" IN DIAMETER OR LARGER SHALL HAVE ANIMAL GUARDS INSTALLED...
22. ALL STORM DRAINAGE PIPE 30" IN DIAMETER OR LARGER SHALL BE POINTED, AT THE JOINTS ON THE INSIDE WITH MORTAR...
23. ALL STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE RETENTION/RETENTION POND SHALL HAVE A TEMPORARY 5'X10'X3' SUMP...
24. STORM WATER OUTLETS DO DENOTE RIP RAP. ALL OUTLETS SHALL BE RIP RAPPED OVER KEVED FILTER FABRIC...
25. RIP RAP AS NOTED ON THE PLAN SHALL BE OF A FUNNEL SHAPE CONSTRUCTION...
26. RIP RAP SHALL BE 6" IN DIAMETER OR LARGER. GROUTING MAY BE NECESSARY...
27. STORM WATER OUTLET IS IN NEED OF A SPLASH BLOCK WHICH IS NOT NOTED ON THE PLAN...
28. IT WILL BE NECESSARY FOR THE DEVELOPER TO HAVE THE STORM DRAINAGE LINES CLEANED PRIOR TO FINAL INSPECTION...
29. ALL UNIMPROVED DISTURBED AREAS SHALL BE RE-TOP SOILED, WITH A MINIMUM OF 3" OF MATERIAL...
30. IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING...
31. PERIODIC INSPECTIONS WILL BE MADE THROUGHOUT THE COURSE OF THE PROJECT...
32. THE ISSUING BUILDING DEPARTMENT SHALL NOT ISSUE THE CERTIFICATE OF OCCUPANCY UNTIL THE FINAL INSPECTION LETTER FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE HAS BEEN OBTAINED...
33. PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS:
TOP-SOIL 3" IN DEPTH
GRASS SEED 218 LBS. PER ACRE
FERTILIZER 150 LBS. PER ACRE
STRAW MULCH 3" IN DEPTH 1.5 TO 2 TONS PER ACRE
AS HYDRO-SEEDING HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1%...
SEED AND MULCHING MUST HAVE A TIE DOWN, SUCH TACKIFIER, NET BINDING, ETC.)
HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1%. IN SUCH CASES STABILIZATION SHALL BE DONE WITH STRAW MULCH WITH A TACKIFIER.
MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS
1. SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT...
2. TRACKING PAD SHALL BE INSPECTED MONTHLY FOR ACCUMULATED DIRT...
3. DETENTION/RETENTION POND SHALL BE INSPECTED QUARTERLY ON A PERMANENT BASIS...
4. CATCH BASINS SHALL BE INSPECTED ANNUALLY FOR ACCUMULATION OF SEDIMENT...
5. COMMON AREAS SHALL BE STABILIZED NO LATER THAN 15 DAYS AFTER GRADE WORK...

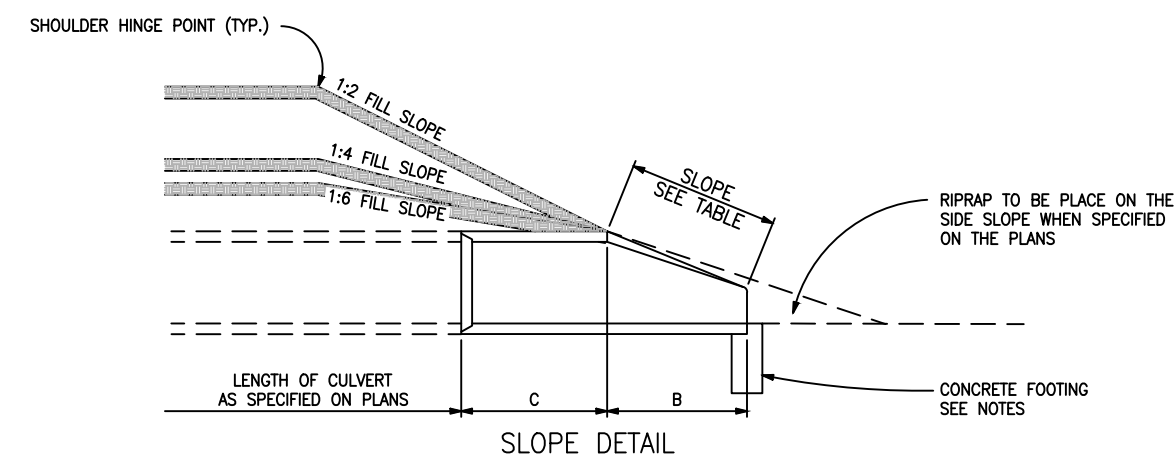
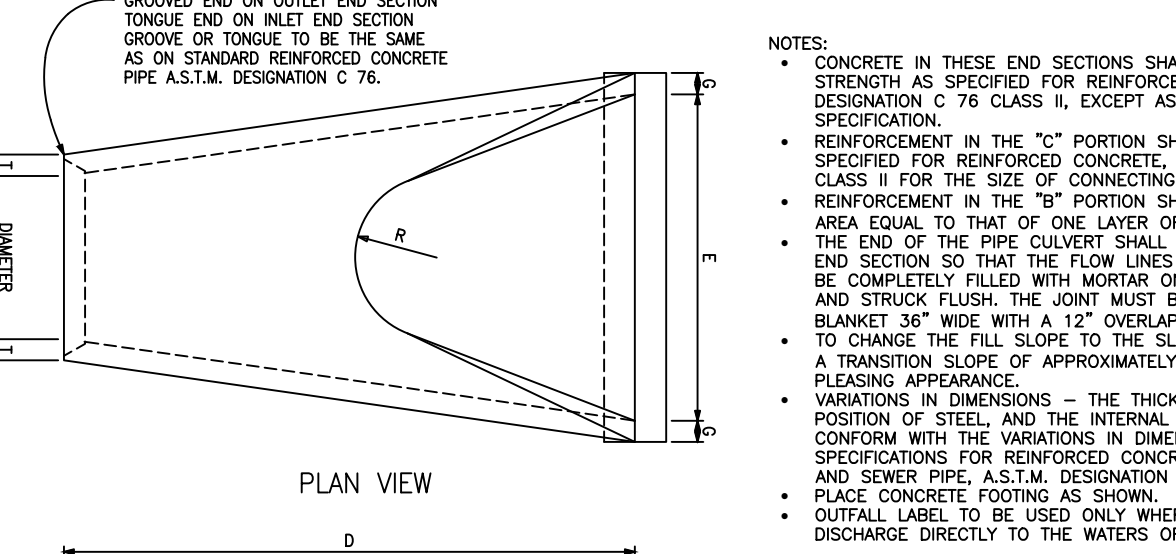
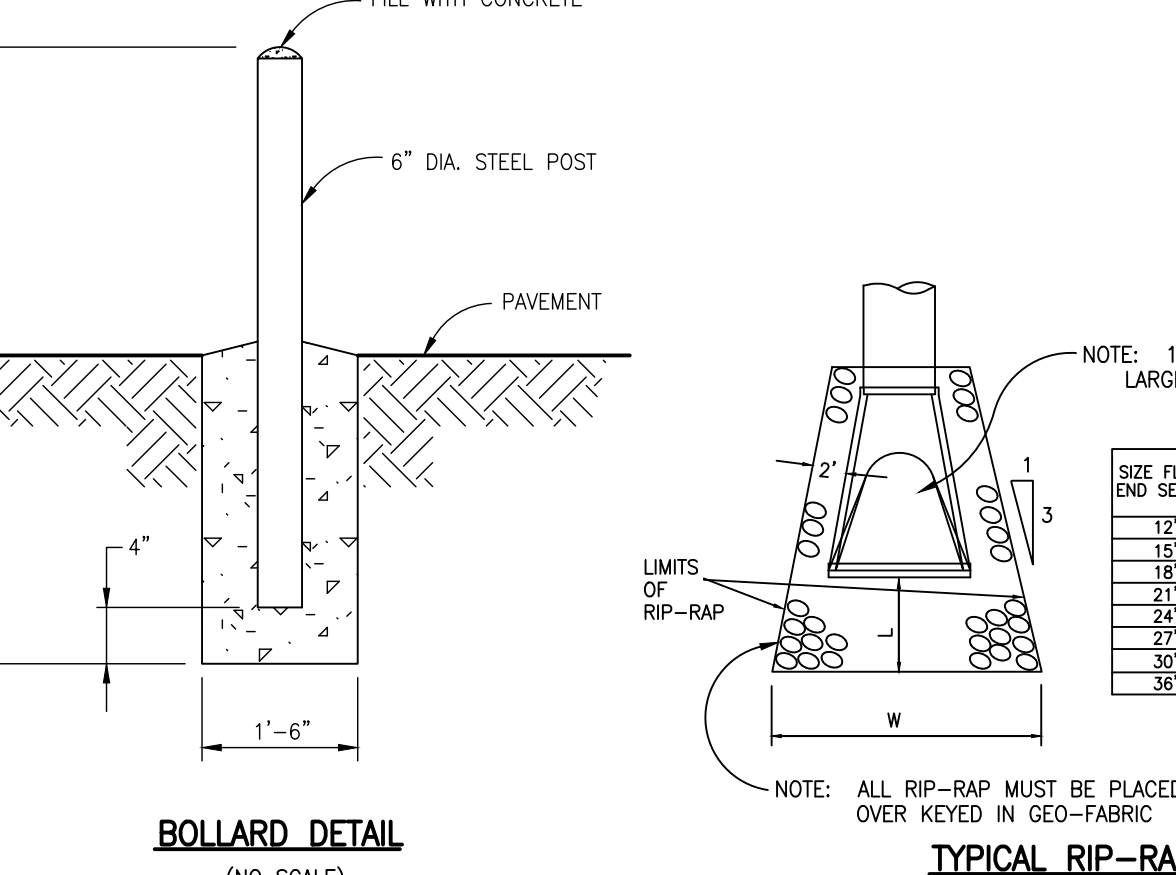


TABLE OF DIMENSIONS. Table with columns: PIPE DIAMETER (INCHES), APPROX. SLOPE, T (INCHES), A (INCHES), B (INCHES), C (INCHES), D (INCHES), E (INCHES), G (INCHES), R (INCHES), X (INCHES), Y (INCHES).

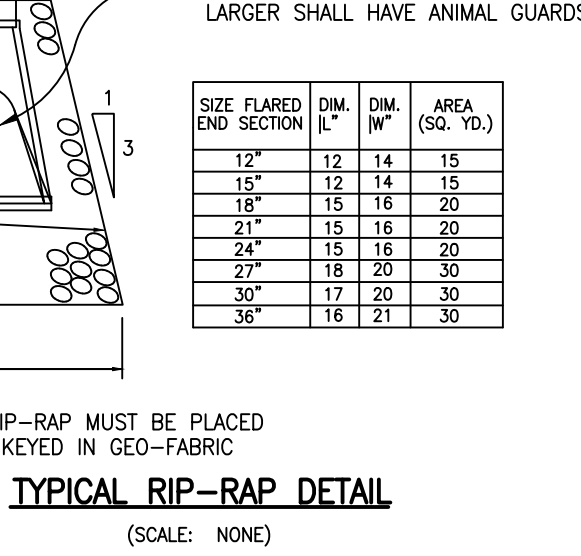


PRECAST CONCRETE END SECTION FOR PIPE CULVERT (REF. MDT DETAIL R-86-F)

STRUCTURE FRAMES & COVERS. Table with columns: COVER, TYPE, USE, EAST JORDAN (OR EQUAL), TYPE OF COVER OR GRATE.



BOLLARD DETAIL (NO SCALE)



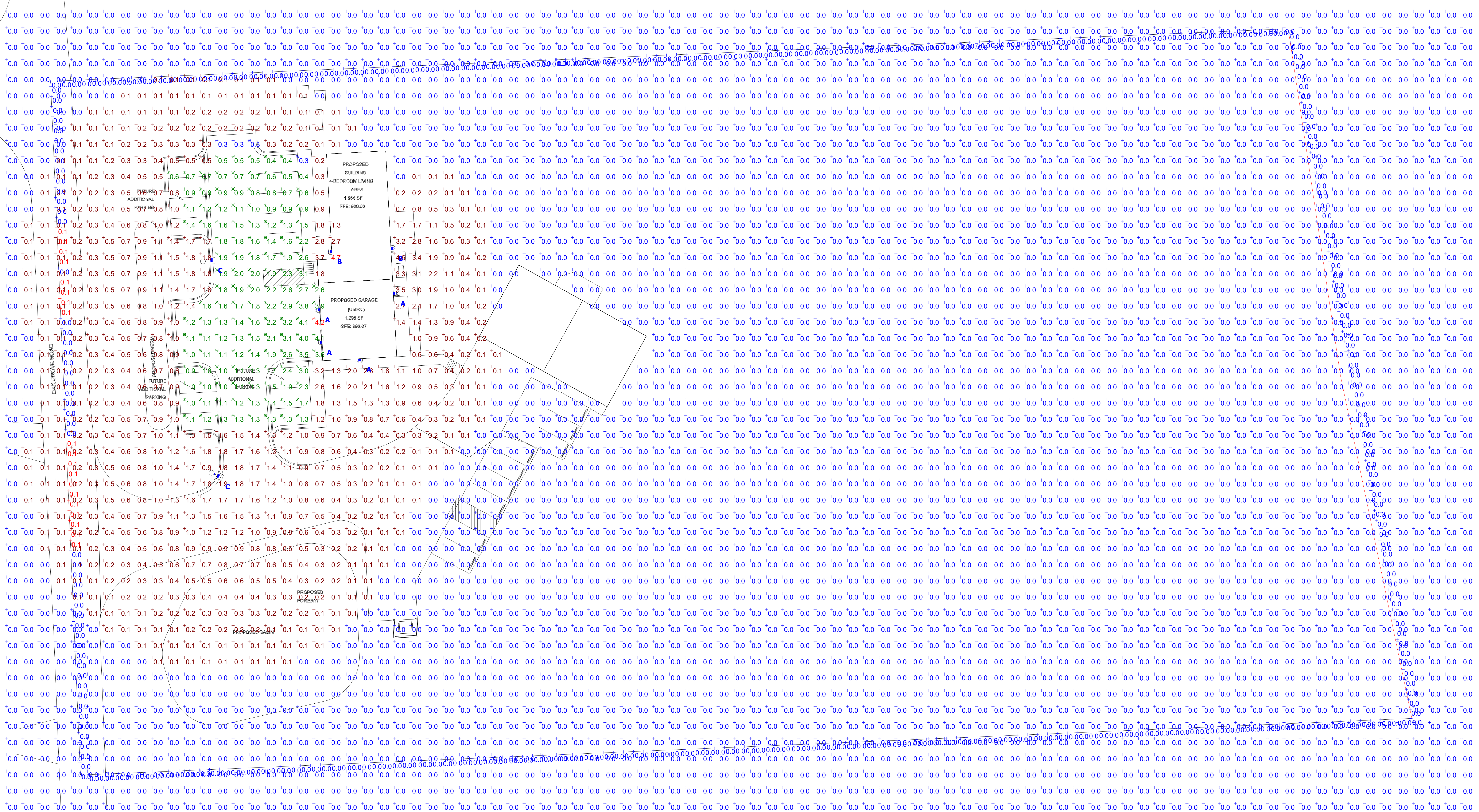
TYPICAL RIP-RAP DETAIL (SCALE: NONE)

LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
LINDBOHN ASSOCIATES AIA, PC
10406 CANTON DRIVE
BRIGHTON, MI 48116
810.227.5588

BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

PROJECT: LIVINGSTON COUNTY EMS - COHOCTAH SUBSTATION
PREPARED FOR: LINDBOHN ASSOCIATES AIA, PC
DATE: 9/10/2024

DESIGNED BY: ST
DRAWN BY: MJD
CHECKED BY:
SCALE: NO SCALE
JOB NO: 24-176
DATE: 9/10/2024
SHEET NO. 12



Plan View
Scale: 1" = 20'

| Statistics | | | | | | |
|------------------|--------|--------|--------|--------|---------|---------|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Overall | + | 0.1 fc | 4.7 fc | 0.0 fc | N/A | N/A |
| Proposed Parking | X | 1.5 fc | 4.2 fc | 0.3 fc | 14.0:1 | 5.0:1 |
| Boundary | + | 0.0 fc | 0.1 fc | 0.0 fc | N/A | N/A |

| Schedule | | | | | | | | | |
|----------|-------|-----|-------------------|----------------------------|--|-------------|-----|-------------|-----------------|
| Symbol | Label | QTY | Manufacturer | Catalog | Description | Lamp Output | LLF | Input Power | Mounting Height |
| ⬇ | A | 4 | Lithonia Lighting | WDGE2 LED P3 40K 70CRI T4M | WDGE2 LED WITH P3 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 4 MEDIUM OPTIC | 3552 | 0.9 | 32,137 | 12' |
| ⬇ | B | 2 | Lithonia Lighting | WDGE2 LED P2 40K 70CRI T4M | WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 4 MEDIUM OPTIC | 2278 | 0.9 | 18,981 | 8' |
| ⬇ | C | 2 | Lithonia Lighting | RSX1 LED P3 40K R5 | RSX Area Fixture Size 1 P3 Lumen Package 4000K CCT Type R5 Distribution | 14396 | 0.9 | 109.44 | 20' |

General Note
 1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
 3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0" & 5' - 0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THIS LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT AS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
 THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note
 FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Mounting Height Note
 MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

RSX1 LED Area Luminaire

Specifications
 Efficacy: 0.57 W (0.055 W)
 Length: 21.6" (548 mm)
 Width: 13.7" (348 mm)
 Height: 3.7" (94 mm)
 Weight: 22.2 lbs (10.1 kg)

Introduction
 The new RSX1 LED Area luminaire delivers maximum value by providing uniform average lighting, long life and consistent performance. The RSX1 delivers 1,000 to 17,000 lumens per fixture, depending on the fixture size and CCT.

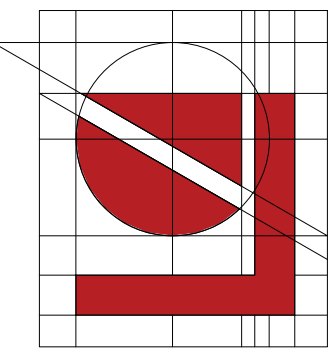
Ordering Information
 EXAMPLE: RSX1 LED P4 40K R5 MVOLT SPA DBXDO

WDGE2 LED Architectural Wall Source Precision Reflective Optic

Specifications
 Depth: 11.5"
 Depth (D): 11.5"
 Width: 11.5"
 Height: 11.5"
 Weight: 13.5 lbs

Introduction
 The WDGE2 LED family is designed to meet the needs of the modern building. It provides uniform average lighting, long life and consistent performance. The WDGE2 delivers 1,000 to 17,000 lumens per fixture, depending on the fixture size and CCT.

Ordering Information
 EXAMPLE: WDGE2 LED P3 40K R5CIN T4M SVMT DBXDO



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10465 Citation Drive, (810) 227-5668
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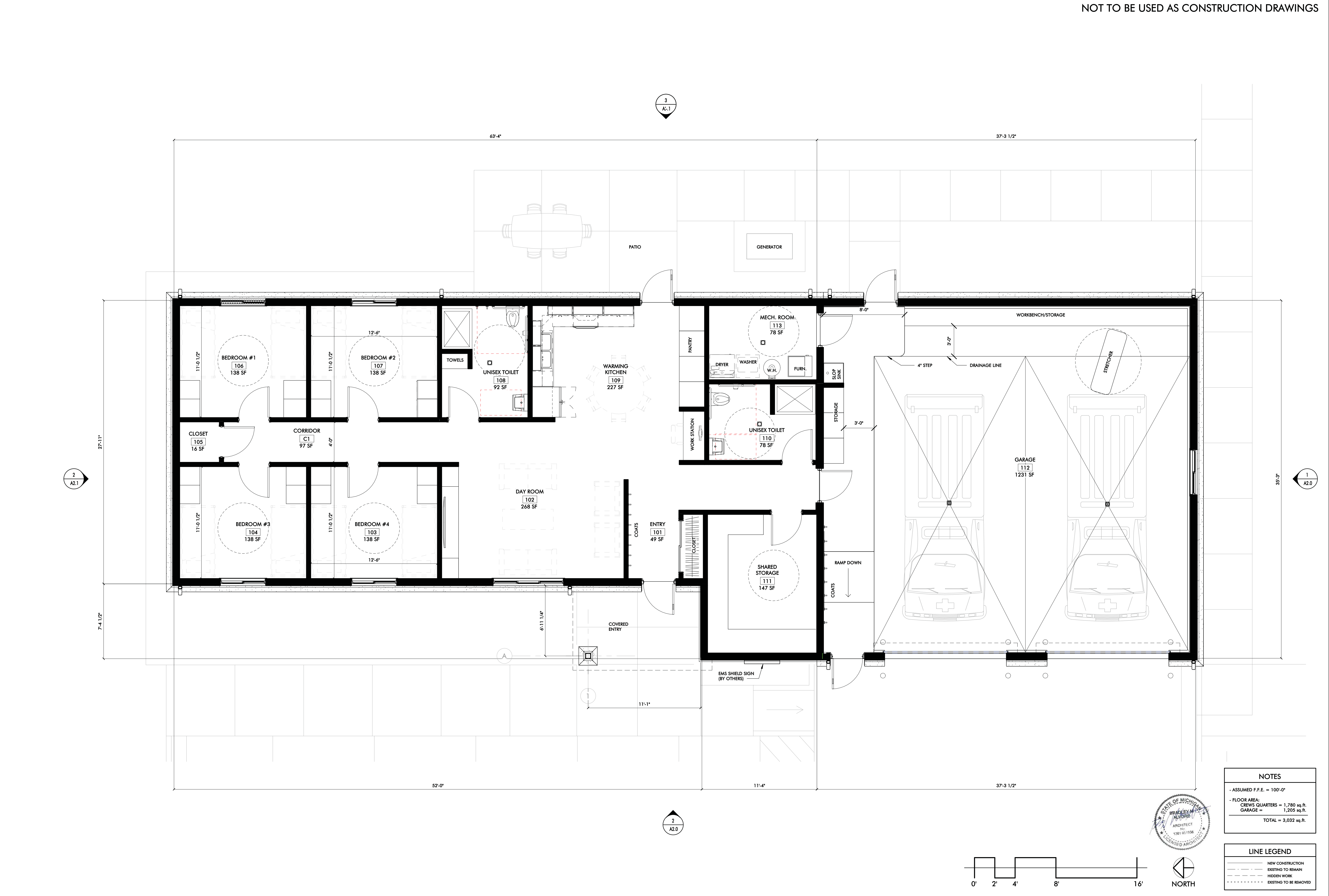
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| SITE PLAN SUBMISSION | | ISSUED FOR |
| 9-10-2024 | DATE: | |

COHOCTAH TWP. SUBSTATION FOR:
LIVINGSTON COUNTY EMS
7304 OAK GROVE RD., HOWELL, MI 48855
FLOOR PLAN

A1.0
24063

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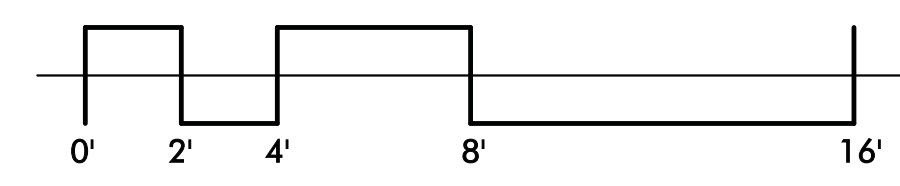


NOTES

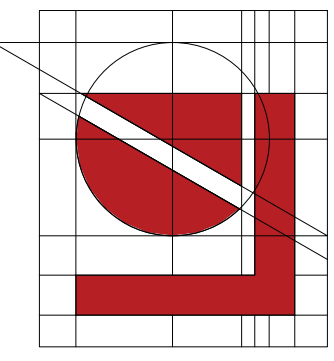
- ASSUMED F.F.E. = 100'-0"
- FLOOR AREA:
CREWS QUARTERS = 1,780 sq.ft.
GARAGE = 1,205 sq.ft.
TOTAL = 3,032 sq.ft.

LINE LEGEND

- NEW CONSTRUCTION
- EXISTING TO REMAIN
- HIDDEN WORK
- EXISTING TO BE REMOVED



1 SITE PLAN SUBMISSION PLAN
A2.0 1/4" = 1'-0"



Lindhout Associates
architects aia pc
Brighton, Michigan 48116-9510
10465 Citation Drive, (810) 227-5668
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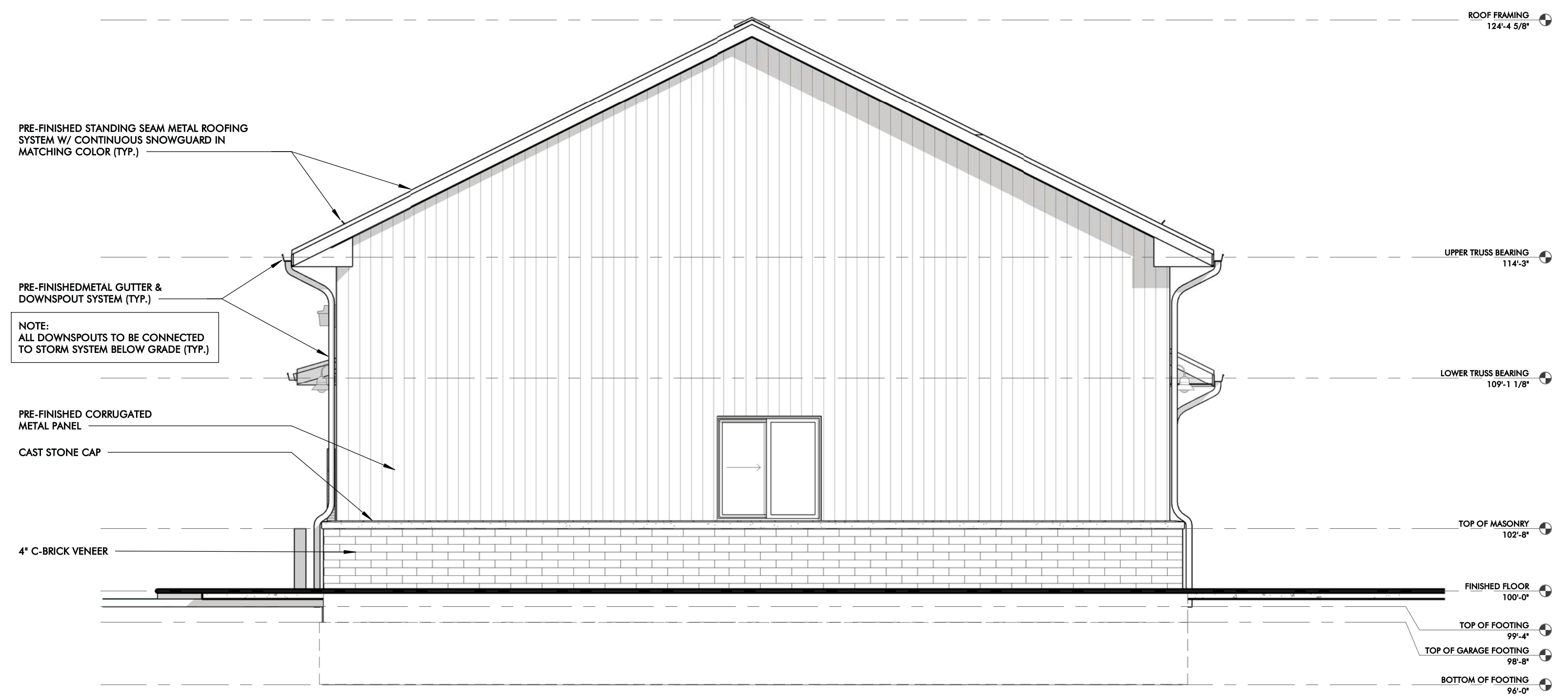
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LIVINGSTON COUNTY EMS
7304 OAK GROVE RD., HOWELL, MI 48855
EXTERIOR ELEVATIONS

A2.0
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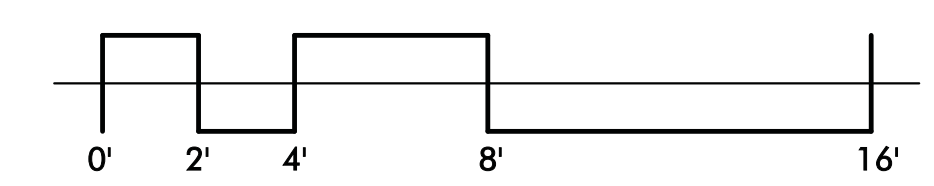
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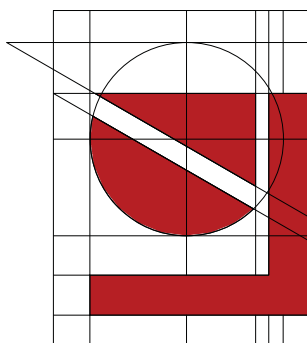


2 WEST ELEVATION
A1.0 1/4" = 1'-0"



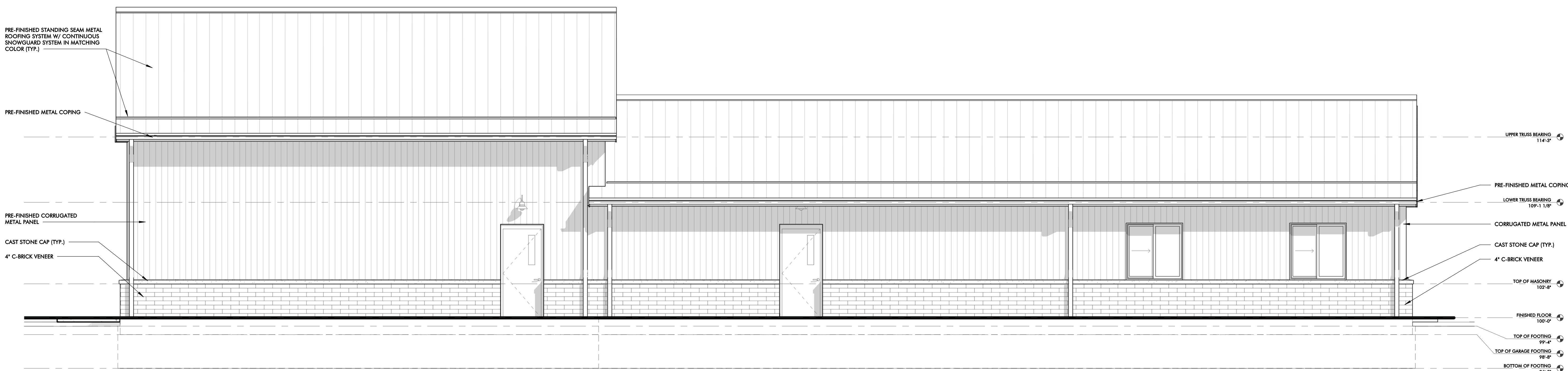
1 SOUTH ELEVATION
A1.0 1/4" = 1'-0"





Lindhout Associates
architects aia pc
10465 Citation Drive, Brighton, Michigan 48116-9510
www.lindhout.com (810) 227-5668 fax: (810) 227-5855

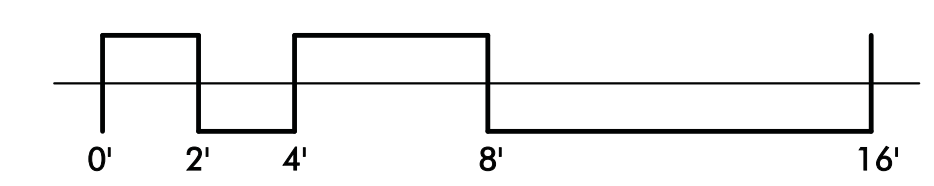
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3 EAST ELEVATION
A1.0 1/4" = 1'-0"



2 NORTH ELEVATION
A1.0 1/4" = 1'-0"



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|------------------|----------------------|
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| APP: [Signature] | ISSUED FOR |

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1
A4.0 VIEW LOOKING SOUTHEAST

NOT TO SCALE



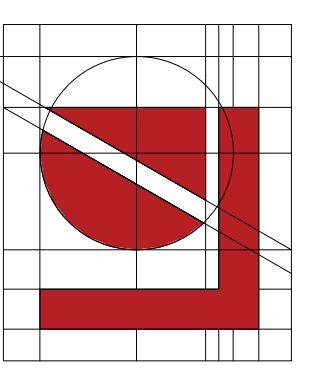
2
A4.0 VIEW LOOKING NORTHWEST

NOT TO SCALE



3
A4.0 BIRDSEYE VIEW LOOKING SOUTHEAST

NOT TO SCALE



Lindhout Associates
architects aia pc
10465 Citation Drive,
Brighton, Michigan 48116-9510
www.lindhout.com
(810) 227-5668 Fax: (810) 227-5855

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COHOCTAH TWP. SUBSTATION FOR:
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RENDERED VIEWS

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