

CITY OF HARRISON CLARE COUNTY, MICHIGAN 2ND STREET PARKING LOT

2960 Lucerne Drive SE Grand Rapids, MI 49546 P: 616.977.1000 F: 616.977.1005

CITY OF HARRISON
CLARE COUNTY, MICHIGAN
STREET PARKING LOT
COVER SHEET

INDEX OF DRAWINGS

AUGUST 2024

C-101 **EXISTING CONDITIONS AND REMOVALS PLAN** C-102 SITE LAYOUT & UTILITY PLAN C-103 SITE GRADING & SESC PLAN C-501 **DETAILS**

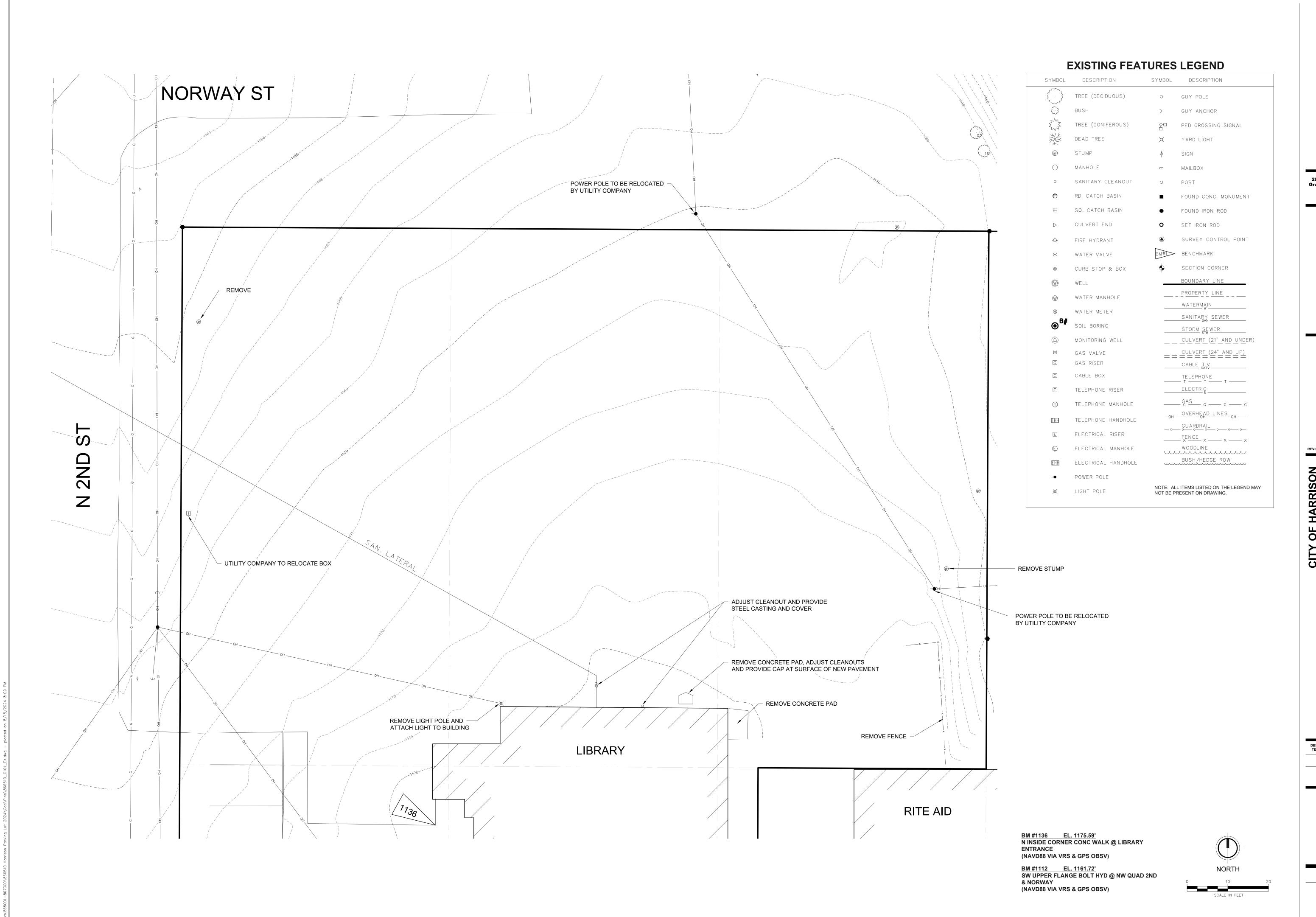




G-001

AUGUST 15, 2024

081324 nate.torrey



LEIS&VANDENBRIN

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CITY OF HARRISON
CLARE COUNTY, MICHIGAN
2ND STREET PARKING LOT
CONDITIONS AND REMOVALS PLAN

PROJ MNGR: NRT
DESIGNED BY: NRT
DRAWN BY: NRT
CHECK BY:
SMB 7/29/24

DRAWING INFORMATION:
866510_C101_EX
081524 nate.torrey

EXISTING

AUGUST 15, 2024

F&V PROJECT NO.

866510

C-101



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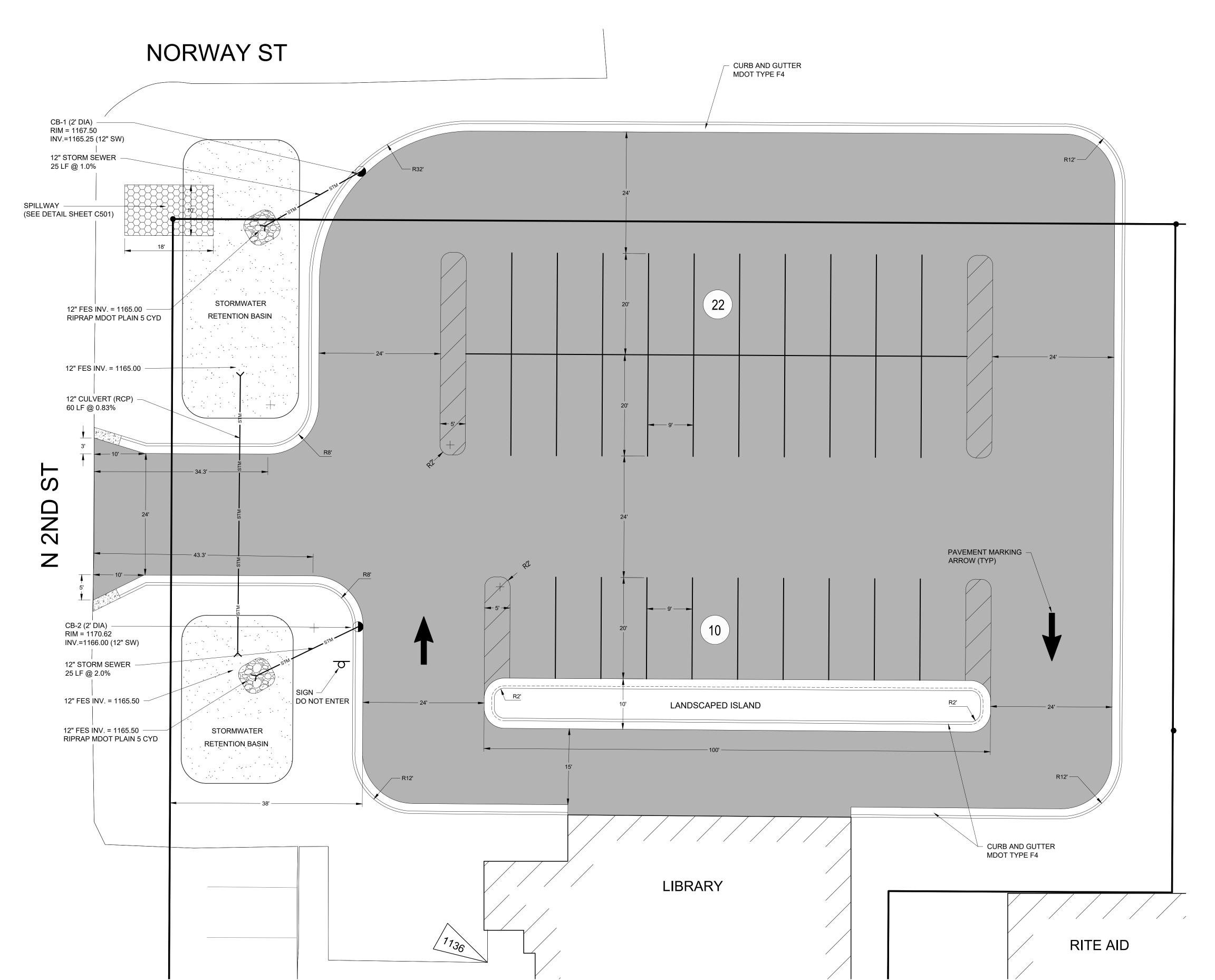
CITY OF HARRISO CLARE COUNTY, MICHIGA STREET PARKING LO LAYOUT AND UTILITY PL 2ND SITE

> PROJ MNGR: NRT DESIGNED BY: NRT DRAWN BY: NRT SMB 7/29/24 DRAWING INFORMATION:

866510_C102_SITE 081524 nate.torrey

AUGUST 15, 2024 F&V PROJECT NO. 866510

C-102



NOTES:

- 1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- 2. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL SITE RELATED PERMITS. CONTRACTOR IS REQUIRED TO COMPLETE THE APPLICATION, AND SUBMIT NECESSARY DRAWINGS, FEES, ETC. TO THE APPROPRIATE JURISDICTION. CONTRACTOR SHALL PAY ALL FEES RELATED TO PERMIT(S) AND SECURE PERMIT(S) IN HIS NAME. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING
- 3. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING WATER, SANITARY SEWER, AND STORM SEWER CROSSINGS AND CONNECTION POINTS PRIOR TO CONSTRUCTION. CONTACT ENGINEER WITH ANY
- 4. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL SITE UTILITY CONNECTIONS AND INSPECTIONS WITH THE PROPER JURISDICTION AND PAY ALL ASSOCIATED FEES.
- 5. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY ENGINEER.
- 6. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
- 7. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
- 8. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- 10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.
- 12. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
- 13. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF
- 14. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.

DETENTION BASIN SEEDING:

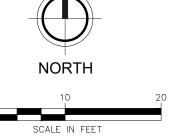
- 1. STORMWATER RETENTION BASIN SEEDING SHALL BE MICHIGAN WILDFLOWER FARM DETENTION BASIN MIX.
- 2. ALL OTHER DISTURBED AREAS SEE PROJECT SPECIFICATIONS.

PROPOSED LAYOUT LEGEND:

ASPHALT RETENTION BASIN RETENTION BASIN SPILLWAY PAVEMENT CURB PAVEMENT CURB - MODIFIED DUB DOWN CURB STORM SEWER

BM #1136 EL. 1175.59' N INSIDE CORNER CONC WALK @ LIBRARY **ENTRANCE** (NAVD88 VIA VRS & GPS OBSV)

BM #1112 EL. 1161.72' SW UPPER FLANGE BOLT HYD @ NW QUAD 2ND & NORWAY (NAVD88 VIA VRS & GPS OBSV)



P: 616.977.1000 F: 616.977.1005

GRADING AND SESC PL

SITE

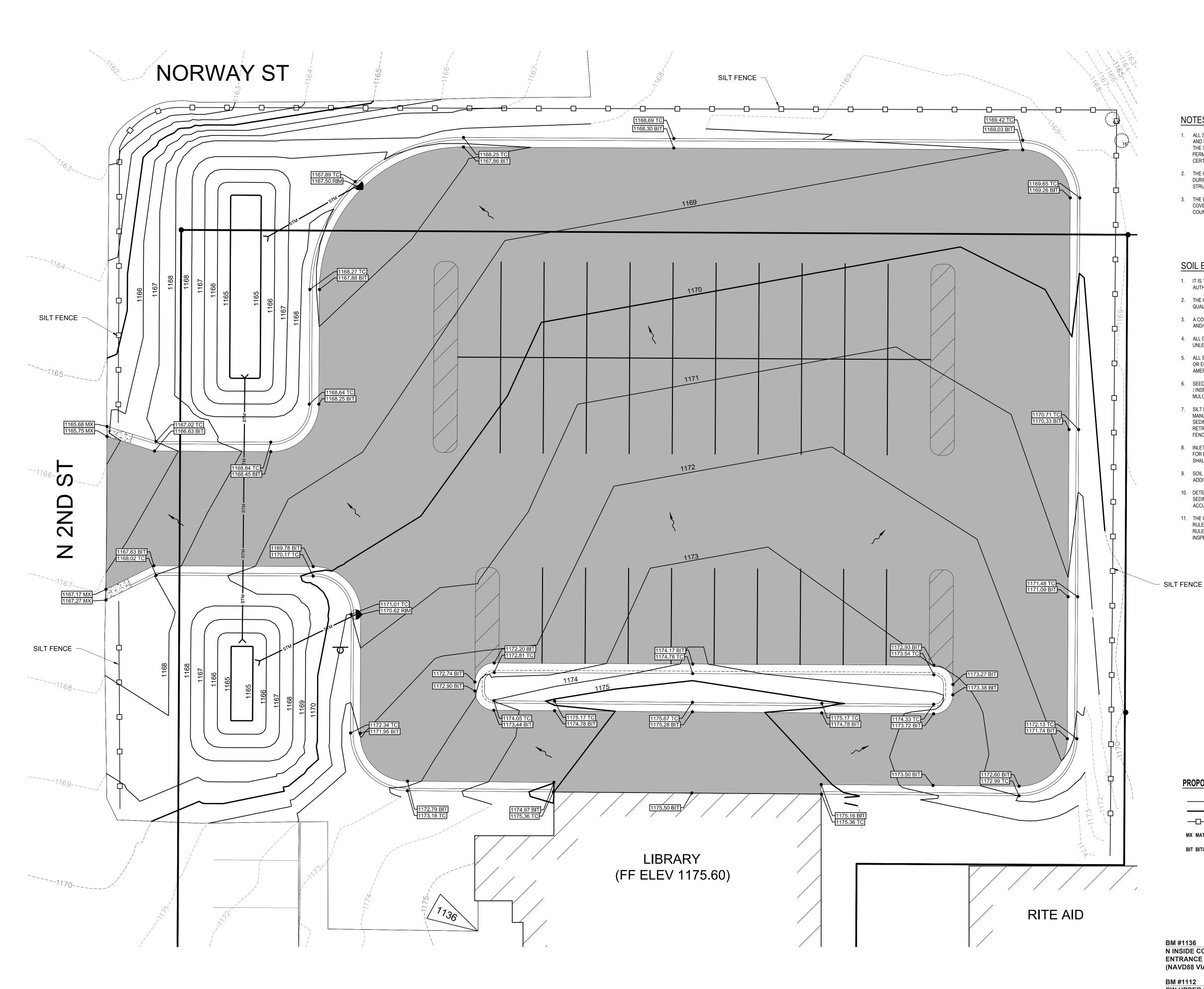
PROJ MNGR: NRT DESIGNED BY: NRT DRAWN BY: NRT

DRAWING INFORMATION:

866510_C103_GRAD 081524 nate.torrey

SMB 7/29/24

2ND



- 1. ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
- 2. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
- 3. THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

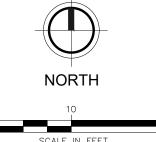
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE SOIL EROSION PERMIT FROM THE PROPER GOVERNING AUTHORITY.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL AND COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR
- 3. A CONTRACTOR / INSPECTOR SHALL INSPECT THE SOIL EROSION/SEDIMENT CONTROL DEVICES ONCE EACH WEEK AND/OR WITHIN 24 HOURS OF A PRECIPITATION EVENT WHICH RESULTS IN A STORM DISCHARGE FROM THE SITE.
- 4. ALL DISTURBED NON-PAVEMENT AREAS MUST BE RESTORED WITH TOPSOIL, SEED, FERTILIZER, AND MULCH UNLESS SODDED.
- 5. ALL SLOPES STEEPER THAN 1V:3H SHALL USE AN EROSION CONTROL BLANKET [NORTH AMERICAN GREEN S150BN OR EQUAL]. ALL SLOPES BETWEEN 1V:4H AND 1V:3H SHALL USE AN EROSION CONTROL BLANKET [NORTH AMERICAN GREEN DS75 OR EQUAL]. UNLESS INDICATED OTHERWISE ON PLANS.
- 6. SEEDING SHOULD BE PREPARED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR / INSPECTOR SHALL INSPECT THE AREA AFTER SEEDING IS COMPLETED. AREAS THAT ARE BARE OR NOT MULCHED PROPERLY WILL NEED TO BE SPOT SEEDED AND/OR RE-MULCHED.
- 7. SILT FENCE SHOULD BE TRENCHED IN, BACKFILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVAL OF BUILT-UP SEDIMENT WHEN THE SEDIMENT ACCUMULATES TO 1/3 TO 1/2 THE HEIGHT OF THE FENCE. CONTRACTOR SHALL REMOVE, REPLACE, RETRENCH, OR REBACKFILL THE FENCE IF IT FAILS. CONTRACTOR SHALL REINSTALL IF ANY PORTION OF THE FENCING IS DAMAGED BY CONSTRUCTION MACHINERY.
- 8. INLET FILTERS SHALL BE SILT SACKS, DANDY BAGS, OR APPROVED EQUAL. INLET FILTERS SHALL BE INSPECTED FOR BUILDUP OF SILT AND OTHER DEBRIS. THIS IS EVIDENT IF STRUCTURE IS CAUSING FLOODING. MAINTENANCE SHALL CONSIST OF REMOVING OF SEDIMENTS OR REPLACING FILTER AS NECESSARY.
- 9. SOIL EROSION CONTROL METHODS SHOWN ARE A GUIDELINE AND DO NOT RELIEVE THE CONTRACTOR FROM ADDITIONAL METHODS THAT MAY BE REQUIRED BY THE SOIL EROSION CONTROL PERMIT.
- 10. DETENTION BASIN(S) SHALL BE ONE OF THE FIRST ITEMS CONSTRUCTED AND SHALL BE USED AS A TEMPORARY SEDIMENTATION BASIN UNTIL THE SITE IS STABILIZED. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL ACCUMULATED SEDIMENT AND RESTORATION OF THE BASIN PRIOR TO ACCEPTANCE BY THE OWNER.
- 11. THE CONTRACTOR WILL ENGAGE A CERTIFIED STORM WATER OPERATOR IN ACCORDANCE WITH EPA PHASE II RULES TO MEET REQUIREMENTS OF THE PERMIT. THIS OPERATOR WILL INSPECT THE JOB SITE AS REQUIRED BY RULE, NOTIFY JOB SITE SUPERINTENDENT OF ANY DEFICIENCIES, AND ENTER FINDINGS IN THE JOB SITE INSPECTION JOB BOOK.

PROPOSED GRADING LEGEND

PROPOSED MINOR CONTOUR PROPOSED MAJOR CONTOUR MX MATCH EXISTING ELEVATION 615.00 FG PROPOSED SPOT GRADE TC TOP OF CURB GRADE BIT BITUMINOUS GRADE SURFACE FLOW DIRECTION

BM #1136 EL. 1175.59'
N INSIDE CORNER CONC WALK @ LIBRARY **ENTRANCE** (NAVD88 VIA VRS & GPS OBSV)

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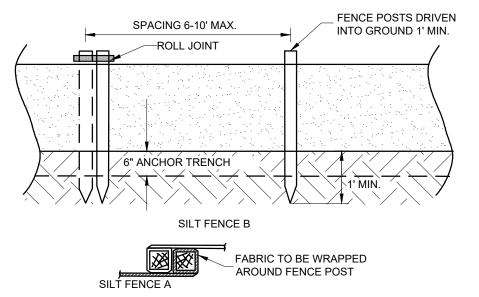
C-103

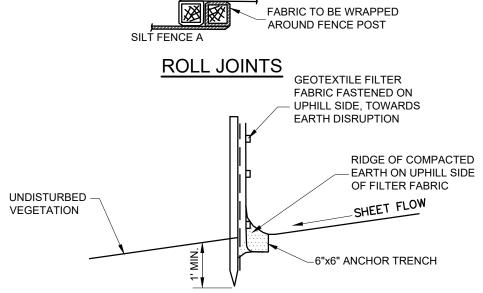
AUGUST 15, 2024

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AUGUST 15, 2024

C-501





SILT FENCE

SUITABLE EXCAVATED MATERIAL

GRANULAR MATERIAL ¬

UTILITY TRENCHING, EXCAVATING

AND BACKFILLING TERMINOLOGY

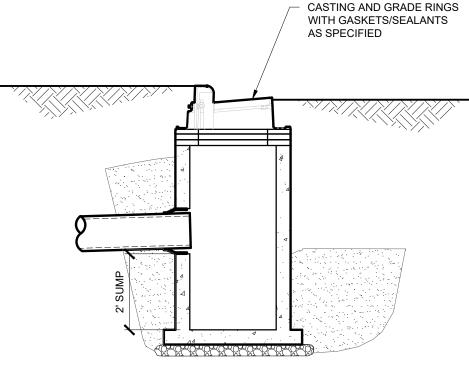
BEDDING

BACKFILL

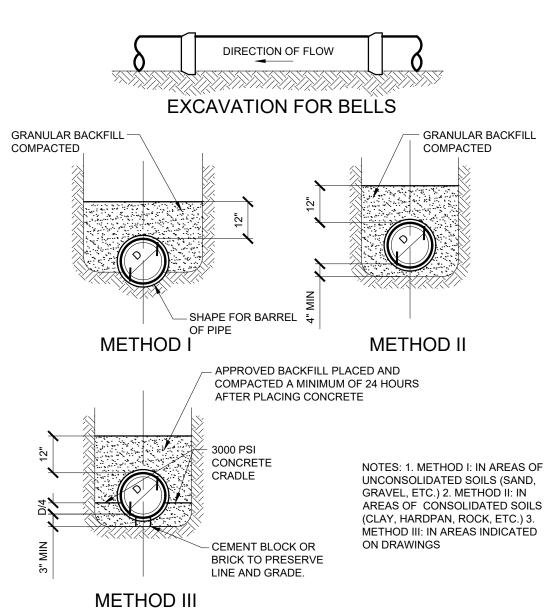
SPRING LINE -

GRANULAR -MATERIAL BACKFILL

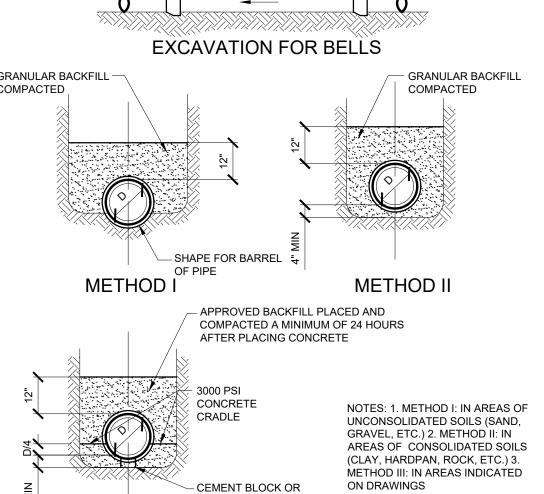
FINISHED BACKFILL GRADE -





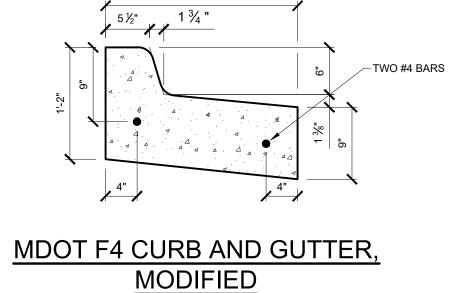


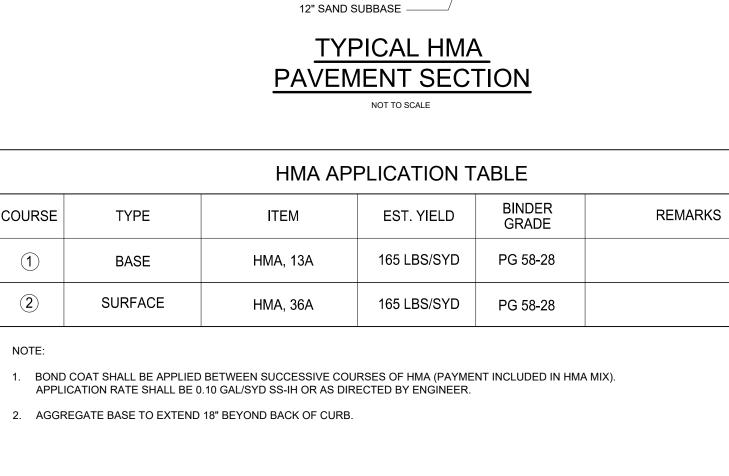
METHODS OF BEDDING GRAVITY PIPE





MDOT F4 CURB AND GUTTER



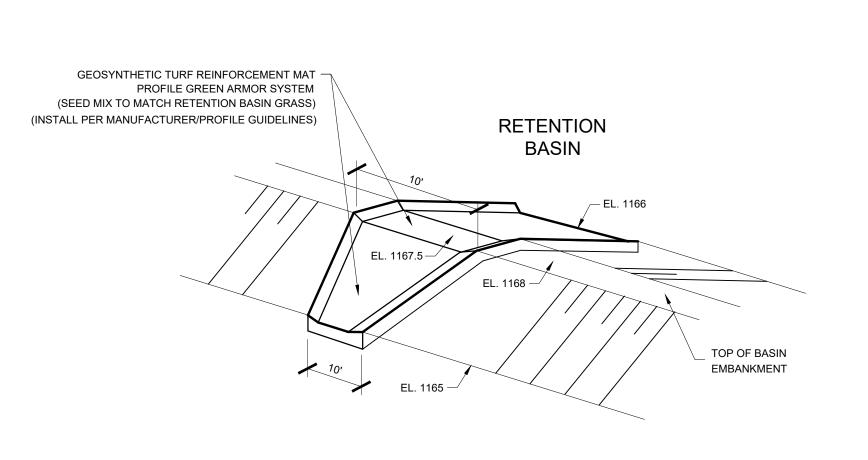


8" AGGREGATE BASE -

TYPE

SURFACE

COURSE



RETENTION BASIN SPILLWAY NOT TO SCALE