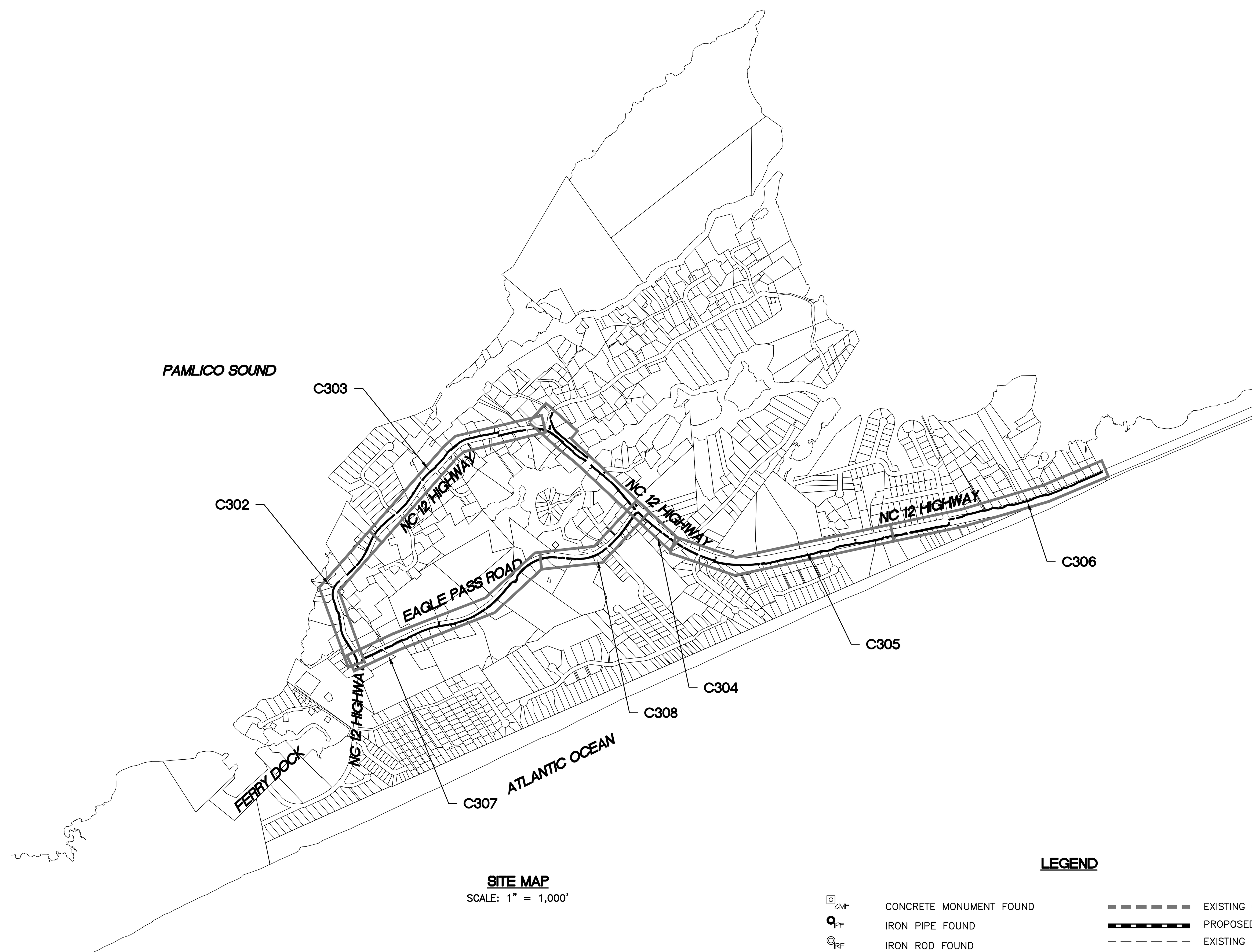
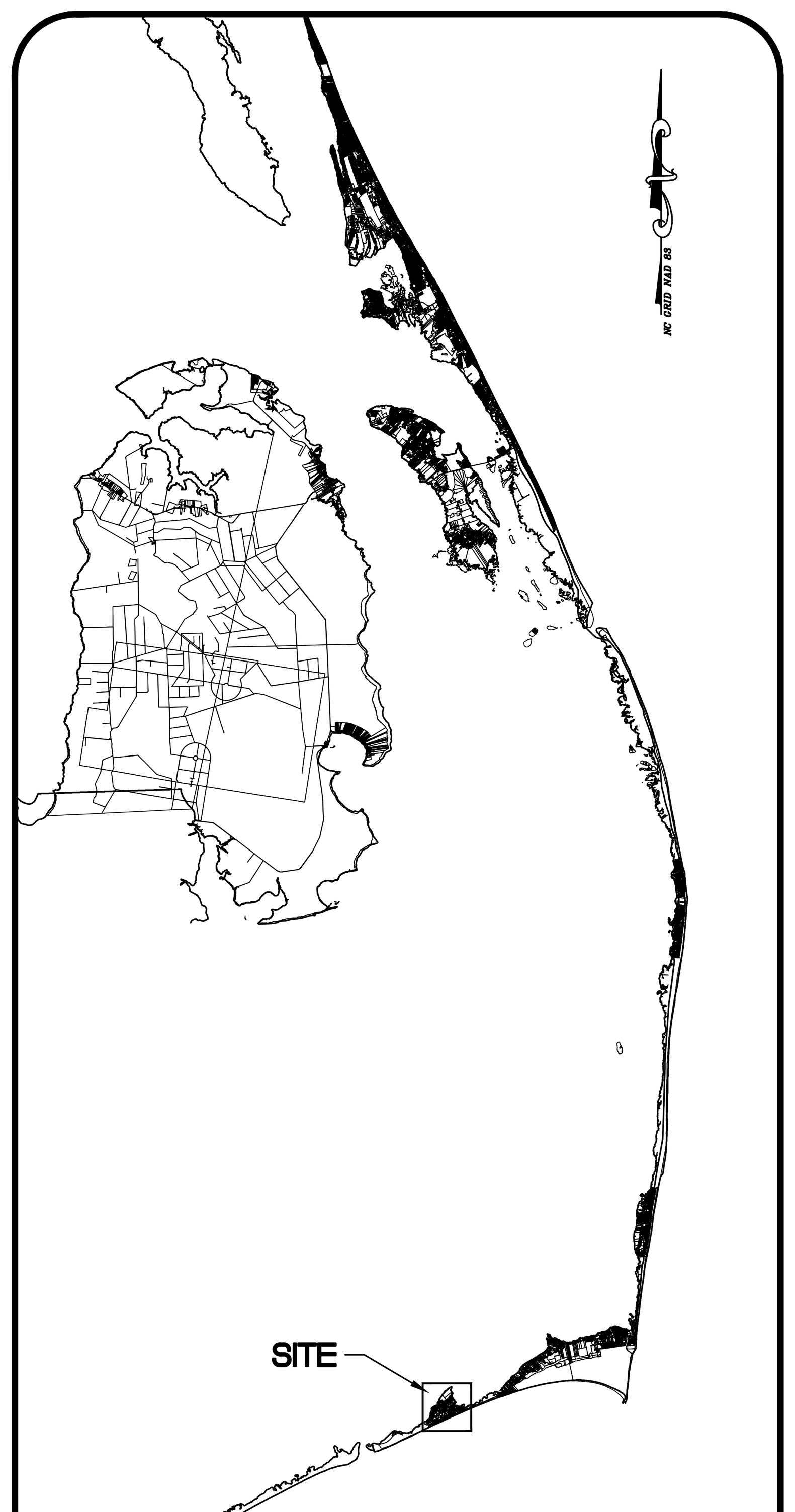
HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

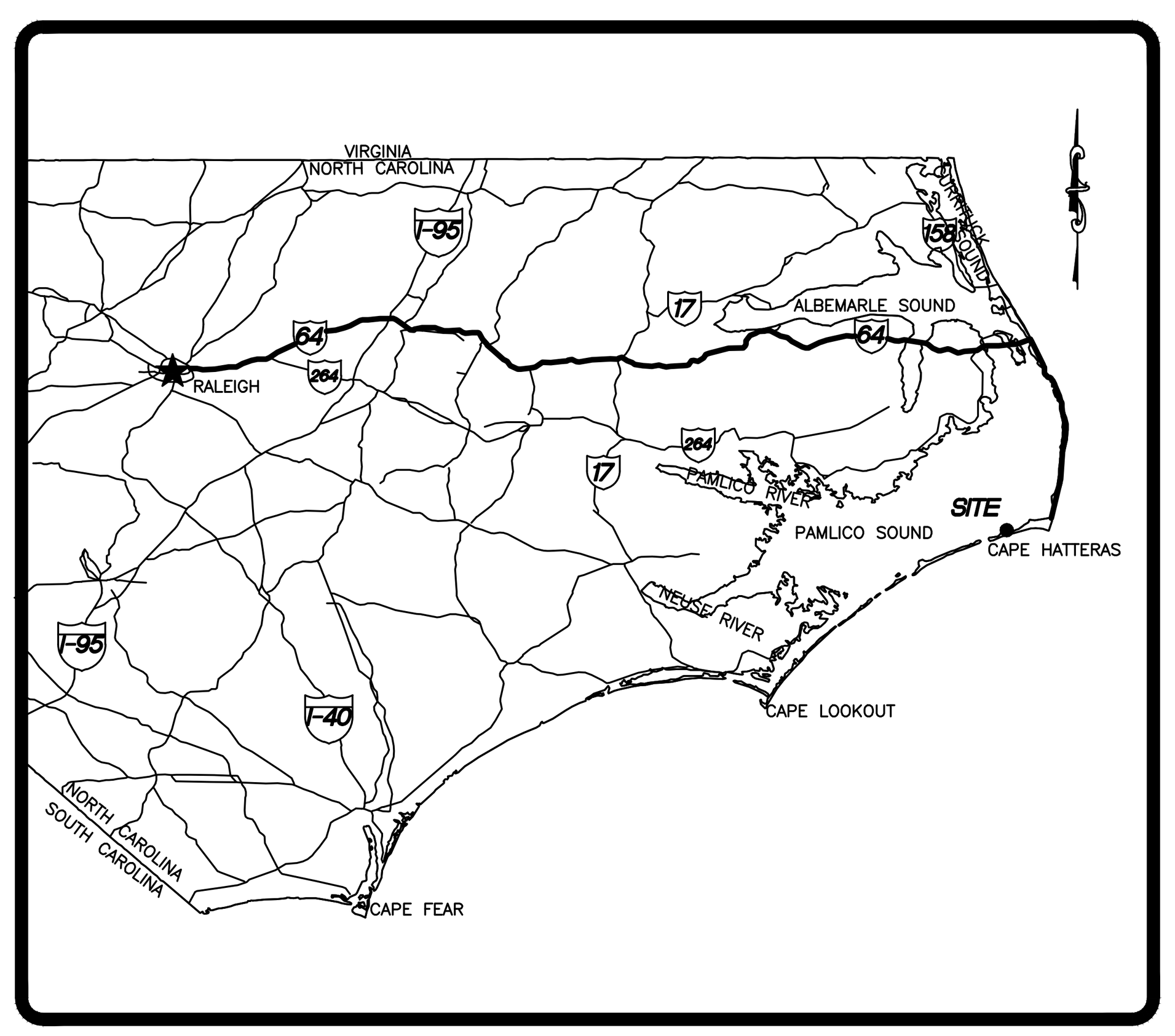
SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD IN HATTERAS VILLAGE HATTERAS ISLAND, NORTH CAROLINA



SITE MAP
SCALE: 1" = 1,000'



LOCATION MAP
SCALE: 1" = 40,000'



REGIONAL VICINITY MAP
N.T.S.

LEGEND

CONCRETE MONUMENT FOUND (CMF)
IRON PIPE FOUND (IPF)
IRON ROD FOUND (IRF)
PK NAIL FOUND (PKF)
R/W MONUMENT FOUND (RW)
RIGHT OF WAY
ADJACENT PROPERTY LINE
SSP SURVEY CONTROL
EXISTING FIRE HYDRANT
EXISTING WATER METER
EXISTING WATER VALVE
EXISTING WATER VALVE WITNESS POST (WSM)
EXISTING POWER POLE
EXISTING GUY WIRE ANCHOR
EXISTING TELEPHONE PEDESTAL
EXISTING CABLE TV PEDESTAL
EXISTING LIGHT POLE
EXISTING SIGNS
RELOCATED SIGNS
EXISTING CONTOURS
PROPOSED CONTOURS
EXISTING SPOT ELEVATIONS
PROPOSED SPOT ELEVATIONS (5.67)
EXISTING TREE / SHRUB
EXISTING TREELINE/VEGETATION
PROPOSED TREELINE
EXISTING CULVERT
PROPOSED CULVERT
EXISTING TOP OF DITCH
EXISTING DITCH/SWALE INVERT
PROPOSED DITCH/SWALE
EXISTING CONCRETE
EXISTING PAVEMENT
EXISTING GRAVEL
EXISTING SOIL DRIVE
PROPOSED 4" CONCRETE SIDEWALK
PROPOSED 6" CONCRETE SIDEWALK AT EXISTING DRIVEWAYS
PROPOSED ELEVATED WALK/BRIDGE
SILT FENCE (SF)
USACOE 404 WETLANDS
NORMAL WATER LEVEL
CAMA SETBACK AND AEC LINES

NORTH CAROLINA PROFESSIONAL SEAL 028572 ENGINEER MICHAEL J. MORWAY

FINAL DRAWING FOR BIDDING PURPOSES ONLY
(RELEASED 01.18.2021)

Albemarle & ASSOCIATES, LTD.
Engineering - Environmental - Land Planning
115 West Saint Clair St.
P.O. Box 3989
Kill Devil Hills, NC 27948
Phone: (252) 441-2113
Fax: (252) 441-0965
www.AlbemarleAssociates.com
Certificate of Licensure No. C-1027

SHEET INDEX

SHEET #	DESCRIPTION
CSC	COVER SHEET
C201	PROJECT NOTES & EROSION CONTROL DETAILS
C202	SIDEWALK SECTIONS & CONSTRUCTION DETAILS
C203	NCDOT STANDARD DETAILS
C302	SIDEWALK PLAN SHEET (STA 40+00 – 58+00)
C303	SIDEWALK PLAN SHEET (STA 58+00 – 84+00)
C304	SIDEWALK PLAN SHEET (STA 84+00 – 114+00) (STA 200+00 – 208+25)
C305	SIDEWALK PLAN SHEET (STA 114+00 – 142+00)
C306	SIDEWALK PLAN SHEET (STA 142+00 – 170+00)
C307	SIDEWALK PLAN SHEET (STA 180+00 – 206+75)
C308	SIDEWALK PLAN SHEET (STA 206+75 – 220+96)
C401	PROJECT CONTROL
C501	PROJECT DETAIL SHEET
C502	PROJECT DETAIL SHEET
C503	PROJECT DETAIL SHEET
C701	BRIDGE PLAN
C702	BRIDGE SECTIONS & CONSTRUCTION DETAILS
C703	BRIDGE PLAN (EAGLE PASS ROAD)

GENERAL

1. PRIOR TO CLEARING, THE CONTRACTOR SHALL FLAG THE SIDEWALK ROUTE AND REVIEW WITH THE ENGINEER TO VERIFY LIMITS OF CLEARING. SIDEWALK ALIGNMENT MAY BE SHIFTED SLIGHTLY TO PRESERVE SPECIMEN TREES OR LANDSCAPE FEATURES. ADJUSTMENT SHALL BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

2. ALL ITEMS SHOWN TO BE REMOVED SHALL BE PAID FOR UNDER "CLEARING & GRUBBING" (LUMP SUM) UNLESS OTHERWISE CALLED FOR WITHIN THE BID FORM.

SURVEY NOTES

1. PROJECT TOPOGRAPHIC SURVEYS, UTILITY LOCATIONS, AND RIGHT-OF-WAY SURVEYS WERE PERFORMED BY SEABOARD SURVEYING & PLANNING, INC. BETWEEN JUNE 2019 AND MARCH 2020.

2. PROJECT BASELINE CONTROL POINTS ARE 5/8" REBAR W/ SSP CAP.

3. THIS IS AN ENGLISH PROJECT. ALL DISTANCES, STATIONS & COORDINATES ARE IN US SURVEY FEET.

4. TOPOGRAPHY, PLANIMETRICS, RIGHT-OF-WAY LOCATIONS, UNDERGROUND UTILITIES, AND GRAVITY UTILITIES WERE COLLECTED AND MAPPED USING A COMBINATION OF IMAGERY, ORTHO PHOTOGRAPHY, GPS, CONVENTIONAL LOCATIONS, AND AUTOCAD.

5. DATUM STATEMENT
   a. THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NGS FOR MONUMENT "XX" WITH NAD 83/2011 STATE PLANE GRID COORDINATES OF NORTHING: X FT EASTING: X FT. THE AVERAGE COMBINED FACTOR USED ON THIS PROJECT GROUND TO GRID IS X.

   b. ALL ELEVATIONS SHOWN HEREON ARE BASED ON THE NAVD 88 DATUM PER NGS MONUMENT "XX" ELEV = XX FEET.

7. THE LOCATIONS SHOWN HEREON FOR THE WESTERN RIGHT-OF-WAY OF NC 12 AND PROPERTY BOUNDARIES WEST OF NC 12 WERE DETERMINED FROM RECORDED DEEDS, PLATS, AND OTHER RECORD DOCUMENTS; AND BY FIELD LOCATION AND VERIFICATION OF EXISTING R/W AND PROPERTY BOUNDARY MONUMENTATION.

EXISTING UTILITIES

1. PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UNDERGROUND UTILITIES LOCATING SERVICE (NC811 / 800-632-4949) AND APPLICABLE NON-MEMBERS TO HAVE UTILITIES LOCATED.

2. EXISTING UTILITIES SHOWN ON THESE DRAWINGS WERE LOCATED FROM FIELD LOCATIONS PROVIDED THROUGH CONTACT WITH NC811. UTILITY INFORMATION IS NOT GUARANTEED TO BE ACCURATE OR COMPLETE.

3. WORK REQUIRES RELOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS. CONTRACTOR SHALL CONTACT THE UTILITY REPRESENATIVE NOTED BELOW AND ENGINEER WITH AT LEAST 3 WEEKS NOTICE. THE CONTRACTOR SHALL COORDINATE WORK WITH THE PROVIDER AS NEEDED.

   WATER
   DARE COUNTY WATER
   SAMMY MIDGETT (252-256-1721)
   STEVE HARRIS (252-256-0926)

   ELECTRIC
   CAPE HATTERAS ELECTRICAL COOPERATIVE
   GEORGE PRICE (252-995-5616)

   TELEPHONE
   CENTURY LINK
   TIMOTHY MIDGETT (252-475-8265)

   CABLE TV
   CHARTER CABLE
   CINDY MUSCIA (252-581-0049)

   TRAFFIC SIGNALS
   NCDOT - DIVISION ONE
   JASON DAVIDSON (252-482-1850)

4. WATER VALVE BOXES TO BE ADJUSTED TO GRADE SHALL BE DONE SO EITHER THROUGH AVAILABLE CAPABILITY OF THE EXISTING BOX (SCREW TYPE) OR THROUGH AN EXTENSION. ALL VALVE BOX ADJUSTMENTS SHALL BE INSPECTED BY DARE COUNTY WATER DEPARTMENT FOR ALIGNMENT PRIOR TO PLACING CONCRETE.

5. WATER METER BOXES WILL BE RELOCATED BY THE COUNTY. THE COUNTY SHALL RELOCATE THE BOX AND ADJUST THE COUNTY (SUPPLY) SIDE OF THE SERVICE, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THIS WORK, NOTIFICATION TO THE OWNER AND FOR RECONNECTION OF THE PROPERTY OWNERS LINE TO THE RELOCATED METER. WORK SHALL BE PERFORMED BY A PLUMBER LICENSED IN THE STATE OF NORTH CAROLINA.

6. VALVE WITNESS POST RELOCATIONS ARE TO BE PERFORMED BY DARE COUNTY WATER DEPARTMENT. SOME OR ALL POSTS MAY BE RELOCATED BY THE COUNTY PRIOR TO CONSTRUCTION.

7. LIGHTS AND OTHER ELECTRICAL FEATURES TO BE REMOVED SHALL BE ACCOMPLISHED AND PROPERLY TERMINATED BY AN ELECTRICIAN LICENSED IN THE STATE OF NORTH CAROLINA.

SIDEWALK NOTES

1. HORIZONTAL WALKWAY ALIGNMENT SHALL BE LESS THAN 5% (LONGITUDINAL SLOPE) AT ALL LOCATIONS EXCEPT AS NOTED ON RAMP PORTIONS OF ELEVATED SECTIONS WHERE HANDRAILS ARE PROVIDED, OR AT CURB RAMPS (6" MAX RISE IN 6')

2. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 848 OF THE NCDOT STANDARD DETAILS AND SPECIFICATIONS.

3. NCDOT DETECTABLE WARNING DOMES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND OTHER COMMERCIAL DRIVEWAY LOCATIONS AS SHOWN ON THE PLANS. DOME SHALL BE PLACED IN ACCORDANCE WITH NCDOT 848. ALL DETECTABLE WARNING DOMES SHALL CONFORM WITH SPECIAL PROVISION SP08-126. DOMES MATERIAL SHALL BE CONCRETE UNITS WITH A TERRA COTTA COLOR.

DRAINAGE NOTES

1. DRAINAGE PIPES SHALL BE HDPE SMOOTH LINED CORRUGATED PLASTIC PIPE EXCEPT WHERE EXTENDING AN EXISTING PIPE. DRAINAGE PIPE EXTENSIONS SHALL BE MADE USING THE SAME TYPE OF PIPE AS THE EXISTING DRAINAGE PIPE. CONNECTIONS SHALL BE MADE USING INDUSTRY RECOMMENDED COUPLINGS.

2. CONTRACTOR SHALL VERIFY EXISTING INVERTS OF CULVERTS TO BE EXTENDED. IF FIELD MEASUREMENTS OF EXISTING INVERTS DO NOT AGREE WITH PLAN INFORMATION, NOTIFY CONSTRUCTION ADMINISTRATOR. INVERTS MAY BE FIELD ADJUSTED TO MATCH EXISTING INVERT.

3. FLARED END SECTION SHALL BE PROVIDED AT ALL OPEN ENDS OF NEW DRAINAGE PIPE 12" OR LARGER. FLARED END SECTIONS MATERIAL SHALL MATCH PIPE.

4. IN LOCATIONS WHERE EXISTING DRAINAGE PIPES ARE BEING EXTENDED, THE CONTRACTOR SHALL GRADE ADJACENT AREAS TO DIRECT DRAINAGE TO THE END OF THE EXTENDED PIPE.

SIGNS

1. SIGNS TO BE RELOCATED SHALL BE PLACED SO THAT THE INSIDE EDGE OF THE SIGN IS NO MORE THAN 6' FROM THE EDGE OF THE TRAVEL LANE OR VEHICULAR SURFACE (NCDOT STD DWG 904) AND 6" FROM THE EDGE OF ANY EXISTING OR NEW SIDEWALK.

2. ALL SIGNS SHALL BE LOCATED SO THAT THEY ARE CLEARLY VISIBLE FROM ANY DIRECTION FROM WHICH THE SIGN IS INTENDED TO BE READ.

3. ALL HIGH VISIBILITY CROSSWALKS SHALL INCLUDE A PEDESTRIAN CROSSWALK WARNING SIGN CONSISTING OF MUTCD W11-2 & W16-7P ON EITHER SIDE OF THE CROSSWALK FACING TRAFFIC.

PAVEMENT MARKINGS

1. ALL HIGH VISIBILITY CROSSWALKS AND STANDARD CROSSWALKS SHALL BE THERMOPLASTIC (120 MIL) IN ACCORDANCE WITH NCDOT SPECIFICATIONS SECTION 1205.

2. PLANT WEEPING LOVEGRASS IN AREAS BETWEEN THE EDGE OF PAEMENT AND THE SIDEWALK ONLY IN AREAS WHERE PROFILE PAVEMENT MARKING LINES ARE SHOWN (3 LB/100 SF).

FINAL DRAWING FOR BIDDING PURPOSES ONLY
(RELEASED 01.18.2021)

EROSION AND SEDIMENTATION CONTROL NOTES

I. NARRATIVE:

"SIDEWALKS THROUGHOUT THE VILLAGE OF HATTERAS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD" INCLUDES THE CONSTRUCTION OF APPROXIMATELY 2.9 MILES OF SIDEWALK ALONG NC-12 AND 0.8 MILES ALONG EAGLE PASS ROAD. CONCRETE SIDEWALKS WILL BE 5' IN WIDTH. AN ELEVATED WOOD PEDESTRIAN BRIDGE 8' IN WIDTH WILL ALSO BE PROVIDED ACROSS A MAN-MADE CANAL. THE SIDEWALK ALIGNMENT HAS BEEN SELECTED TO MINIMIZE CONFLICTS WITH EXISTING UTILITIES AND VEGETATION. CONSTRUCTION IS SCHEDULED TO BEGIN IN 2020.

THE PROJECT IS PRIMARILY LOCATED WITHIN THE NCDOT RIGHT-OF-WAY, WITH THE EXCEPTION OF AN ENCROACHMENT ONTO DARE COUNTY PROPERTY. TOPOGRAPHY IS LEVEL AND THE SOILS ARE SANDY. PORTIONS OF THE PROJECT WILL INCLUDE THE REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT OR STRIPING OF EXISTING PAVEMENT AS DENOTED ON THE PLANS. DISTURBANCE SHALL BE MAINTAINED WITHIN 5' ON EITHER SIDE OF THE SIDEWALK (15' TOTAL) EXCEPT IN ISOLATED AREAS WHERE SWALE RE-GRADING IS REQUIRED (AS SHOWN ON PLANS). APPROXIMATELY 5.54 ACRES ARE TO BE DISTURBED. DISTURBED AREAS ARE TO BE STABILIZED WITH TEMPORARY/PERMANENT VEGETATION ACCORDING TO THE SEQUENCE OF CONSTRUCTION.

II. SOILS:

UPLAND SOIL TYPES AS MAPPED IN THE SOIL SURVEY OF DARE COUNTY:

CARTERET SAND (CeA)
COROLLA FINE SAND (CoB)
DUCKSTON FINE SAND (DtA)
NEWHAN COROLLA COMPLEX (NhC)

III. CONSTRUCTION SEQUENCE:

- OBTAIN PLAN APPROVAL
- IDENTIFY CAMA AND USACOE JURISDICTIONAL AREAS
- HOLD PRE-CONSTRUCTION MEETING

SIDEWALK CONSTRUCTION

- FLAG OR STAKE WORK ALIGNMENT FOR SECTION TO BE CONSTRUCTED (1,500 FT MAXIMUM SEGMENT)
- INSTALL SILT FENCING ALONG UPLAND SIDE OF JURISDICTIONAL AREAS AS SHOWN ON PLANS
- INSTALL COIR LOGS WERE SHOWN ON PLANS
- SELECTIVELY REMOVE TREES AND SHRUBS TO CONSTRUCT SIDEWALKS AND ELEVATED WOOD BRIDGES
- STRIP VEGETATION AND TOPSOIL ALONG PORTION OF SIDEWALK UNDER CONSTRUCTION
- INSTALL CULVERTS, PLACE FILL MATERIAL CONSTRUCT SIDEWALK OR WALKWAY
- STABILIZE WITH TEMPORARY PERMANENT VEGETATION
- STABILIZATION SHALL OCCUR ONCE SECTIONS NO LONGER THAN 1,500 HAVE BEEN COMPLETED
- CONTINUE TO SEED, FERTILIZE AND WATER DISTURBED AREA TO STABILIZE

IV. SEDIMENTATION EROSION CONTROL NOTES:

1. PRIOR TO ANY LAND DISTURBING ACTIVITIES AND AFTER DELINEATION OF THE SIDEWALK LOCATION AND JURISDICTIONAL AREAS, THE CONTRACTOR SHALL SCHEDULE A PRE-CLEARING MEETING ON THE SITE WITH THE CONSTRUCTION MANAGER.

2. PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL HAVE THE APPROPRIATE UNDERGROUND UTILITIES LOCATED.

3. PRIOR TO COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES, EROSION AND SEDIMENTATION CONTROL MEASURES IDENTIFIED ON THE EROSION AND SEDIMENT CONTROL AND THIS PLAN SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS SPECIFICATIONS.

4. THE CONTRACTOR SHALL ENSURE THAT AREAS OUTSIDE OF THE LIMITS OF LAND DISTURBANCE AS WELL AS EXISTING IMPROVEMENTS SPECIFICALLY NOTED FOR PROTECTION ARE NOT ADVERSELY IMPACTED BY ANY CLEARING ACTIVITIES.

5. THE LIMITS OF LAND DISTURBANCE SHALL BE MAINTAINED AS NOTED UNLESS OTHERWISE APPROVED. THE CONTRACTOR SHALL ENSURE THAT AREAS OUTSIDE OF THE LIMITS OF LAND DISTURBING AS WELL AS TREES SPECIFICALLY NOTED FOR PROTECTION ARE NOT ADVERSELY IMPACTED BY ANY CONSTRUCTION ACTIVITIES. ANY SPECIMEN TREES DAMAGED SHALL BE REPLACED IN KIND.

6. EXPOSED SIDE SLOPES SHALL BE PLANTED OR PROVIDED WITH TEMPORARY GROUND COVER SUFFICIENT TO CONTROL EROSION WITHIN 14 CALENDER DAYS (7 FOR SLOPES STEEPER THAN 3H : 1V) OF THE COMPLETION OF ANY PHASE OF GRADING.

7. IF EXCESSIVE WIND EROSION OR STORM WATER RUNOFF DEVELOPS DURING TIME OF CONSTRUCTION IN ANY LOCATION ON THE PROJECT SITE, ADDITIONAL SAND OR SILT FENCING SHALL BE INSTALLED AS DIRECTED BY ENGINEER, SEE SAND OR SILT FENCE DETAIL.

8. SOIL EROSION AND SEDIMENTATION CONTROLS TO BE INSPECTED, MAINTAINED AND REPAIRED AS NECESSARY.

9. NO BURNING IS PERMITTED ON SITE.

10. NO BORROW PERMITTED FROM THE SITE.

11. ANY OFF-SITE MATERIAL USED FOR GRADING FILL SHALL BE OBTAINED FROM A PERMITTED BORROW PIT.

12. EXISTING TOPOGRAPHIC INFORMATION BASED ON THE SURVEY INFORMATION OBTAINED BY McKIM AND CREED DURING APRIL AND AUGUST OF 2012.

V. SEEDING SCHEDULE

APRIL 1 - MAY 15: PERMANENT SEEDING

SPECIES	RATE
CENTIPEDE GRASS	3 LB/1000 SF
COMMON BERMUDAGRASS	1 LB/1000 SF
WINTER RYE GRAIN	3 LB/1000 SF

NOTE: DELETE RYE GRAIN IF OVERSEEDING ESTABLISHED RYE OR FESCUE.
DELETE FESCUE IF OVERSEEDING ESTABLISHED FESCUE.

MAY 15 - JULY 16: PERMANENT SEEDING

SPECIES	RATE
CENTIPEDE GRASS	3 LB/1000 SF
COMMON BERMUDAGRASS	1 LB/1000 SF
GERMAN MILLET	3 LB/1000 SF

NOTE: DELETE MILLET IF OVERSEEDING ESTABLISHED MILLET OR FESCUE.
DELETE FESCUE IF OVERSEEDING ESTABLISHED FESCUE.

AUGUST 15 - APRIL 1: TEMPORARY SEEDING

SPECIES	RATE
CENTIPEDE GRASS	3 LB/1000 SF
WINTER RYE GRAIN	5 LB/1000 SF

SOIL AMENDMENTS

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 500 LB PER ACRE OF 10-10-10 FERTILIZER.

MULCH

USE JUTE, EXCELSIOR MATTING OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER BOTTOM AND SIDES OF SWALES. ANCHOR MATTING PER MANUFACTURERS RECOMMENDATIONS. HYDROSEEDING IS ALSO AN ACCEPTABLE METHOD OF TEMPORARY STABILIZATION.

MAINTENANCE

A MINIMUM OF 3 WEEKS IS REQUIRED TO FOR ESTABLISHMENT. INSPECT AND REPAIR MULCH FREQUENTLY. FERTILIZE THE FOLLOWING SPRING WITH 50 LB/ ACRE NITROGEN.

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

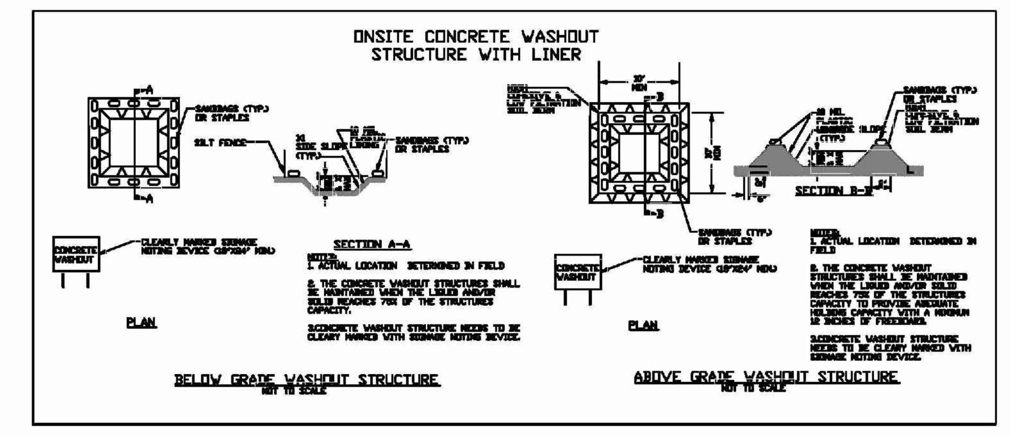
PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

NORTH CAROLINA Environmental Quality



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING | EFFECTIVE: 04/01/19

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible.*** The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6)]. • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NORTH CAROLINA Environmental Quality

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING | EFFECTIVE: 04/01/19

Albemarle & ASSOCIATES, LTD.
Engineering - Environmental - Land Planning

Albemarle & Associates, Ltd.
115 West St. Clair Street
P.O. Box 3989
Kill Devil Hills, NC 27948
Phone: (252) 441-2113
Fax: (252) 441-0965
www.AlbemarleAssociates.com
Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 MICHAEL J. MORWAY 12/2020

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	03.23.2020	UPDATED DETAILS TO INCLUDE NCG01 SHEETS	KCA
3	11.12.2020	NCDOT SUBMITTAL	KCA

PROJECT NOTES & EROSION CONTROL DETAILS

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT
SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

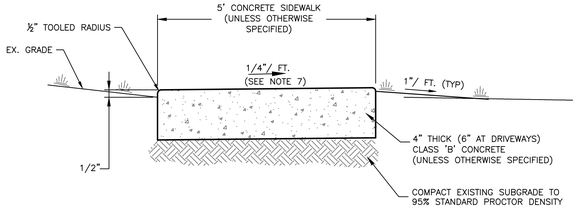
HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

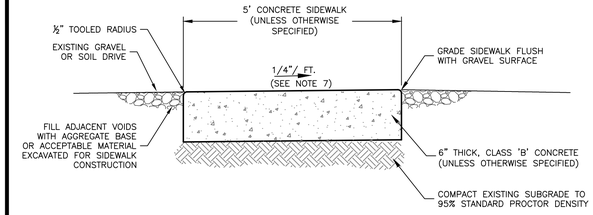
SCALE: NTS

C201

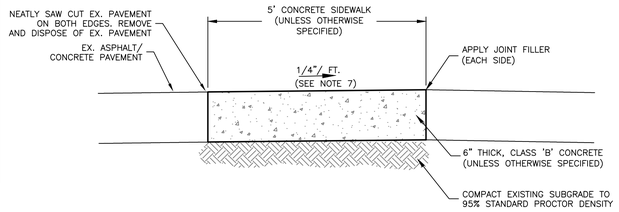
PROJ. NO. 08343B



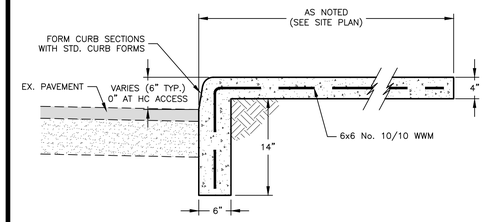
CONCRETE SIDEWALK DETAIL
NTS



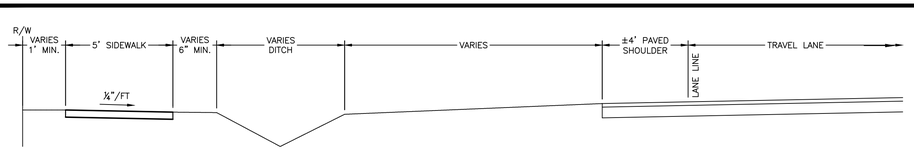
CONCRETE DRIVEWAY CROSSING
(AT EXISTING GRAVEL/SOIL DRIVEWAY DETAIL)
NTS



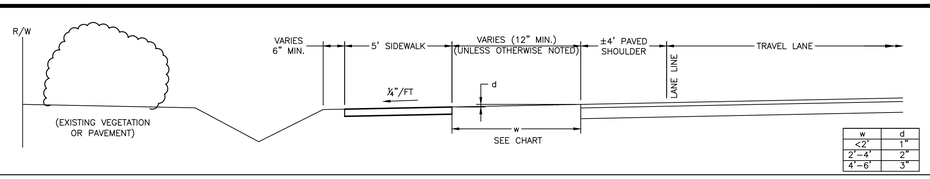
CONCRETE DRIVEWAY CROSSING
(AT EXISTING ASPHALT/CONCRETE PAVEMENT DETAIL)
NTS



TURN DOWN SIDEWALK
NTS

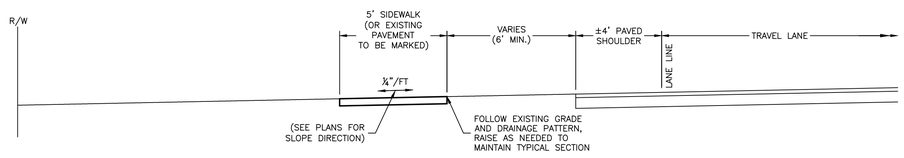


TYPICAL SECTION 1 - (SIDEWALK OUTSIDE OF DITCH)
NTS

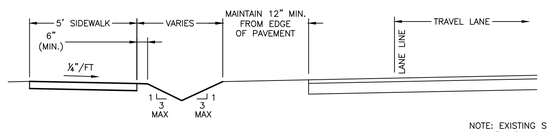


w	d
<2'	1"
2'-4'	2"
4'-6'	3"

TYPICAL SECTION 2 - (SIDEWALK INSIDE OF DITCH)
NTS

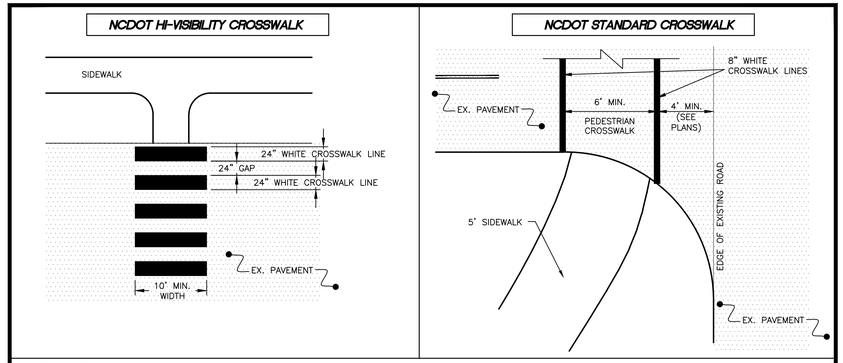


TYPICAL SECTION 3 - (SIDEWALK WITH NO DRAINAGE)
NTS



NOTE: EXISTING SWALE SLOPES EXCEEDING 3:1 SHALL NOT BE DISTURBED.

TYPICAL SWALE (REGRADED)
NTS



GENERAL NOTES:

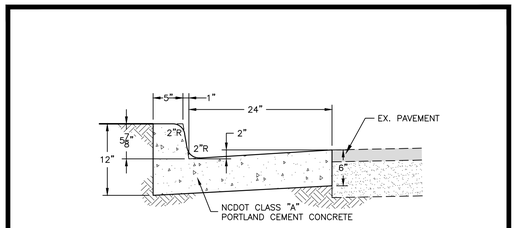
1. THE MINIMUM WIDTH OF STANDARD CROSSWALKS IS 6'. THE WIDTH OF HI-VISIBILITY CROSSWALKS IS 10 FEET.
2. CROSSWALKS SHOULD BE CENTERED TO THEIR CORRESPONDING WHEELCHAIR RAMPS, BUT THEY SHALL NOT BE SET WITHIN THE INTERSECTION AREA ESTABLISHED BY BISECTING THE INTERSECTION RADII.
3. PLACEMENT OF CROSSWALKS SHALL IN ALL CASES BE COORDINATED WITH THE LOCATION OF SIDEWALK.

NCDOTPAVEMENT MARKINGS PEDESTRIAN CROSSWALKS
NTS

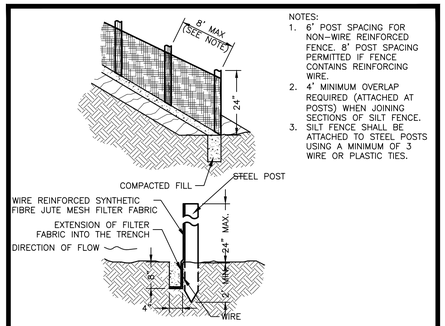
FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)

CONCRETE SIDEWALK NOTES:

1. ALL CONCRETE SHALL BE CLASS 'B', 4" THICK, UNLESS NOTED OTHERWISE. DRIVE APRONS AND SIDEWALK AT DRIVEWAYS SHALL BE 6" THICK CONCRETE SHALL BE PREPARED IN ACCORDANCE WITH ACI 211.1, ACI 301 AND ASTM C94.
2. CONTROL JOINTS SHALL BE PLACED PERPENDICULAR TO THE EDGE OF PAVEMENT AT 5' SPACING. CONTROL JOINTS SHALL BE SAWED.
3. EXPANSION JOINTS SHALL BE PLACED AT THE END OF EACH SECTION OF CONSTRUCTION INCLUDING THE LOCATIONS THAT PAVEMENT ABUTS EXISTING PAVEMENT AND AT 30' INTERVALS. EXPANSION JOINT MATERIAL SHALL BE ½" THICK AND CONFORM TO ASTM D 1751.
4. LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
5. A BROOMED SURFACE FINISH SHALL BE PROVIDED UNLESS OTHERWISE APPROVED BY THE OWNER.
6. TESTING SHALL BE PROVIDED BY THE CONTRACTOR.
7. REFER TO TYPICAL SECTION DETAILS AND PLANS FOR SLOPE DIRECTION.



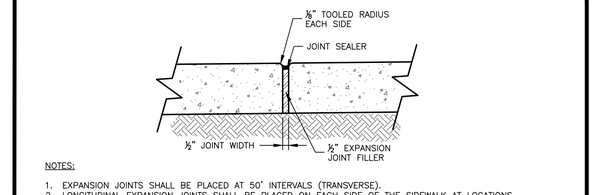
30" CURB AND GUTTER
NTS



NOTES:

1. 6' POST SPACING FOR NON-WIRE REINFORCED FENCE. 8' POST SPACING PERMITTED IF FENCE CONTAINS REINFORCING WIRE.
2. 4" MINIMUM OVERLAP REQUIRED (ATTACHED AT POSTS) WHEN JOINING SECTIONS OF SILT FENCE.
3. SILT FENCE SHALL BE ATTACHED TO STEEL POSTS USING A MINIMUM OF 3 WIRE OR PLASTIC TIES.

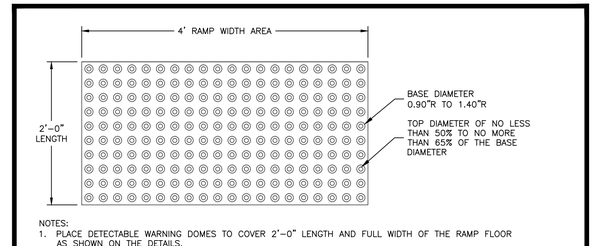
SILT FENCE DETAIL
(SEE PLAN SHEETS FOR LOCATION)
NTS



NOTES:

1. EXPANSION JOINTS SHALL BE PLACED AT 50' INTERVALS (TRANSVERSE).
2. LONGITUDINAL EXPANSION JOINTS SHALL BE PLACED ON EACH SIDE OF THE SIDEWALK AT LOCATIONS WHERE THE SIDEWALK ABUTS RIGID PAVEMENT AND/OR OTHER STRUCTURES.
3. EXPANSION JOINT MATERIAL SHALL BE ½" THICK AND CONFORM TO ASTM D 1751.

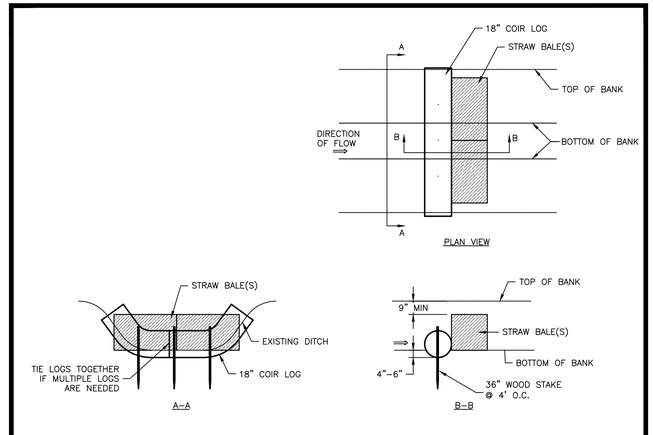
EXPANSION JOINT DETAIL
NTS



NOTES:

1. PLACE DETECTABLE WARNING DOMES TO COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
2. OBTAIN VISIBLE CONTRAST WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

DETECTABLE DOMES
NTS



TYPICAL COIR LOG CHECK DAM DETAIL
NTS

Albemarle & ASSOCIATES, LTD.
Engineering - Environmental - Land Planning

Albemarle & Associates, Ltd.
115 West St. Clair Street
P.O. Box 2889
Edenton, NC 27948
Phone: (252) 441-2113
Fax: (252) 441-0965
www.albemarleassociates.com
Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 02572 CHARLES MORRIS 12-17-2020

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	01.13.2020	DIMENSIONAL REMARKING	KCA
2	12.17.2020	ADDED TO INCLUDE NCDOT SHEETS	KCA

SIDEWALK SECTIONS & CONSTRUCTION DETAILS

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: NTS

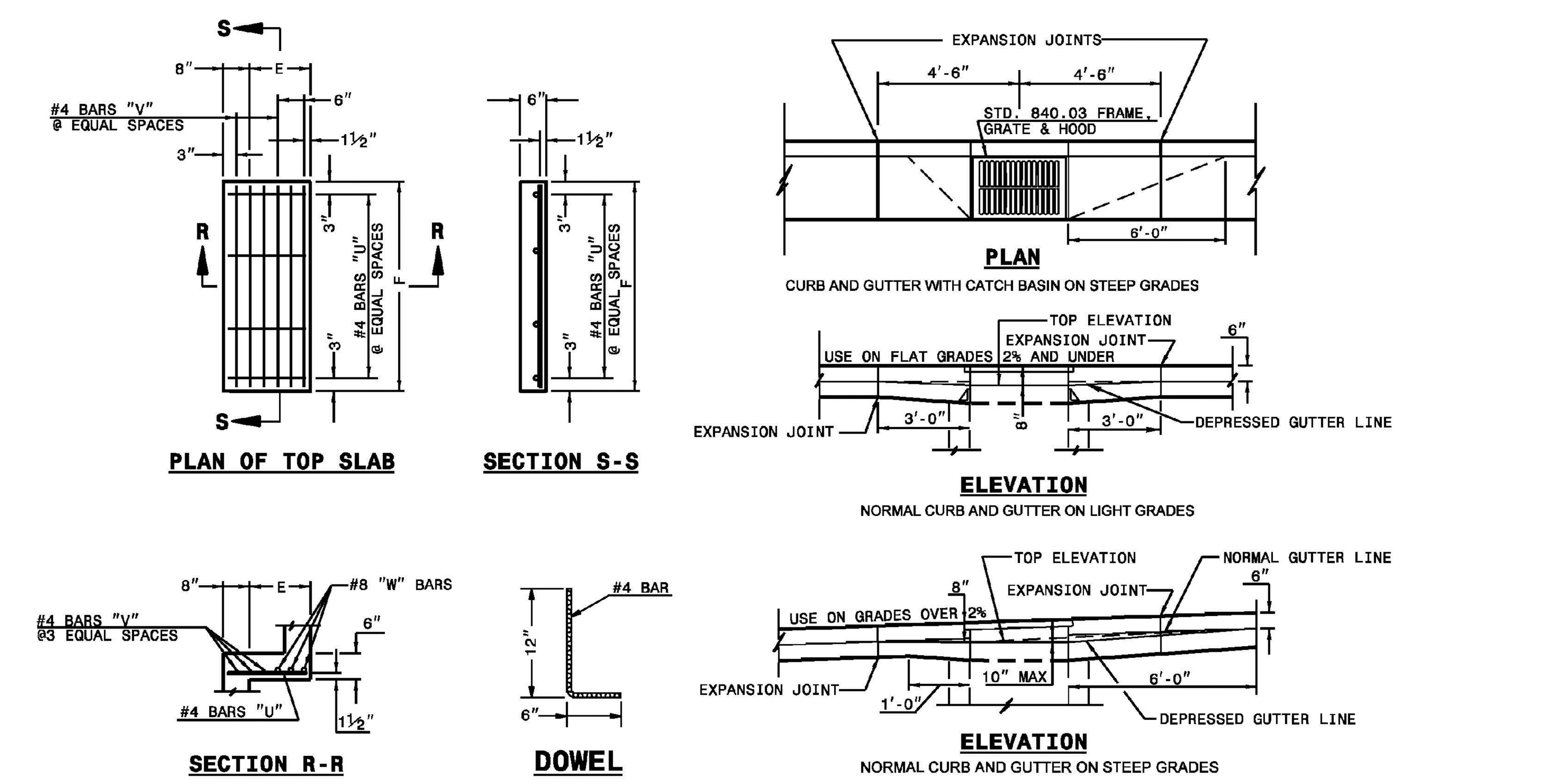
C202

PROJ. NO. 08343B

FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-12

ENGLISH STANDARD DRAWING FOR
BRICK CATCH BASIN
12" THRU 54" PIPE



MINIMUM DIMENSIONS AND QUANTITIES FOR BRICK CATCH BASIN (BASED ON MIN. HEIGHT, H, WITH NO RISER)*																					
DIMENSIONS OF BOX AND PIPE						TOP SLAB DIMENSIONS		BARS-U		BARS-V		BARS-W		TOTAL LBS.	CU.YDS. CONC. IN BOX			BRICK MASONRY		DEDUCTIONS ONE PIPE	
PIPE D	SPAN A	WIDTH B	WIDTH C	SPAN G	MIN. HEIGHT H	E	F	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		TOP SLAB	BOTTOM SLAB	TOTAL CONC.	BRICK MSNR. IN WALLS	TOTAL BRICK AND CONCRETE	C.M.	R.C.
12"	3'-0"	2'-2"	--	--	2'-9"	--	--	--	--	--	--	--	--	--	--	0.281	0.281	0.883	1.164	0.020	0.042
15"	3'-0"	2'-2"			3'-0"											0.281	0.281	0.963	1.244	0.031	0.047
18"	3'-0"	2'-2"			3'-3"											0.281	0.281	1.043	1.324	0.044	0.065
24"	3'-0"	2'-2"			3'-9"											0.281	0.281	1.204	1.485	0.078	0.121
30"	3'-0"	2'-2"	3'-4"		4'-3"	1'-2"	4'-4"	4	1'-6"	3	4'-1"	3	4'-1"	45	0.147	0.374	0.521	1.606	2.217	0.122	0.184
36"	3'-0"	2'-2"	3'-10"		4'-9"	1'-8"	4'-4"	4	2'-0"	4	4'-1"	3	4'-1"	49	0.187	0.415	0.602	1.914	2.516	0.176	0.261
42"	3'-0"	2'-2"		4'-5"	5'-3"	1'-5"	3'-6"	4	1'-9"	3	3'-3"	3	3'-3"	38	0.135	0.373	0.508	2.152	2.660	0.240	0.371
48"	3'-0"	2'-2"		5'-0"	5'-9"	2'-0"	3'-6"	4	2'-6"	4	3'-3"	3	3'-3"	41	0.173	0.410	0.583	2.415	2.998	0.313	0.477
54"	3'-0"	2'-2"		5'-7"	6'-3"	2'-7"	3'-6"	4	3'-0"	6	3'-3"	3	3'-3"	47	0.211	0.448	0.659	2.806	3.465	0.396	0.595

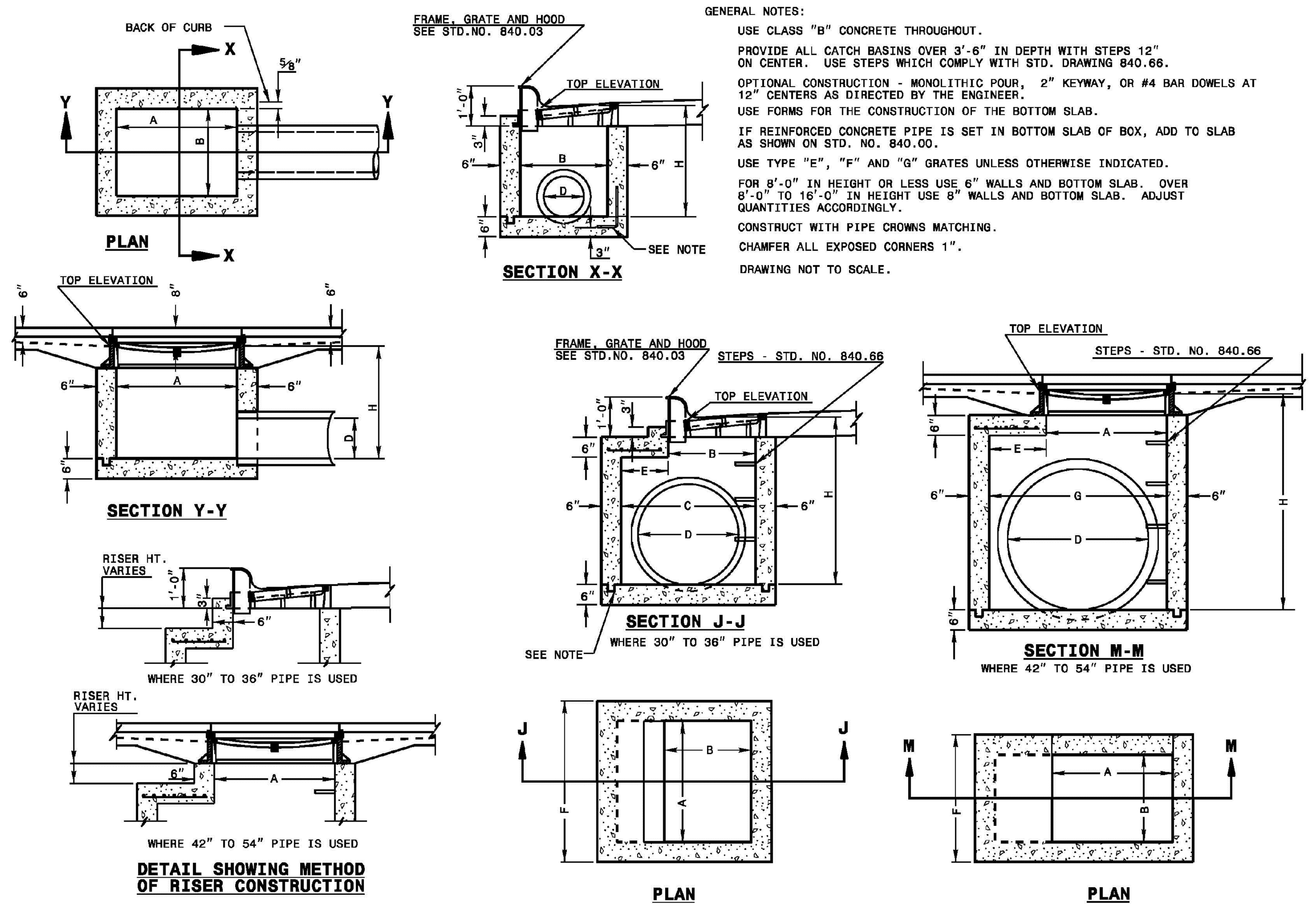
* RISER HAS .321 CUBIC YARDS OF BRICK MASONRY PER FOOT HEIGHT

SHEET 2 OF 2
840.01

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-12

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
CONSTRUCT WITH PIPE CROWNS MATCHING.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

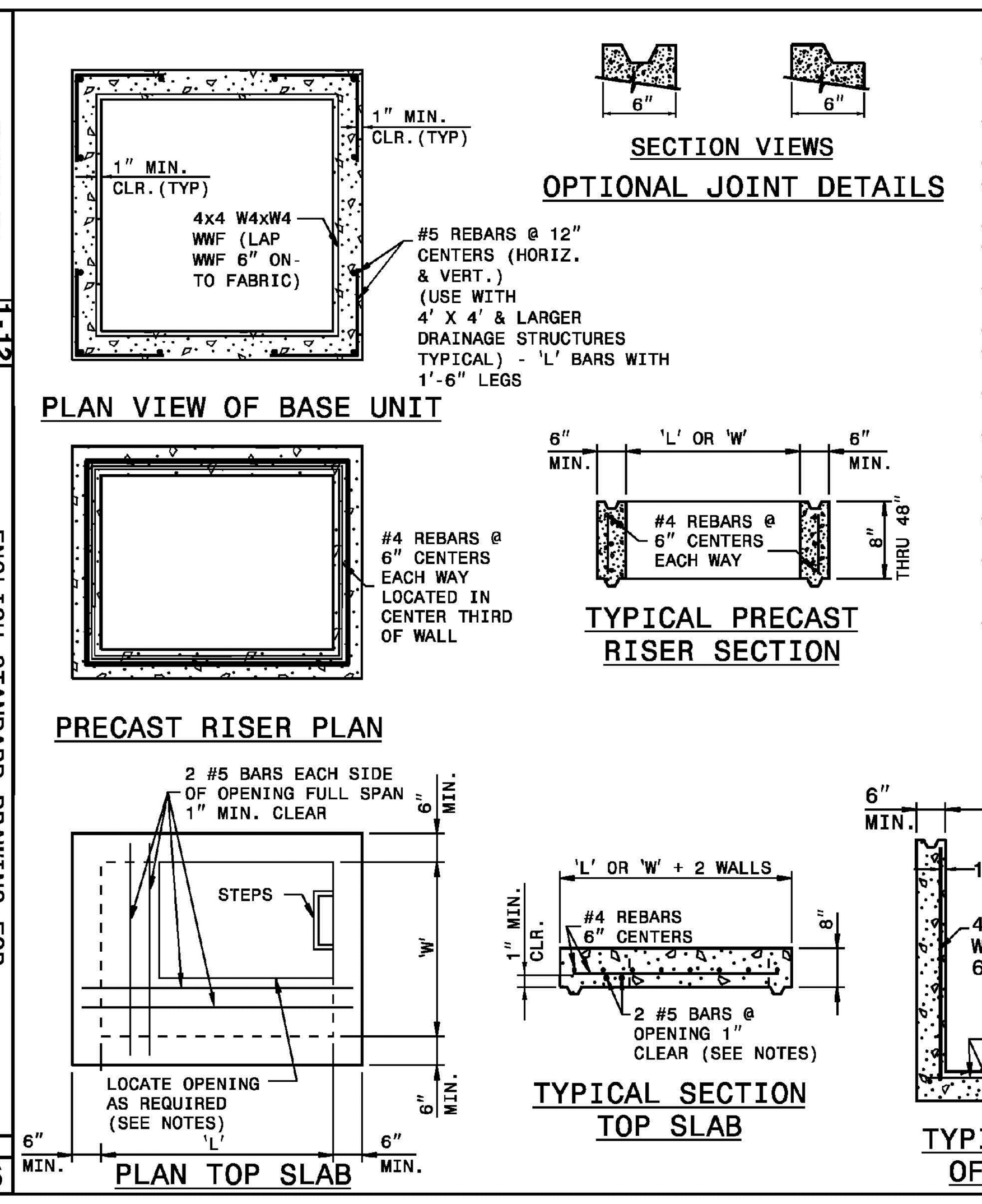


SHEET 1 OF 2
840.02

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-12

ENGLISH STANDARD DRAWING FOR
TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE

GENERAL NOTES:
* THIS PRECAST BOX MAY BE USED FOR THE FOLLOWING STANDARDS: 840.04, 840.05, 840.14, 840.15, 840.31, 840.32, 840.34, 840.35, 840.36 AND 840.41.
* INSTALL AND PAY FOR PRECAST DRAINAGE STRUCTURES IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATION SECTION 840.
* USE 4000 PSI MINIMUM COMPRESSIVE STRENGTH CONCRETE.
* USE ASTM A615 GRADE 60 REINFORCING STEEL. USE ASTM A185 WELDED WIRE FABRIC (WWF).
* LIMIT MAXIMUM DEPTH TO TOP OF BOTTOM SLAB TO 15'-0".
* PLACE LIFT HOLES OR PINS IN ACCORDANCE WITH OSHA STANDARD 1926.704.
* ORIENT STRUCTURES SO THAT CORNERS WILL NOT BE CUT OR MODIFIED UNLESS ALLOWED BY DETAIL IN PLANS.
* PRECAST ALL ELEMENTS TO MEET ASTM C913.
* FRAME AND GRATE HEIGHT MAY BE ADJUSTED WITH CONCRETE OR BRICK IN ACCORDANCE WITH STANDARD 840.25.
* PROVIDE PRECAST STRUCTURES OVER 4'-0" IN DEPTH WITH STEPS 12" ON CENTERS IN ACCORDANCE WITH STD. NO. 840.66.
* WELDED WIRE FABRIC MAY BE SUBSTITUTED FOR REBAR IF THE SAME MIN. AREA OF STEEL IS PROVIDED.
* SEAL JOINTS WITH AN APPROVED SEALANT (SEE SECTION 840 OF NCDOT STANDARD SPECIFICATIONS.
* LIMIT MAXIMUM STRUCTURE SIZE INSIDE CLEAR DIMENSIONS TO 6'-0" X 6'-0".
* THE OUTSIDE PIPE DIAMETER PLUS 2" IS THE MINIMUM STRUCTURE SIZE OR THE OPENING REQUIRED FOR GRATE AND FRAME WHICHEVER IS GREATER.
* ROUND MANHOLE MAY BE USED IN LIEU OF SQUARE PROVIDED 2 EXTRA #5'S ARE PLACED ON EVERY SIDE NOT ADJACENT TO A WALL. SEE STD. DWG. 840.34 FOR MANHOLE INSTALLATION.

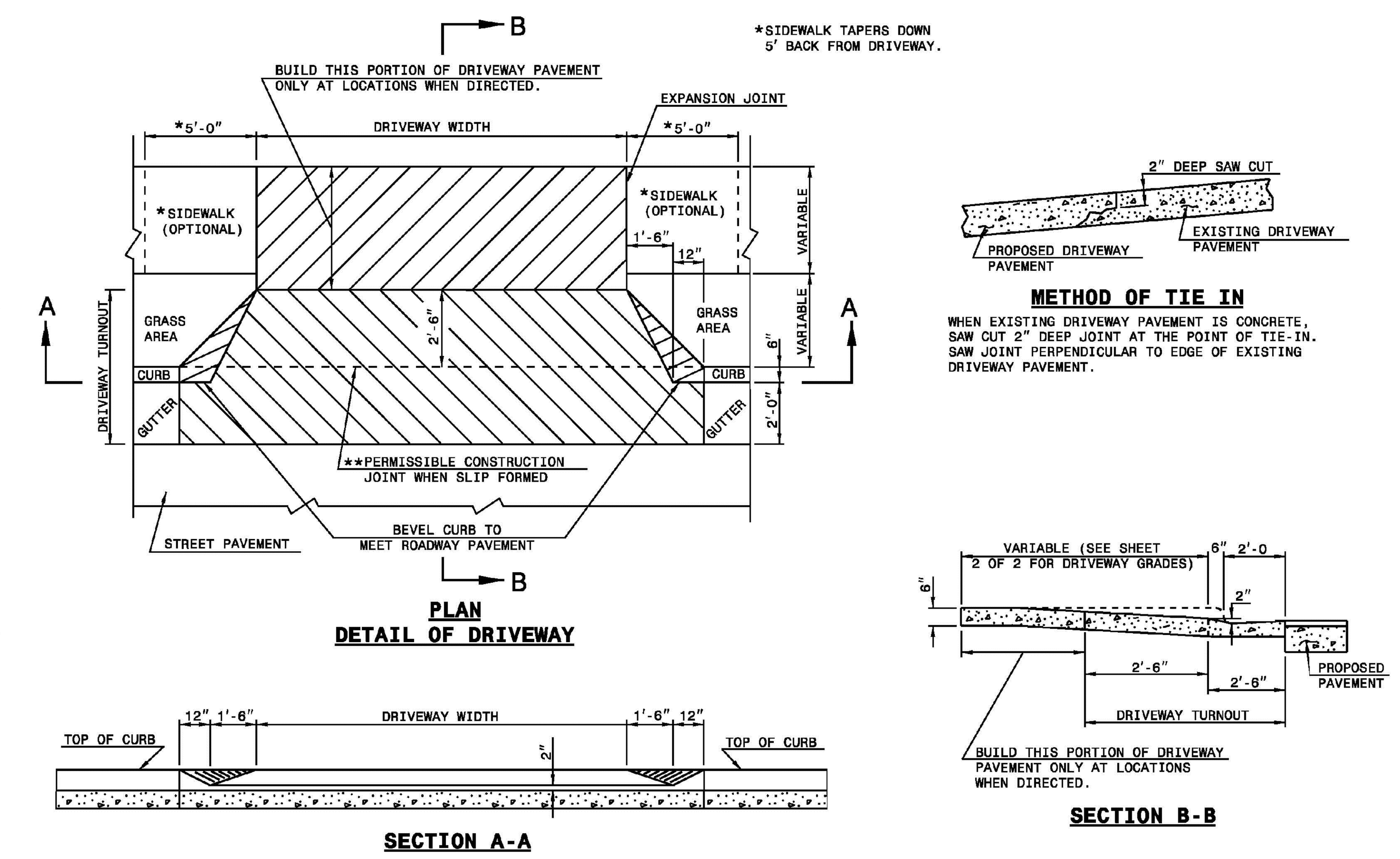


SHEET 1 OF 1
840.46

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-12

ENGLISH STANDARD DRAWING FOR
DRIVEWAY TURNOUT
DROP CURB TYPE

*SIDEWALK TAPERS DOWN 5' BACK FROM DRIVEWAY.



WHEN EXISTING DRIVEWAY PAVEMENT IS CONCRETE, SAW CUT 2" DEEP JOINT AT THE POINT OF TIE-IN. SAW JOINT PERPENDICULAR TO EDGE OF EXISTING DRIVEWAY PAVEMENT.

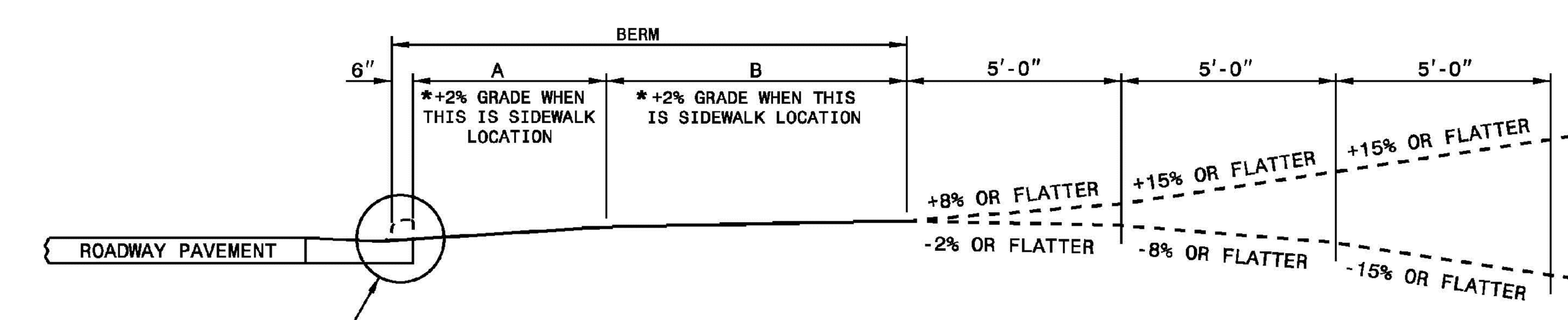
GENERAL NOTES:
**NO CONSTRUCTION JOINT WILL BE PERMITTED IF FORMS ARE USED TO CAST DRIVEWAY. SLIP FORMING OF CURB AND GUTTER PERMITS THE USE OF CONSTRUCTION JOINT.

SHEET 1 OF 2
848.03

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-12

ENGLISH STANDARD DRAWING FOR
DRIVEWAY TURNOUT
DRIVEWAY GRADES

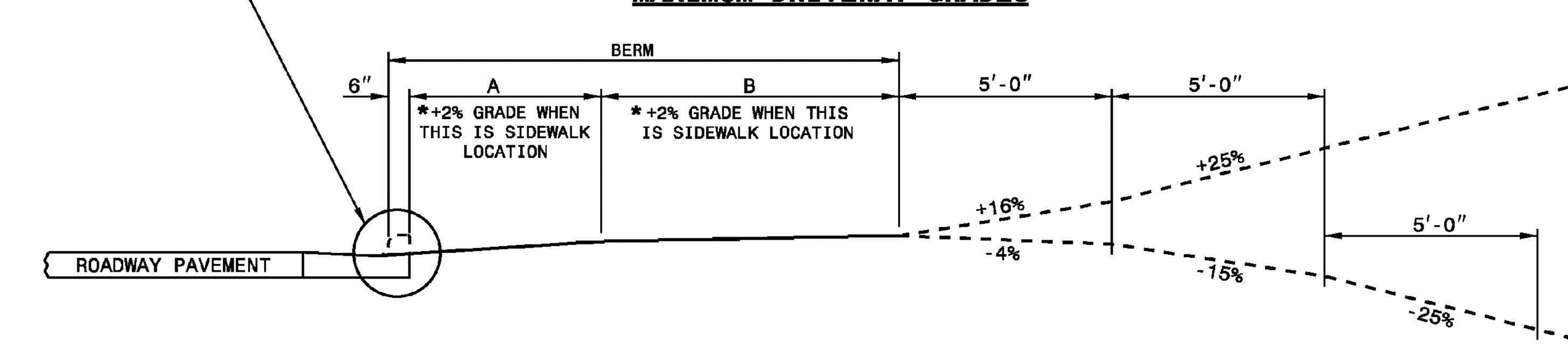
DESIRABLE DRIVEWAY GRADES



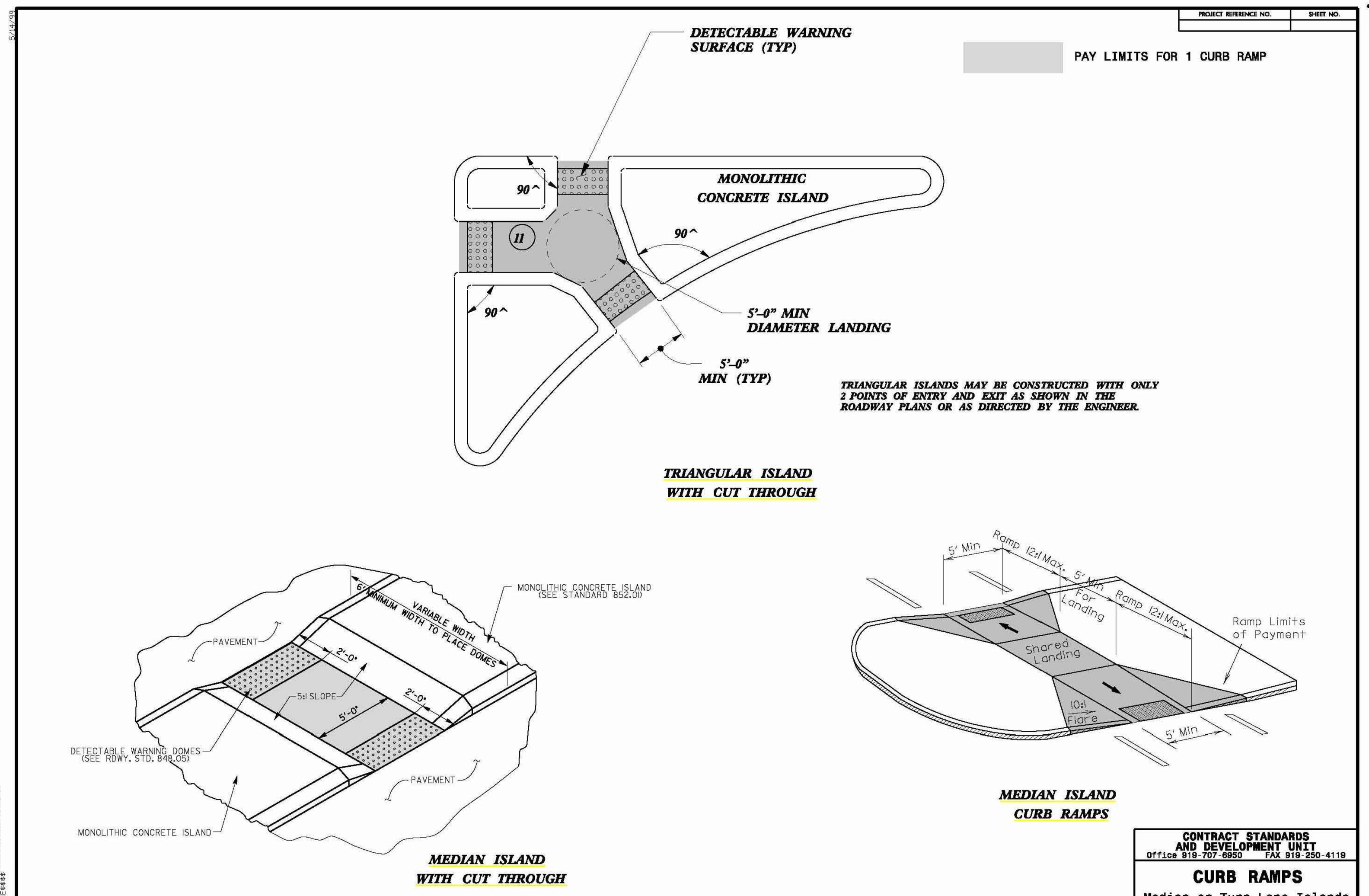
*SIDEWALK LOCATION
(DO NOT PLACE SIDEWALK ON BERMS LESS THAN 6' WIDE.)

DESIRABLE OR MAXIMUM DRIVEWAY GRADES				
BERM WIDTH	A		B	
	DIST.	GRADE	DIST.	GRADE
8' OR LESS	5'-0"	+2%*	2'-6"	+5%
8' OR LESS	2'-0"	+6%	5'-6"	+2%*
10'	4'-0"	+4%	5'-6"	+2%*
12' & OVER	4'-6"	+4%	7'-0"	+2%*

MAXIMUM DRIVEWAY GRADES



SHEET 2 OF 2
848.03



CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119
CURB RAMPS
Median or Turn Lane Islands
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11

Albemarle & Associates, Ltd.
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P.O. Box 3989
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Phone: (252) 441-2113
Fax: (252) 441-0965
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Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 MICHAEL J. MORWAY
11/12/2020

REVISIONS

NO.	DATE	DESCRIPTION	BY

NCDOT STANDARD DETAILS

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT
SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD
HATTERAS ISLAND — HATTERAS TOWNSHIP — DARE COUNTY — NORTH CAROLINA

DATE:	11.12.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: NTS

C203

PROJ. NO. 08343B

K:\Active Projects\08343 - Hatteras Village Sidewalks\08343B - Sidewalk Design\Cadd Files\08343B - Details.dwg, 1/18/2021 2:51:38 PM

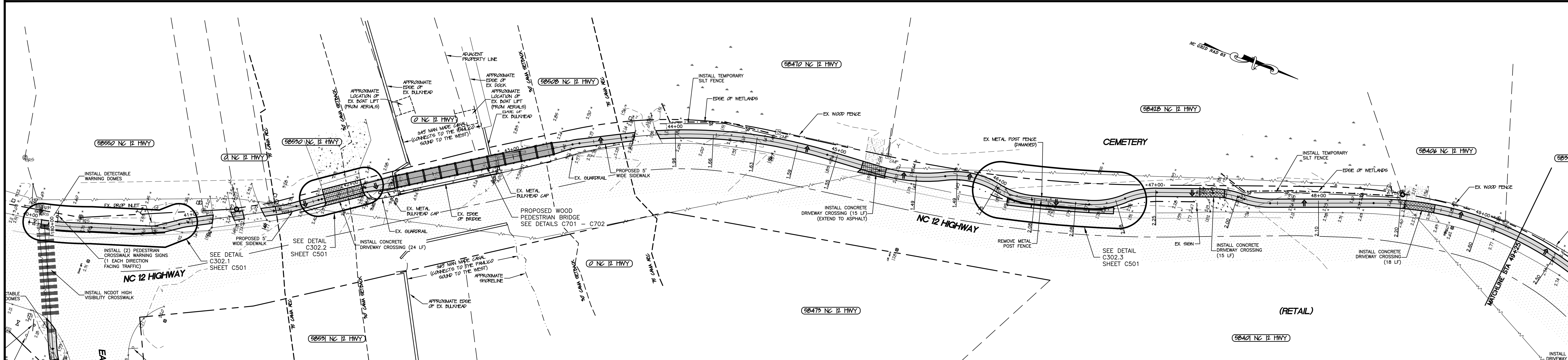
LEGEND

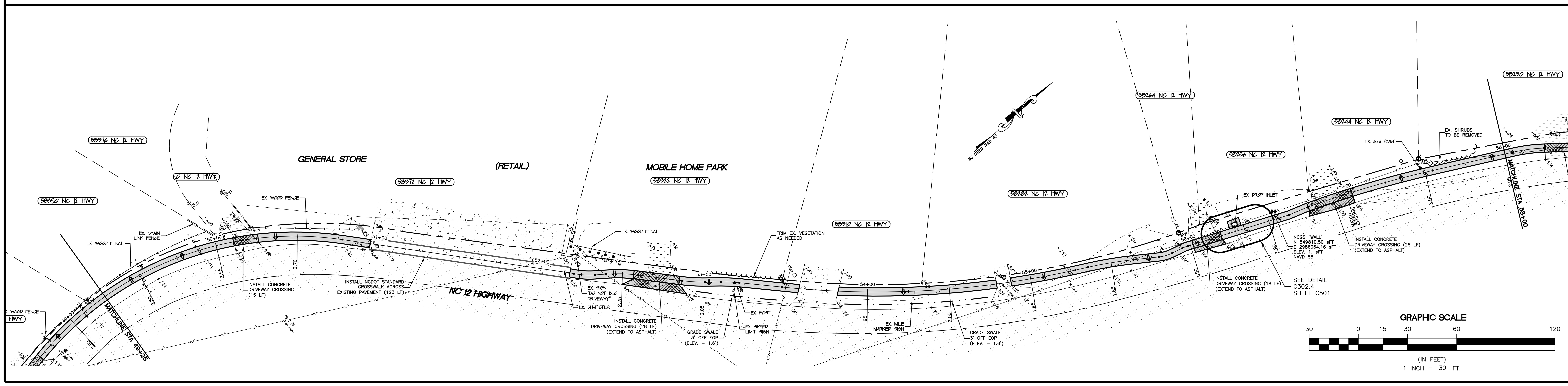
(SEE COVER SHEET FOR ADDITIONAL LEGEND ITEMS)

- RIGHT OF WAY
- ADJACENT PROPERTY LINE
- SSP SURVEY CONTROL
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER VALVE WITNESS POST (WSM)
- EXISTING POWER POLE
- EXISTING TREE / SHRUB
- EXISTING TREELINE/VEGETATION
- PROPOSED TREELINE
- EXISTING CONCRETE
- EXISTING PAVEMENT
- EXISTING GRAVEL
- EXISTING SOIL DRIVE
- EXISTING PAVEMENT TO BE REMOVED
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE SIDEWALK AT EXISTING DRIVEWAYS
- USACOE 404 WETLANDS
- NORMAL WATER LEVEL
- CAMA SETBACK AND AEC LINES

FINAL DRAWING FOR BIDDING PURPOSES ONLY

(RELEASED 01.18.2021)





GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 INCH = 30 FT.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 MICHAEL J. MORWAY 1/12/2021

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	03.23.2020	ENVIRONMENTAL PERMITTING	KCA
3	07.08.2020	ENVIRONMENTAL PERMITTING	KCA
3	11.12.2020	NCDOT SUBMITTAL	KCA

SIDEWALK PLAN (STA 40+00 - 58+00)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

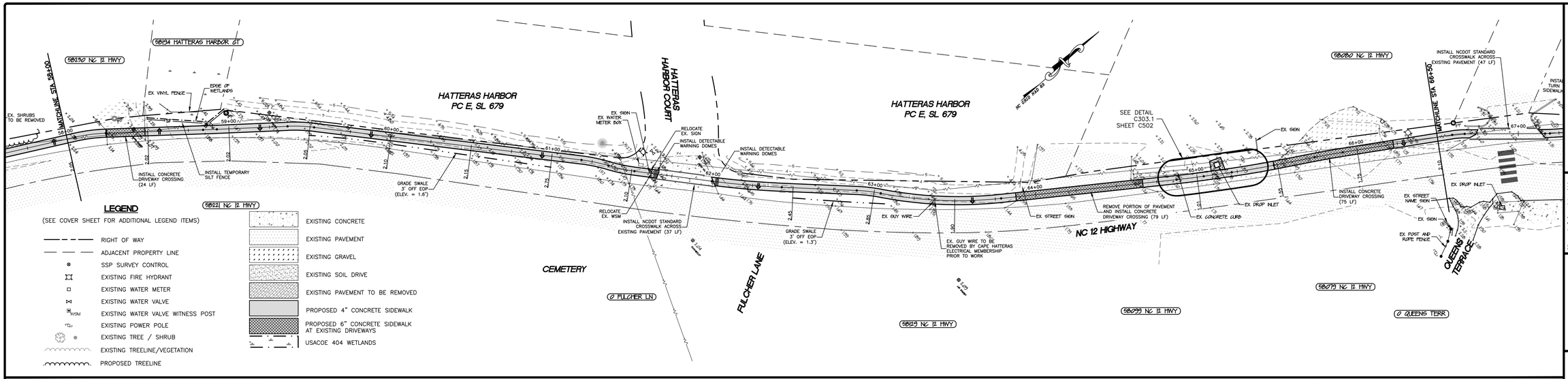
DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

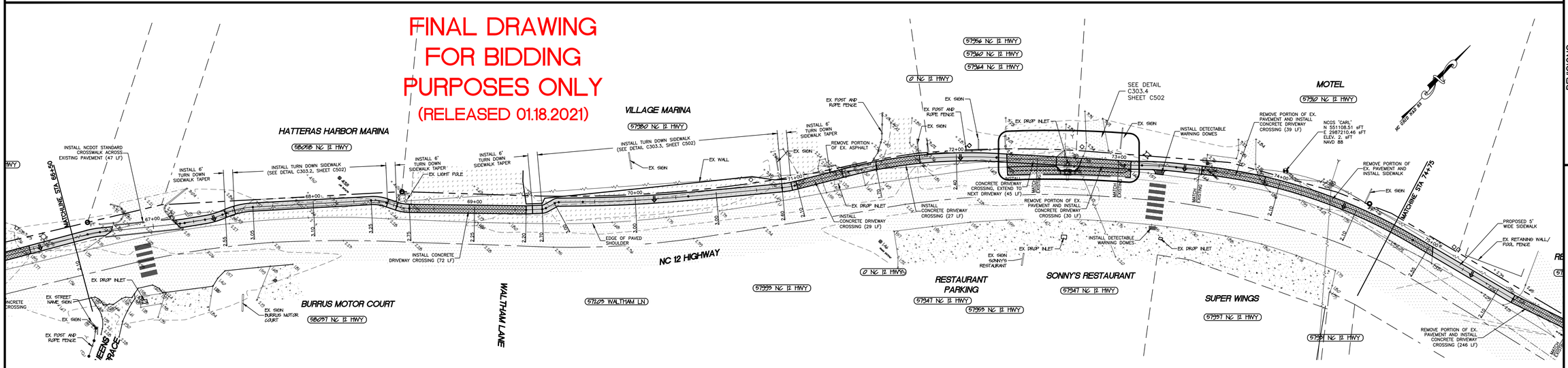
SCALE: 1" = 30'

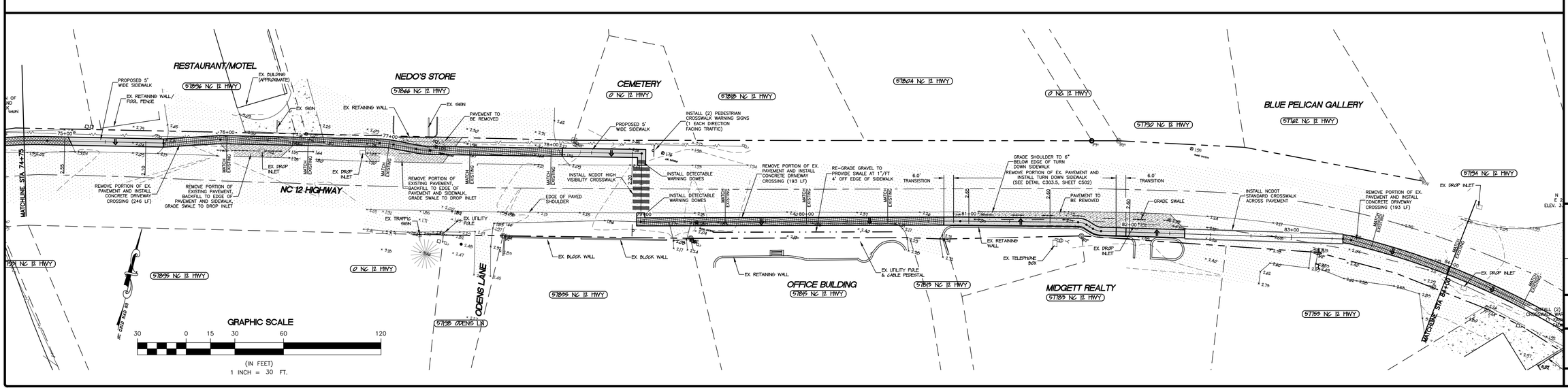
C302

PROJ. NO. 08343B

FINAL DRAWING FOR BIDDING PURPOSES ONLY (RELEASED 01.18.2021)







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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 12-22-2020 MICHAEL J. MORRIS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	08.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	11.12.2020	NCDOT SUBMITTAL	KCA
3	01.12.2021	NCDOT SUBMITTAL	KCA

SIDEWALK PLAN (STA 58+00 - 84+00)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND — HATTERAS TOWNSHIP — DARE COUNTY — NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1" = 30'

C303

PROJ. NO. 08343B

K:\Active Projects\08343 - Hatteras Village Sidewalks\08343B - Sidewalk Design\Cadd Files\08343B - Design.dwg, 1/18/2021 2:32:18 PM

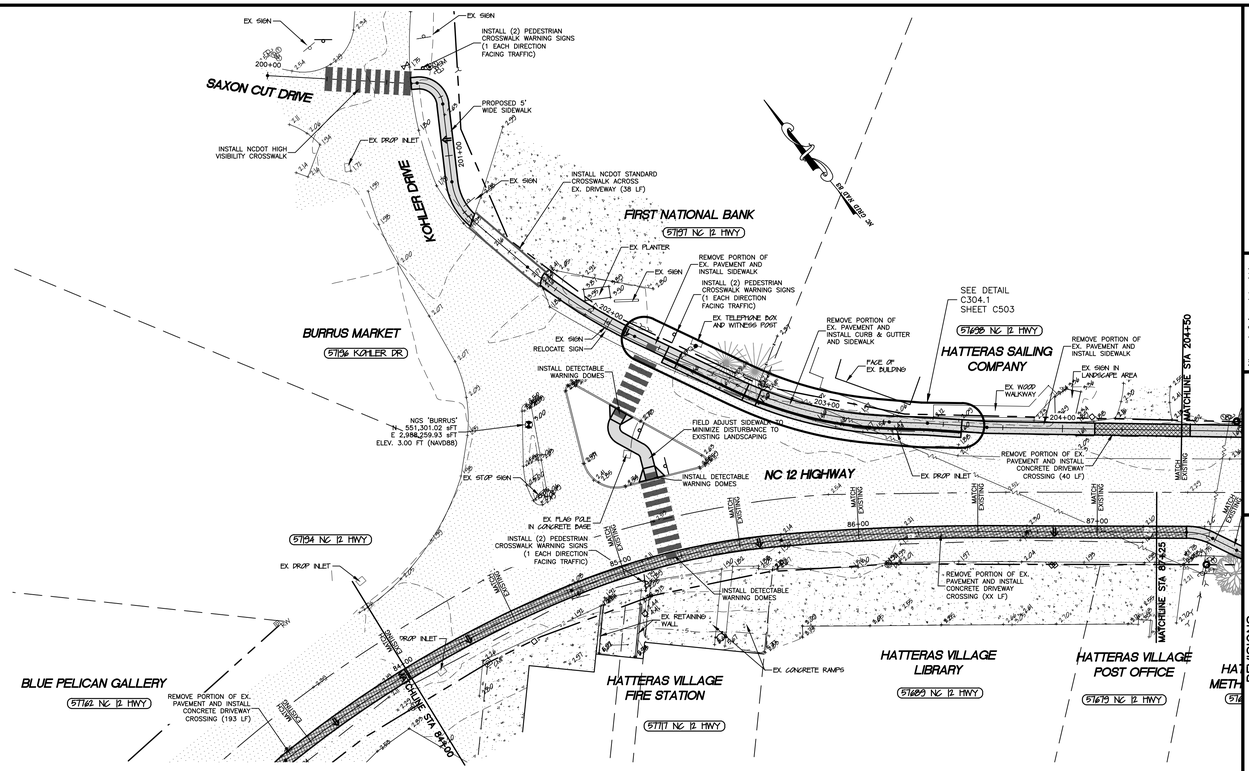
LEGEND

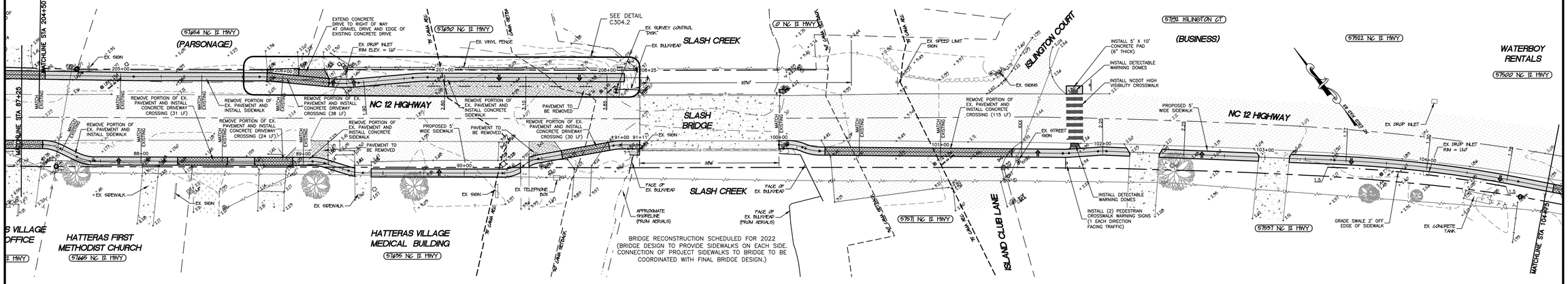
(SEE COVER SHEET FOR ADDITIONAL LEGEND ITEMS)

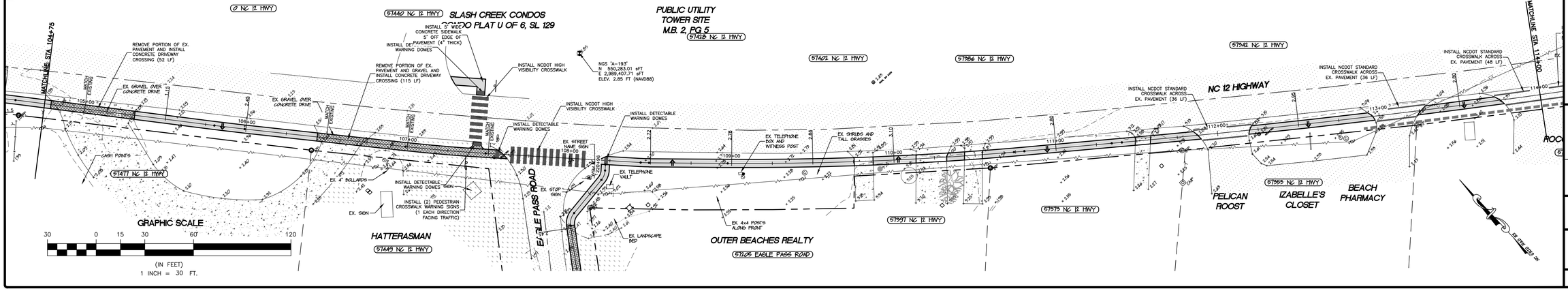
- RIGHT OF WAY
- ADJACENT PROPERTY LINE
- SSP SURVEY CONTROL
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER VALVE WITNESS POST
- EXISTING POWER POLE
- EXISTING TREE / SHRUB
- EXISTING TREELINE/VEGETATION
- PROPOSED TREELINE
- EXISTING CONCRETE
- EXISTING PAVEMENT
- EXISTING GRAVEL
- EXISTING SOIL DRIVE
- EXISTING PAVEMENT TO BE REMOVED
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE SIDEWALK AT EXISTING DRIVEWAYS
- USACOE 404 WETLANDS
- NORMAL WATER LEVEL
- CAMA SETBACK AND AEC LINES

FINAL DRAWING FOR BIDDING PURPOSES ONLY

(RELEASED 01.18.2021)







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NORTH CAROLINA PROFESSIONAL SEAL 028572 ENGINEER CHARLES J. MORRIS

NO.	DATE	DESCRIPTION	BY
1	09.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	11.12.2020	NCDOT SUBMITTAL	KCA
3	01.18.2021	NCDOT RESUBMITTAL	KCA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1" = 30'

SIDEWALK PLAN (STA 84+00 - 114+00) (STA 200+00 - 208+25)

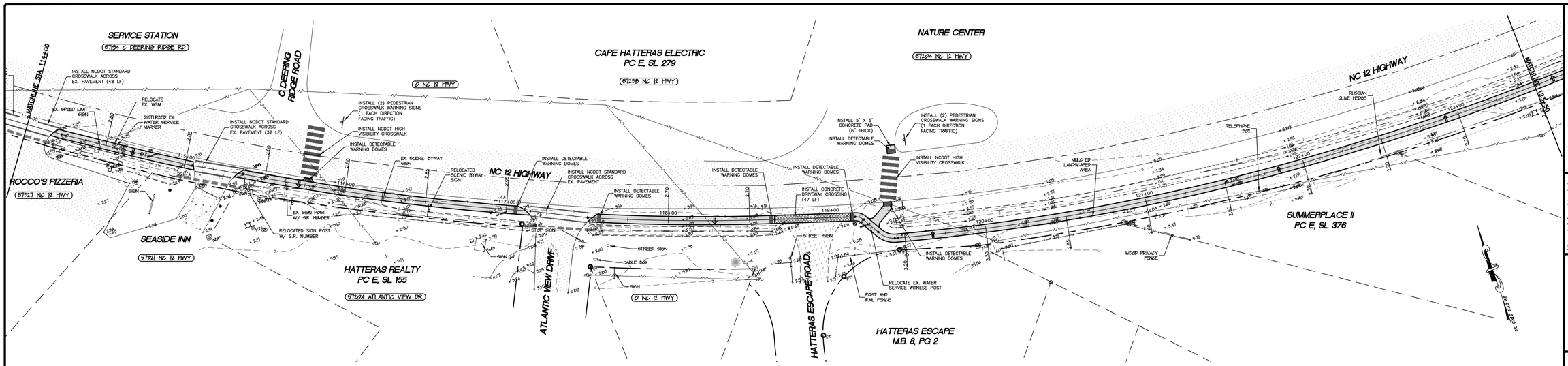
HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND — HATTERAS TOWNSHIP — DARE COUNTY — NORTH CAROLINA

C304

PROJ. NO. 08343B



LEGEND

(SEE COVER SHEET FOR ADDITIONAL LEGEND ITEMS)

- RIGHT OF WAY
- ADJACENT PROPERTY LINE
- SSP SURVEY CONTROL
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER VALVE WITNESS POST
- EXISTING POWER POLE
- EXISTING TREE / SHRUB
- EXISTING TREELINE/VEGETATION
- PROPOSED TREELINE

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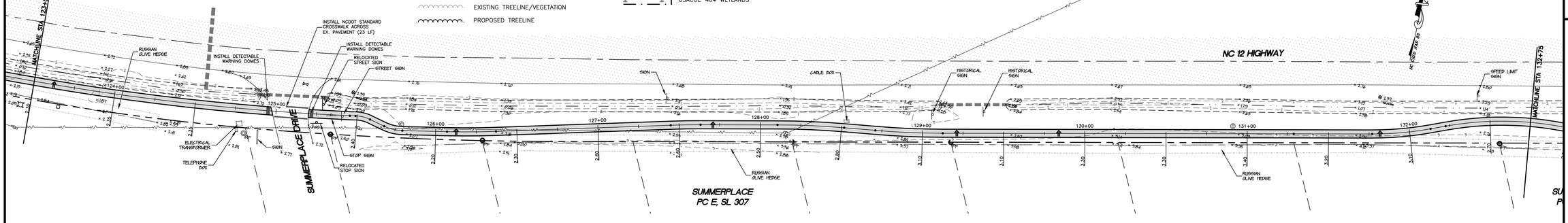
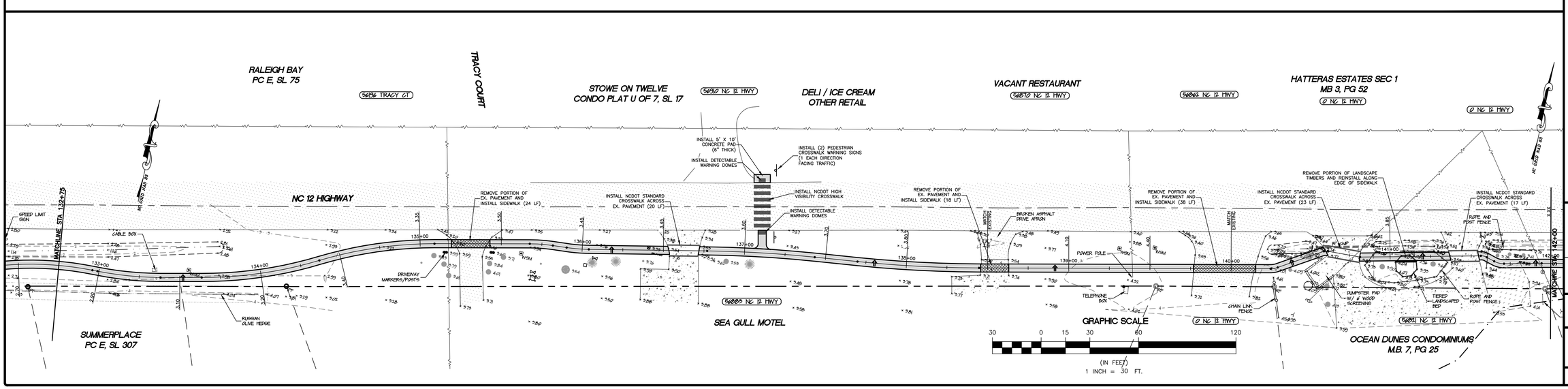
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE SIDEWALK AT EXISTING DRIVEWAYS
- USACOE 404 WETLANDS

FINAL DRAWING FOR BIDDING PURPOSES ONLY

(RELEASED 01.18.2021)





GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 INCH = 30 FT.

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NORTH CAROLINA PROFESSIONAL SEAL 028572 ENGINEER MICHAEL J. MORRIS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	09.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	11.12.2020	NCDOT SUBMITTAL	KCA
3	01.08.2021	NCDOT SUBMITTAL	KCA

SIDEWALK PLAN (STA 114+00 - 142+00)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1" = 30'

C305

PROJ. NO. 08343B

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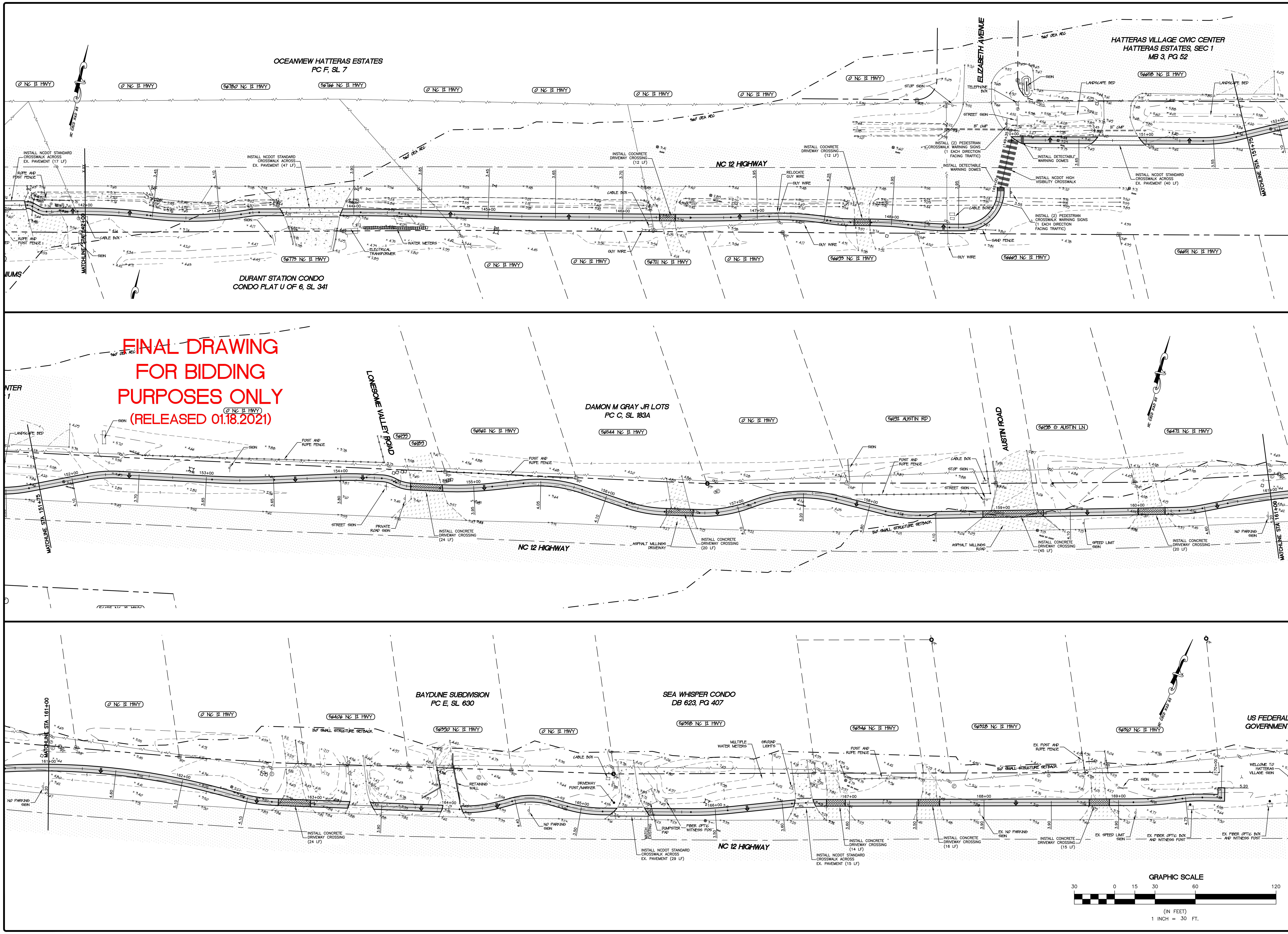

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Fax: (252) 441-0965
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 MICHAEL J. MORWAY 1/12/2021

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	03.23.2020	ENVIRONMENTAL PERMITTING	KCA
3	07.08.2020	REVISED OEA AEC / CAMA SETBACKS	KCA
4	11.12.2020	NCDOT SUBMITTAL	KCA

SIDEWALK PLAN (STA 142+00 - 170+00)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

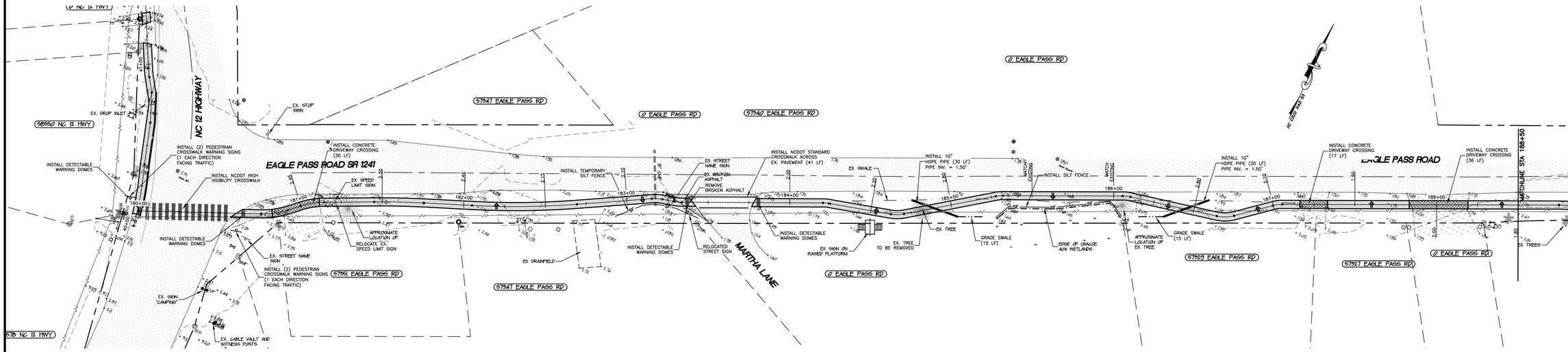
HATTERAS ISLAND — HATTERAS TOWNSHIP — DARE COUNTY — NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1" = 30'

C306

PROJ. NO. 08343B



LEGEND

(SEE COVER SHEET FOR ADDITIONAL LEGEND ITEMS)

- RIGHT OF WAY
- ADJACENT PROPERTY LINE
- SSP SURVEY CONTROL
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER VALVE WITNESS POST
- EXISTING POWER POLE
- EXISTING TREE / SHRUB
- EXISTING TREELINE/VEGETATION
- PROPOSED TREELINE
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- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE SIDEWALK AT EXISTING DRIVEWAYS
- USACOE 404 WETLANDS

FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 INCH = 30 FT.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 12.22.2020 CHARLEY J. MORRIS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	09.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	11.12.2020	NCDOT SUBMITTAL	KCA
3	12.22.2020	PERMITTING	KCA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1" = 30'

C307

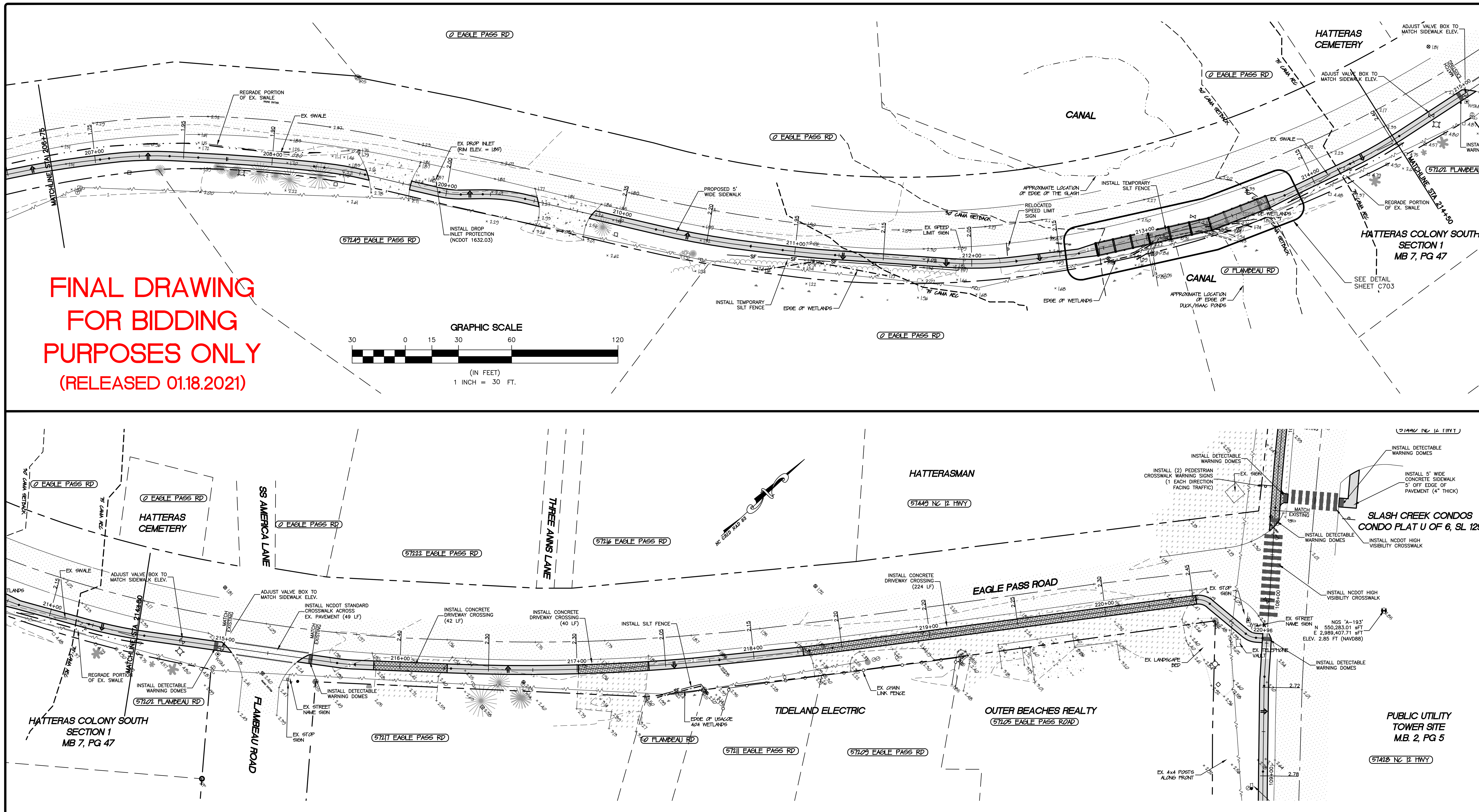
PROJ. NO. 08343B

SIDEWALK PLAN (STA 180+00 - 206+75)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND — HATTERAS TOWNSHIP — DARE COUNTY — NORTH CAROLINA



LEGEND

(SEE COVER SHEET FOR ADDITIONAL LEGEND ITEMS)

- RIGHT OF WAY
- ADJACENT PROPERTY LINE
- SSP SURVEY CONTROL
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
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- PROPOSED 4" CONCRETE SIDEWALK
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 MICHAEL J. MORWAY 1/12/2020

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	03.23.2020	ENVIRONMENTAL PERMITTING	KCA
3	11.12.2020	PER CAMA REVIEW COMMENTS / NCDOT SUBMITTAL	KCA

SIDEWALK PLAN (STA 206+75 - 220+96)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

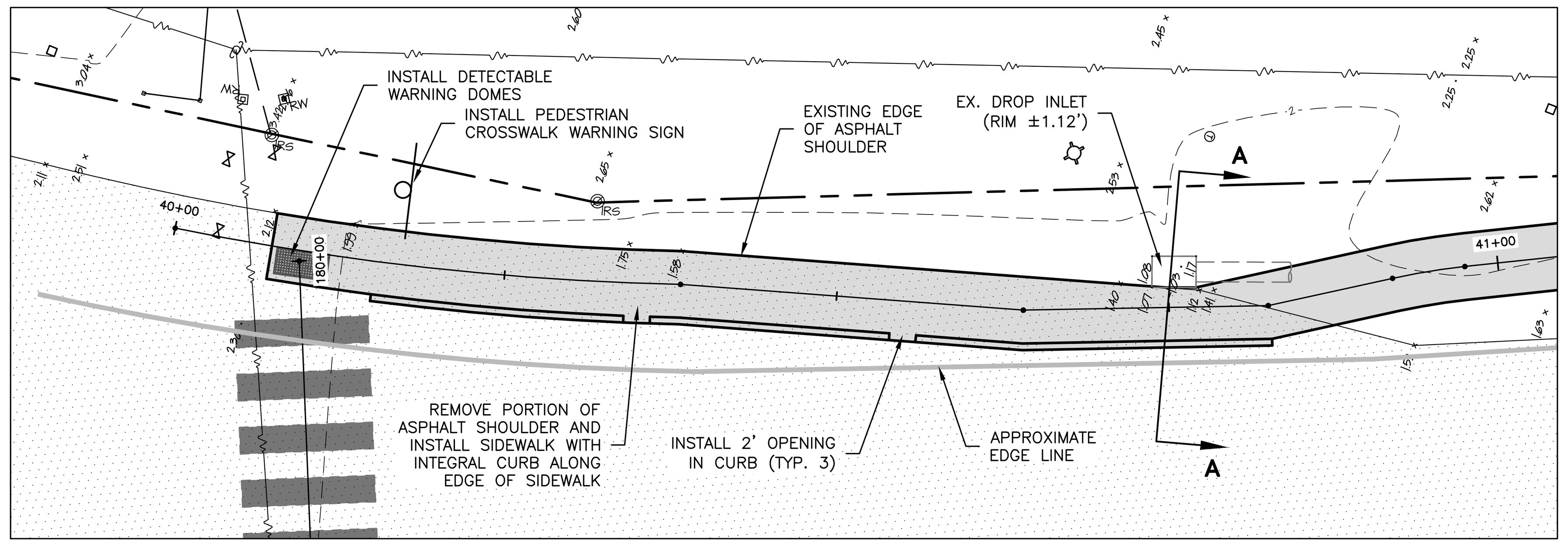
HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

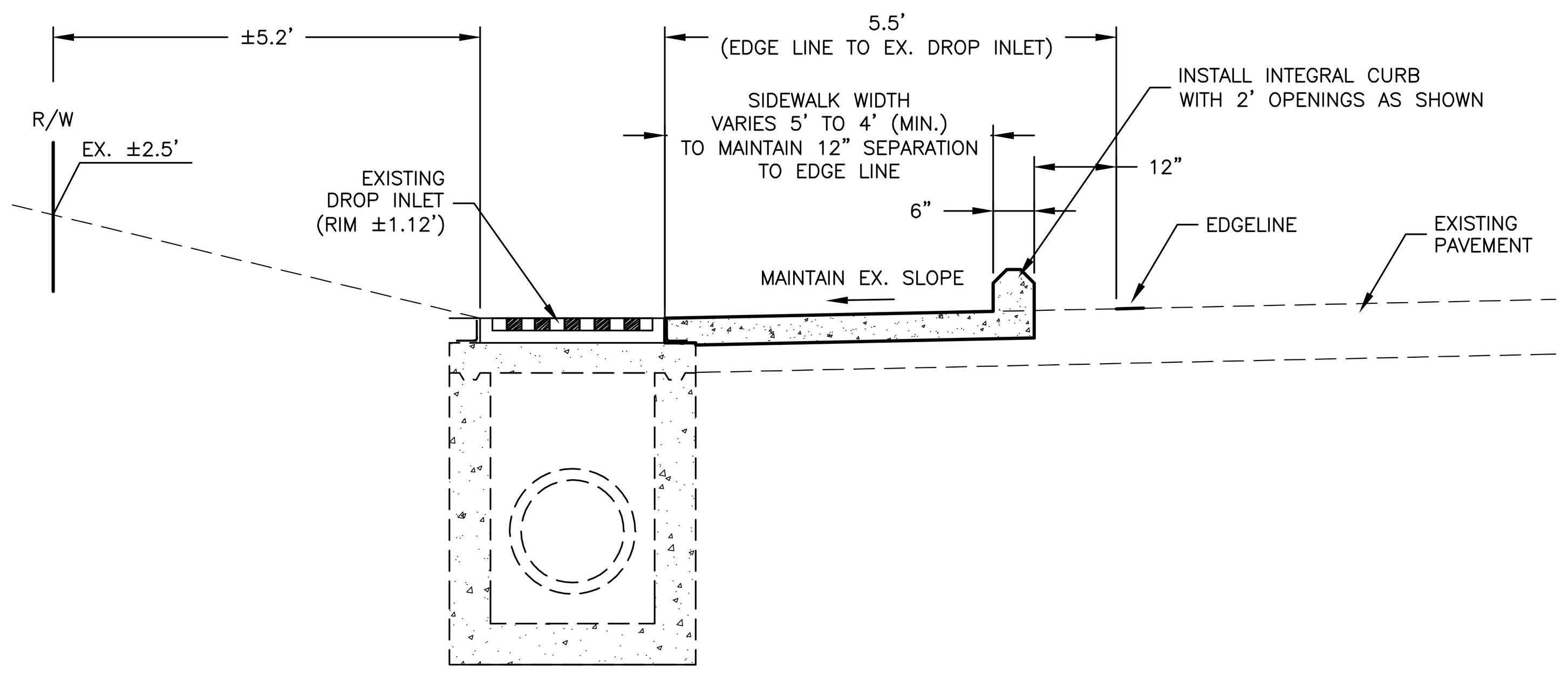
SCALE: 1" = 30'

C308

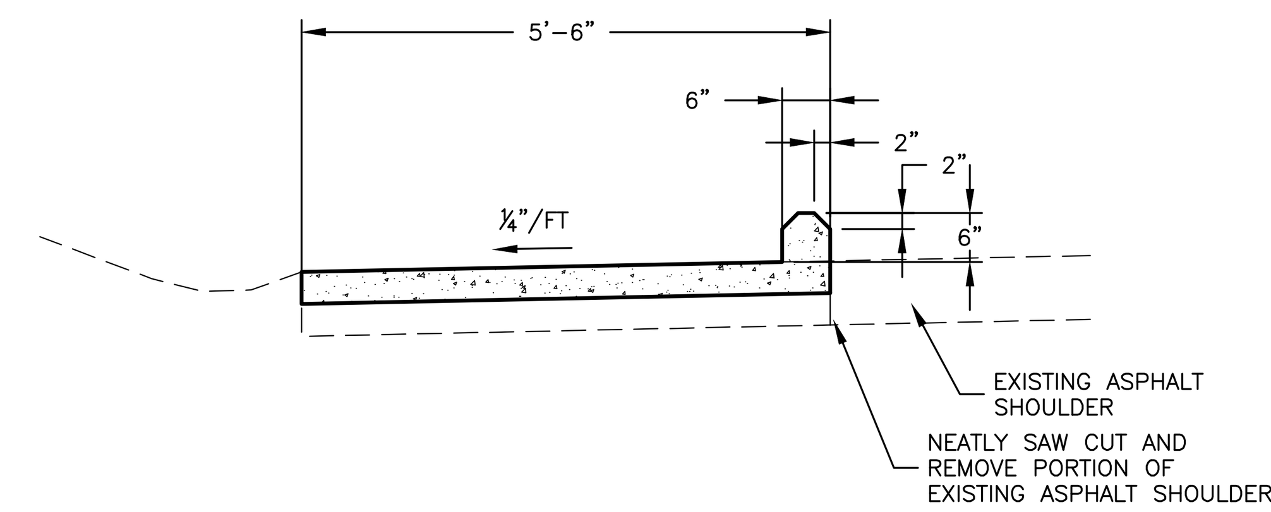
PROJ. NO. 08343B



PLAN VIEW
SCALE: 1" = 10'

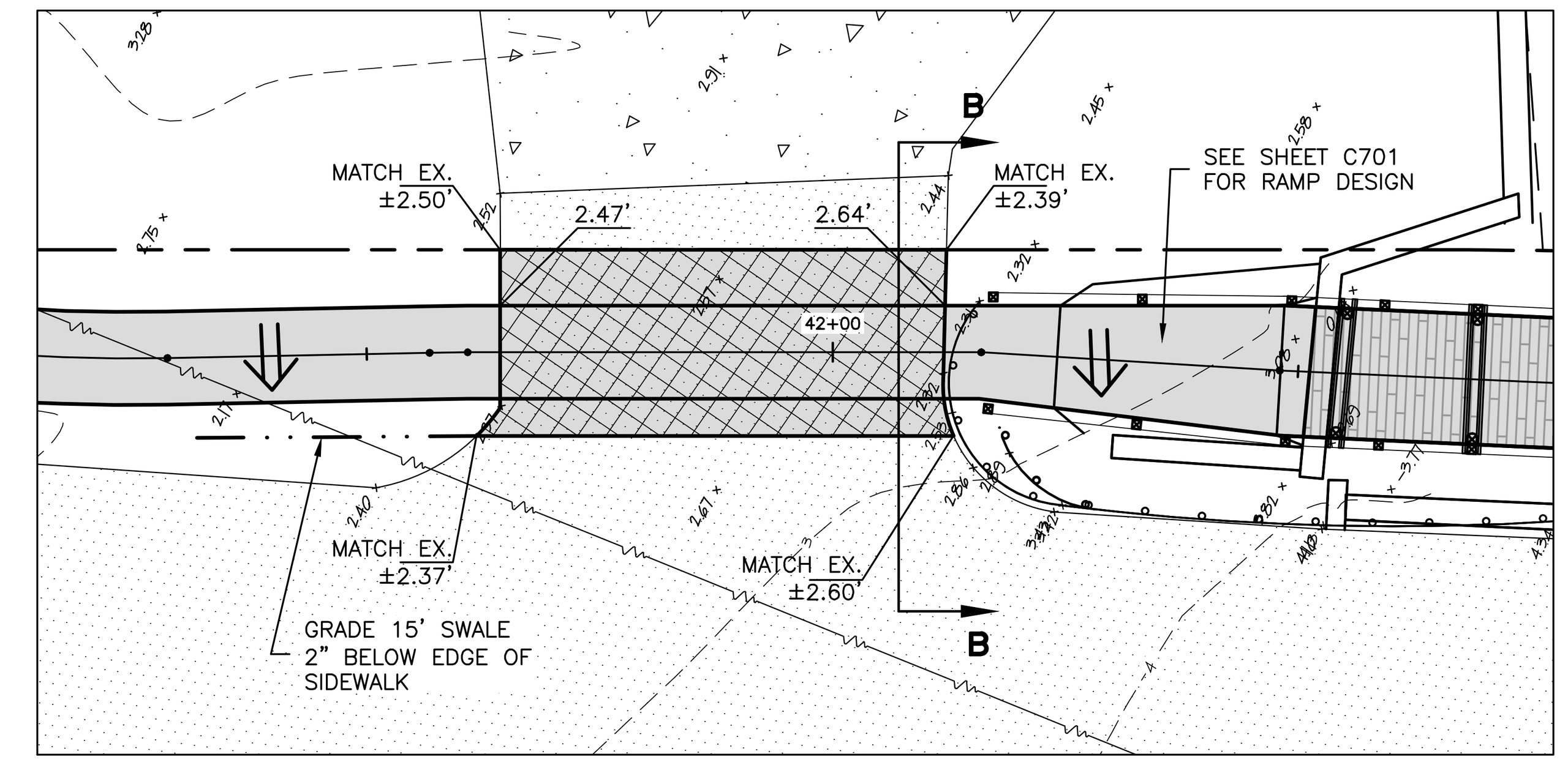


SECTION A-A
NTS

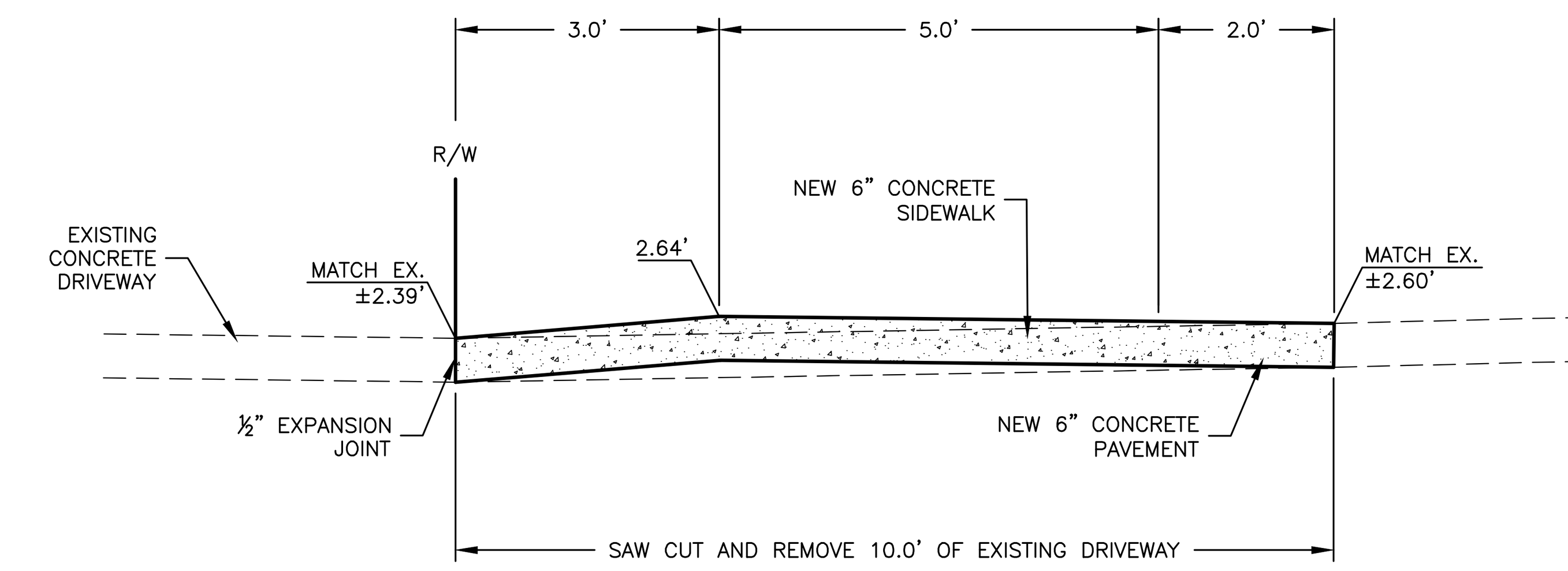


TYPICAL SIDEWALK WITH INTEGRAL CURB
NTS

DETAIL C302.1

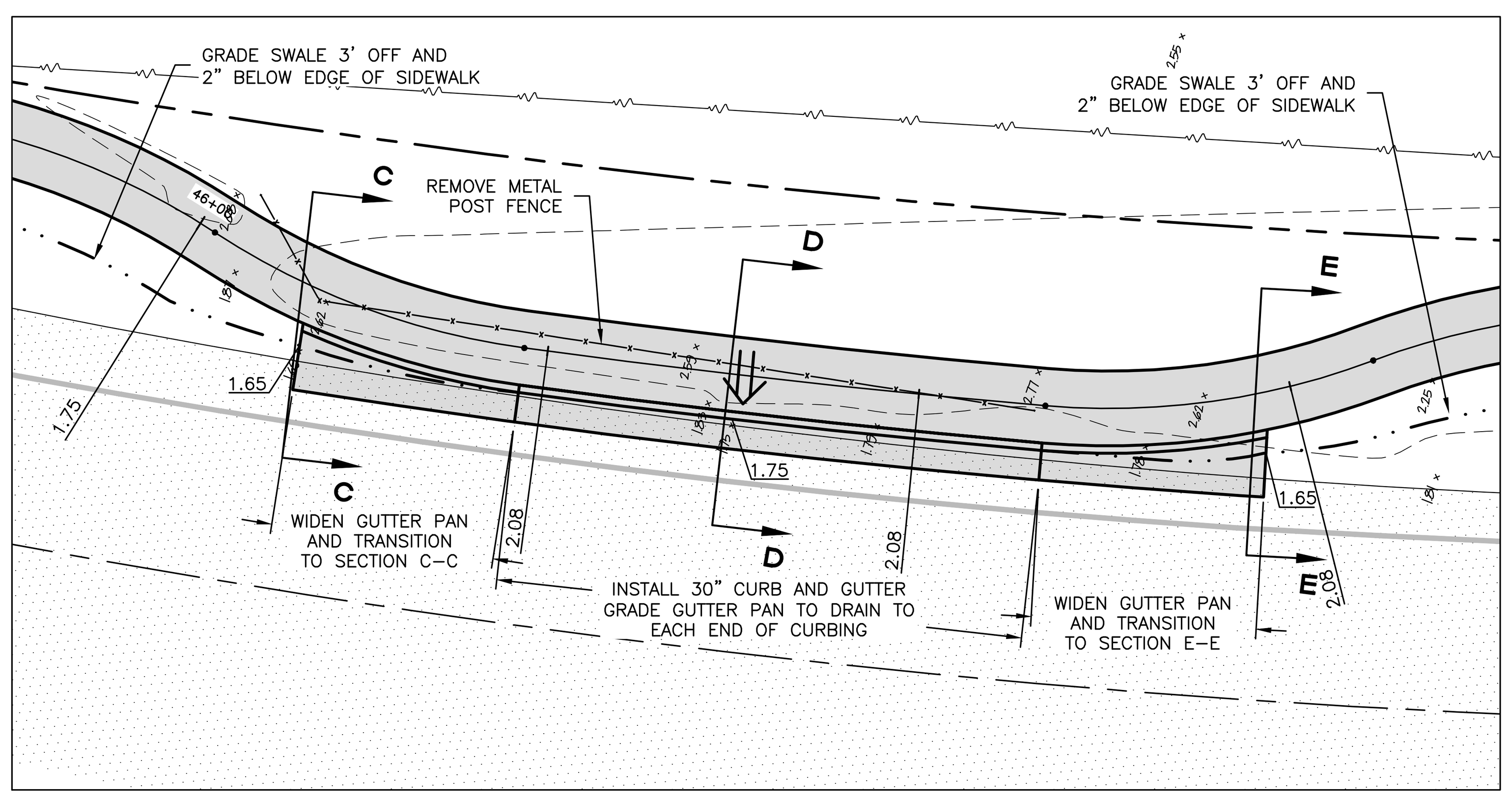


PLAN VIEW
SCALE: 1" = 10'

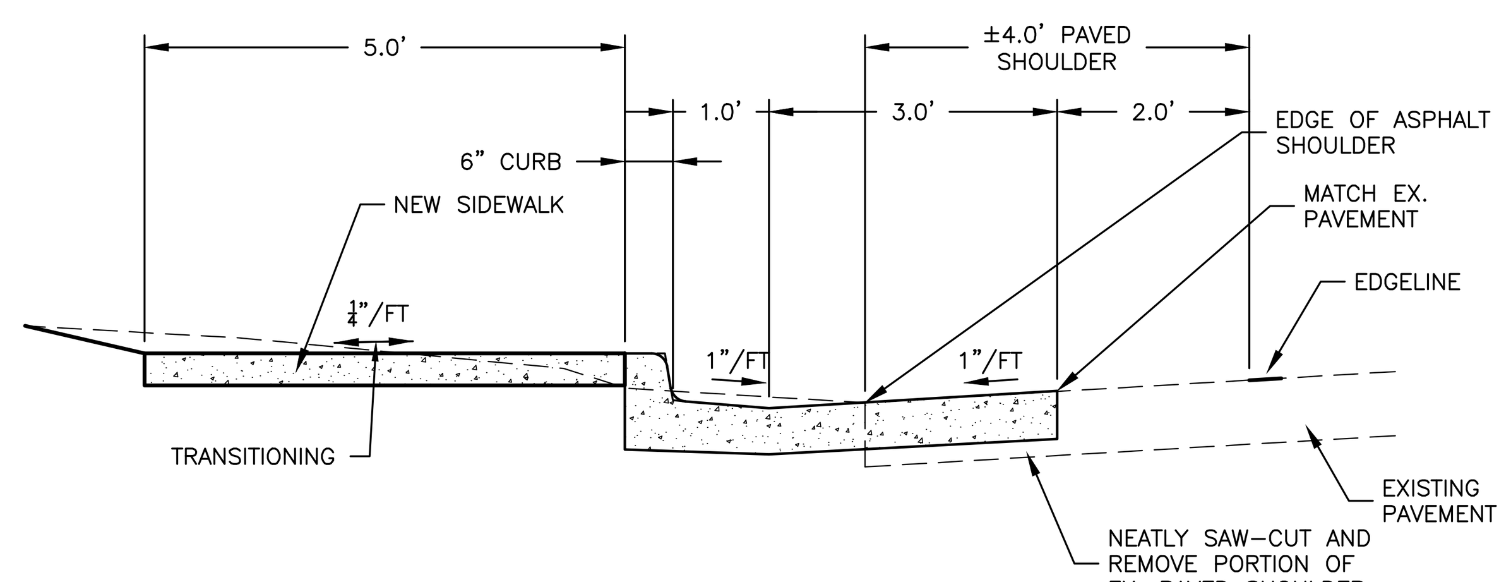


SECTION B-B
NTS

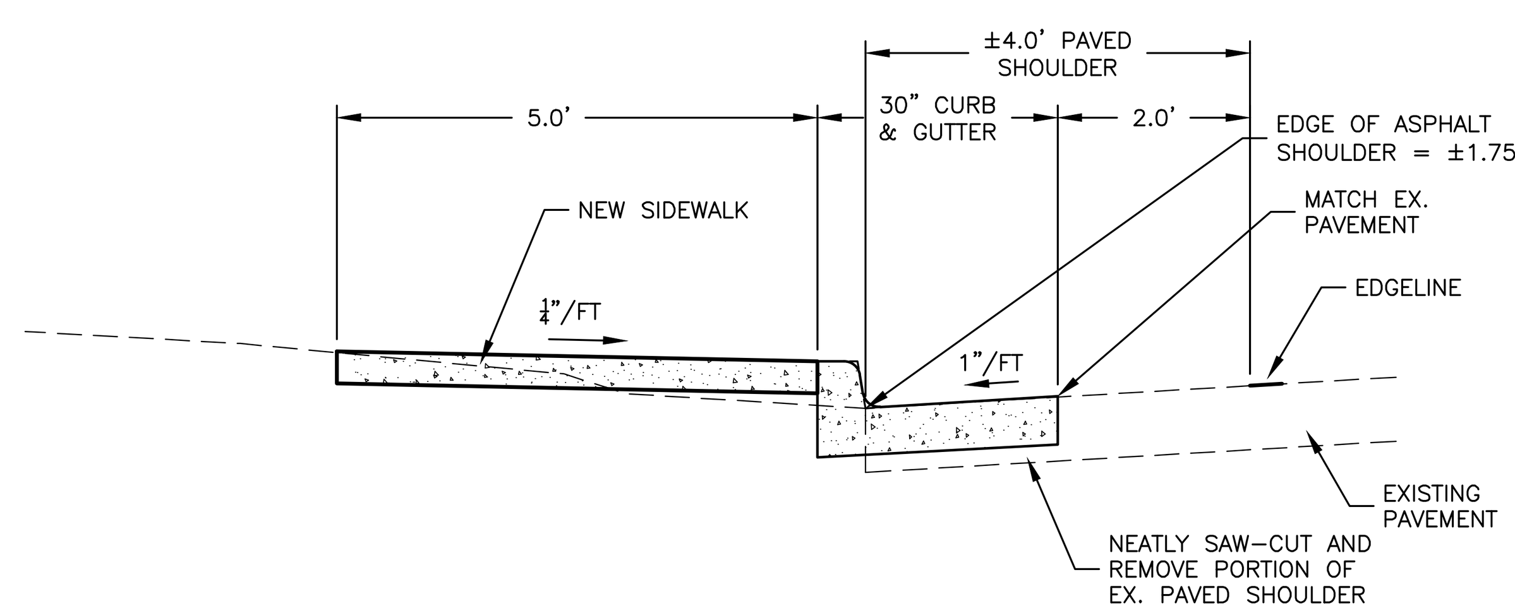
DETAIL C302.2



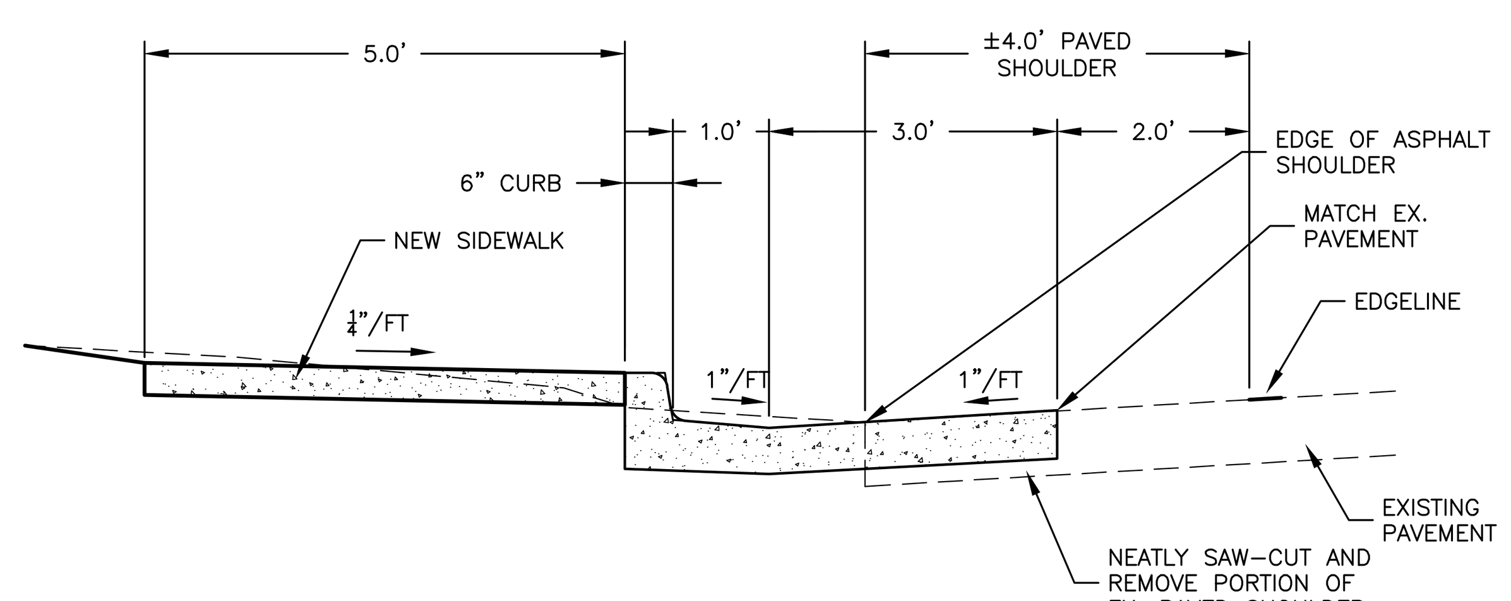
PLAN VIEW
SCALE: 1" = 10'



SECTION C-C
NTS



SECTION D-D
NTS

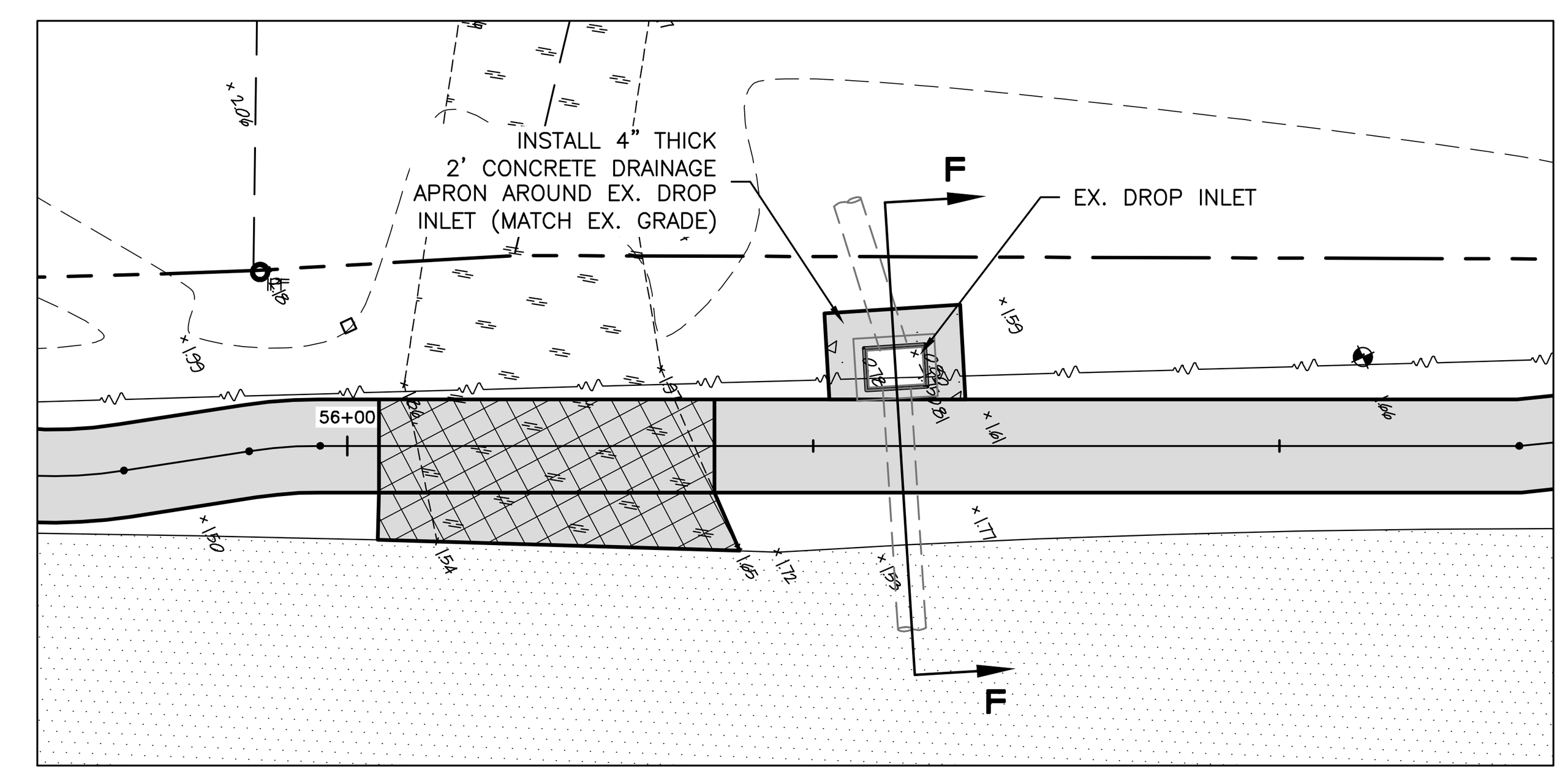


SECTION E-E
NTS

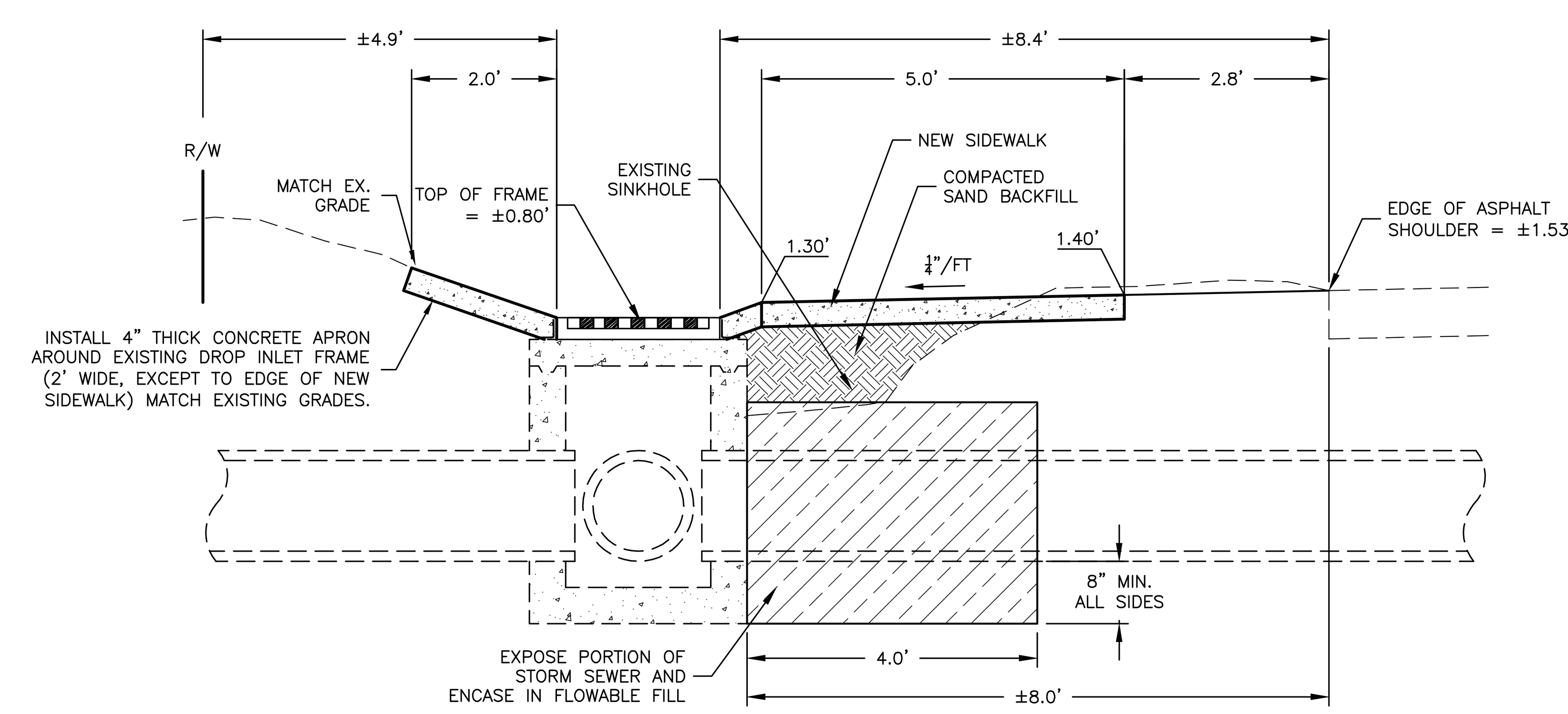
FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)

GRAPHIC SCALE
0 5 10 20
(IN FEET)
1 INCH = 10 FT.

DETAIL C302.3



PLAN VIEW
SCALE: 1" = 10'



SECTION F-F
NTS

DETAIL C302.4

Albemarle & ASSOCIATES, LTD.
Engineering - Environmental - Land Planning

Albemarle & Associates, Ltd.
115 West St. Clair Street
P.O. Box 3989
Kill Devil Hills, NC 27948
Phone: (252) 441-2113
Fax: (252) 441-0965
www.AlbemarleAssociates.com
Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL SEAL 028572 ENGINEER MICHAEL J. MORWAY
1/12/2020

REVISIONS

NO.	DATE	DESCRIPTION	BY

BRIDGE SECTIONS & CONSTRUCTION DETAILS

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD
HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

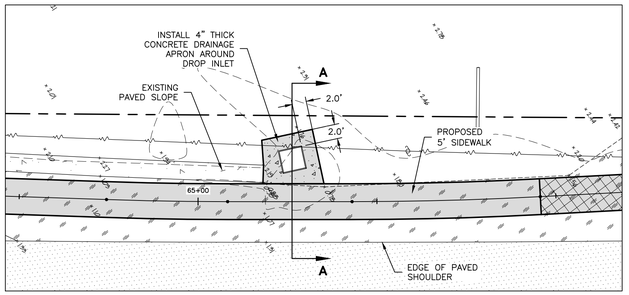
HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

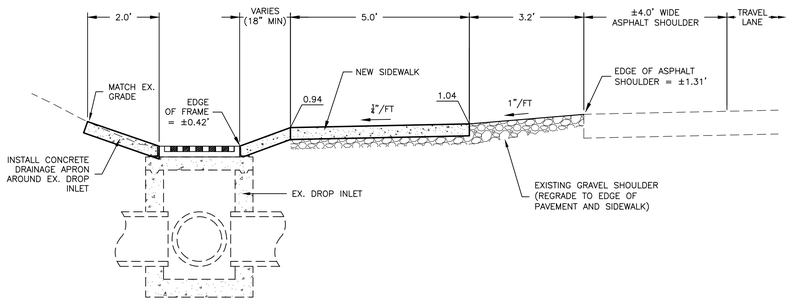
SCALE:
AS SHOWN

C501

PROJ. NO. 08343B

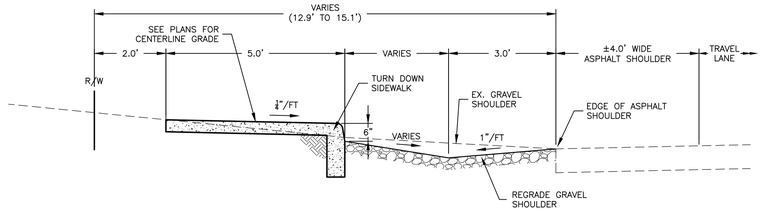


PLAN VIEW
SCALE: 1" = 10'

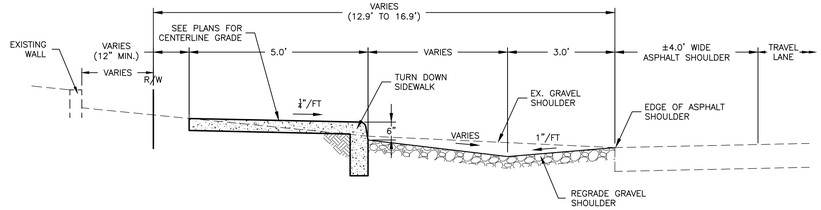


SECTION A-A
NTS

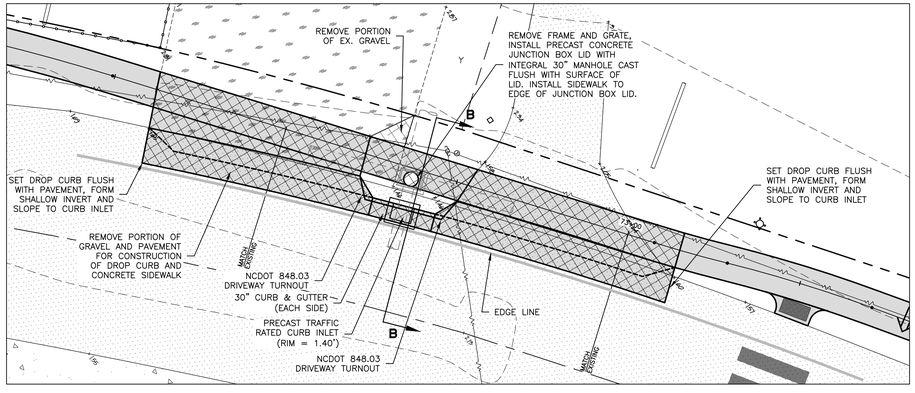
DETAIL C303.1



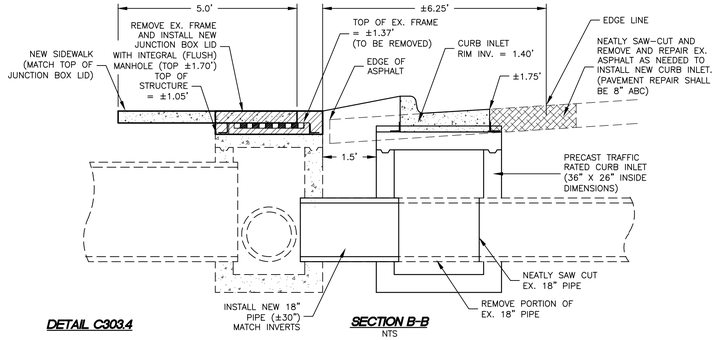
DETAIL C303.2
NTS



DETAIL C303.3
NTS



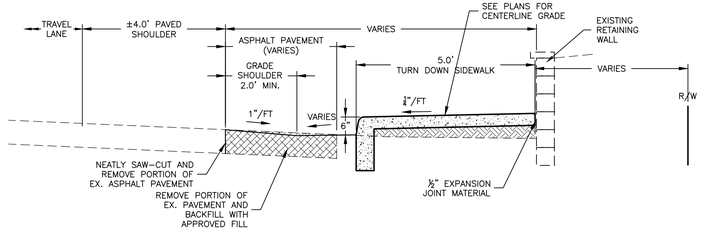
PLAN VIEW
SCALE: 1" = 10'



DETAIL C303.4 ***SECTION B-B***
NTS

GRAPHIC SCALE
0 5 10 20
(IN FEET)
1 INCH = 10 FT.

FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)



DETAIL C303.5
NTS

Albemarle & Associates, Ltd.
115 West St. Clair Street
P.O. Box 3889
Kitty Hawk, NC 27949
Phone: (252) 441-2113
Fax: (252) 441-0965
www.AlbemarleAssociates.com
Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL SEAL 028572 ENGINEER MICHAEL J. MORRIS
12/22/2020

REVISIONS

NO.	DATE	DESCRIPTION	BY

BRIDGE SECTIONS & CONSTRUCTION DETAILS

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD
HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

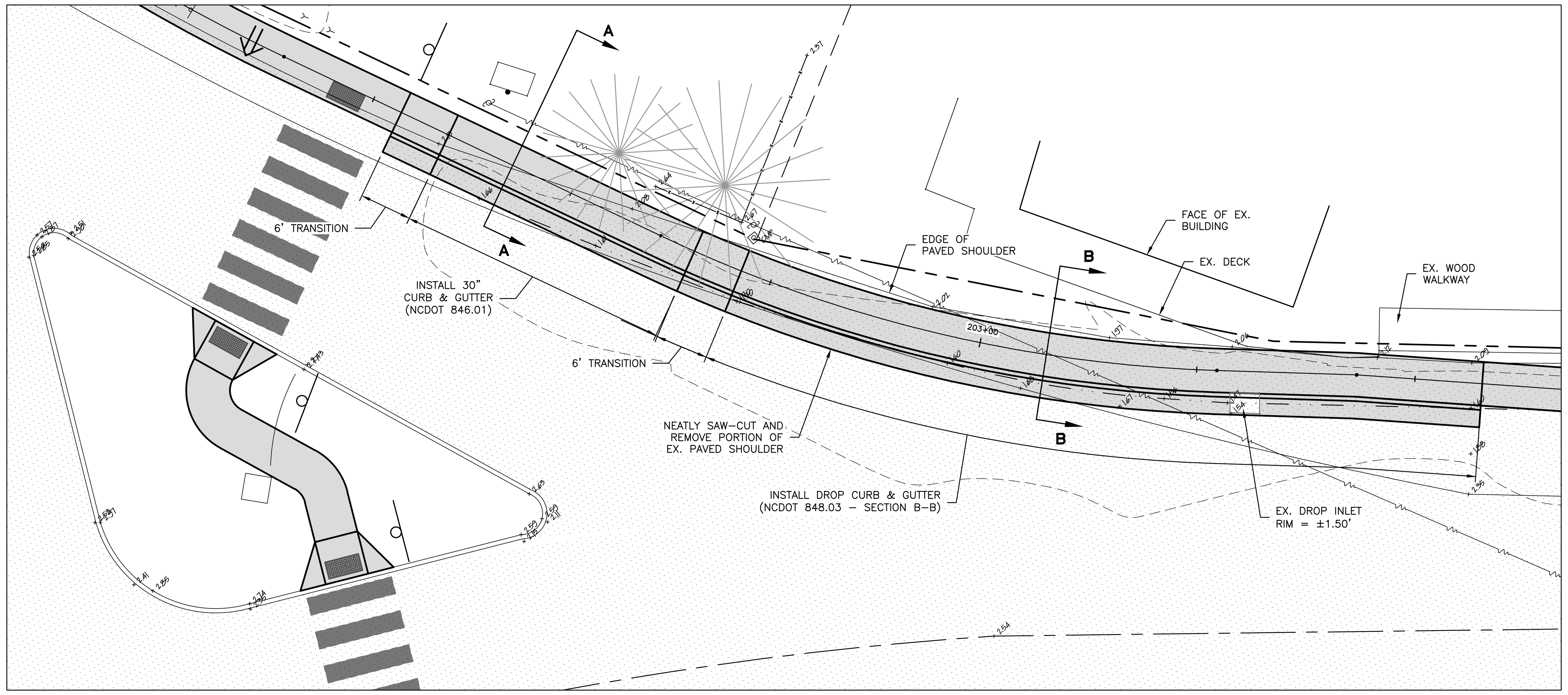
HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

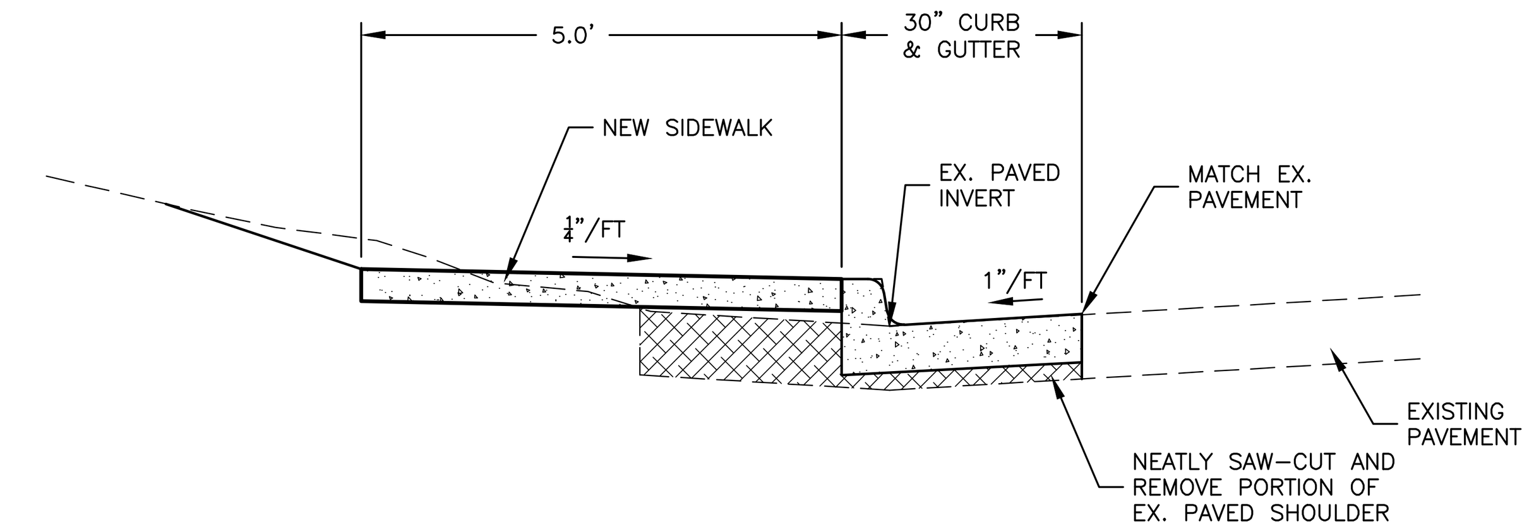
SCALE: AS SHOWN

C502

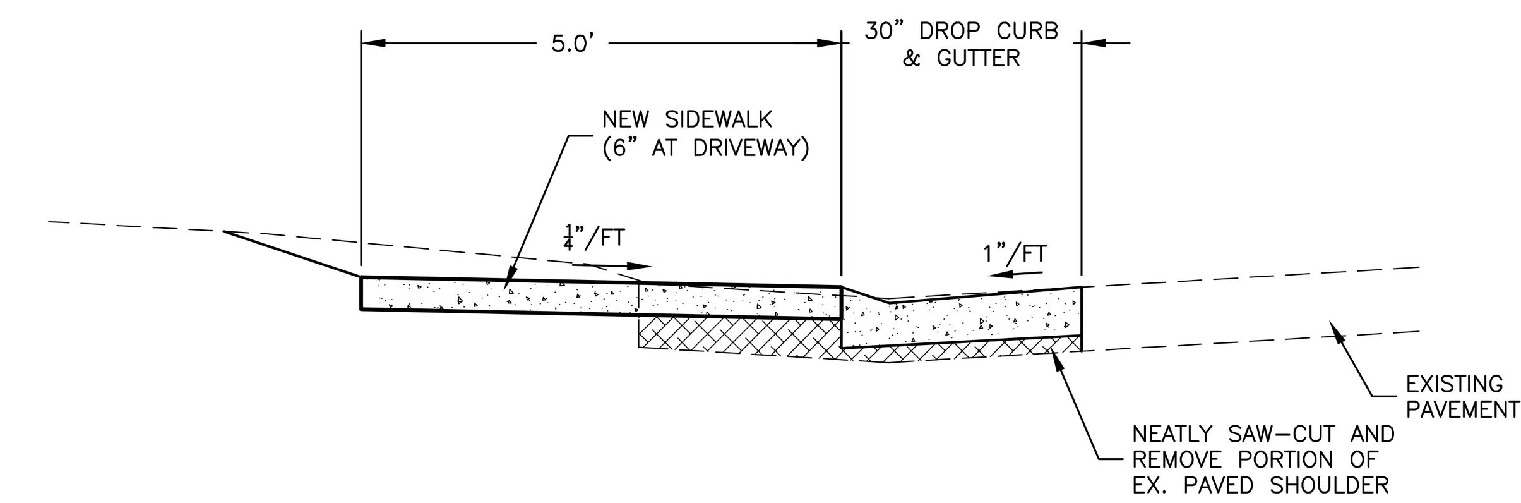
PROJ. NO. 08343B



PLAN VIEW
SCALE: 1" = 10'

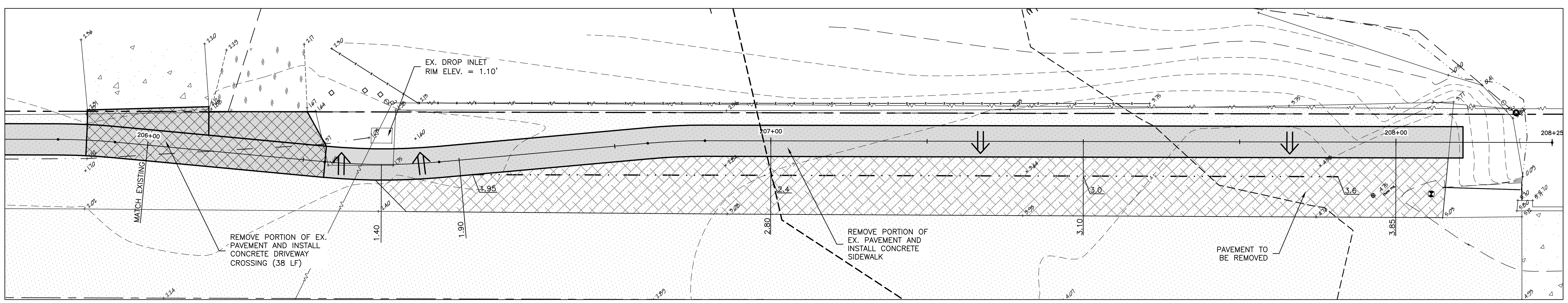


SECTION A-A
NTS

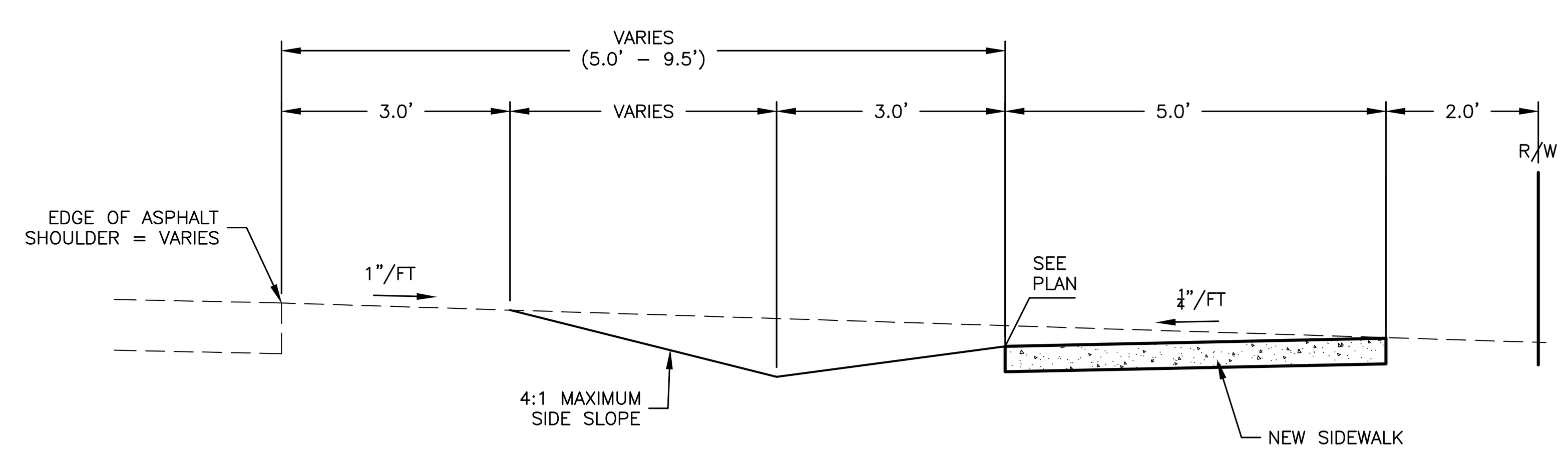


SECTION B-B
NTS

DETAIL C304.1

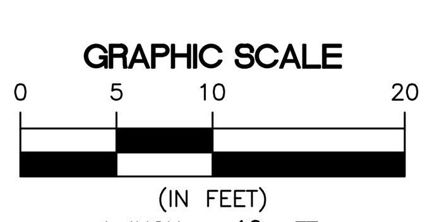


PLAN VIEW
SCALE: 1" = 10'



SECTION A-A
NTS

DETAIL C304.2



FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)

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115 West St. Clair Street
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Kill Devil Hills, NC 27948
Phone: (252) 441-2113
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Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028572 MICHAEL J. MORWAY

REVISIONS			
NO.	DATE	DESCRIPTION	BY

BRIDGE SECTIONS & CONSTRUCTION DETAILS

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD
HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

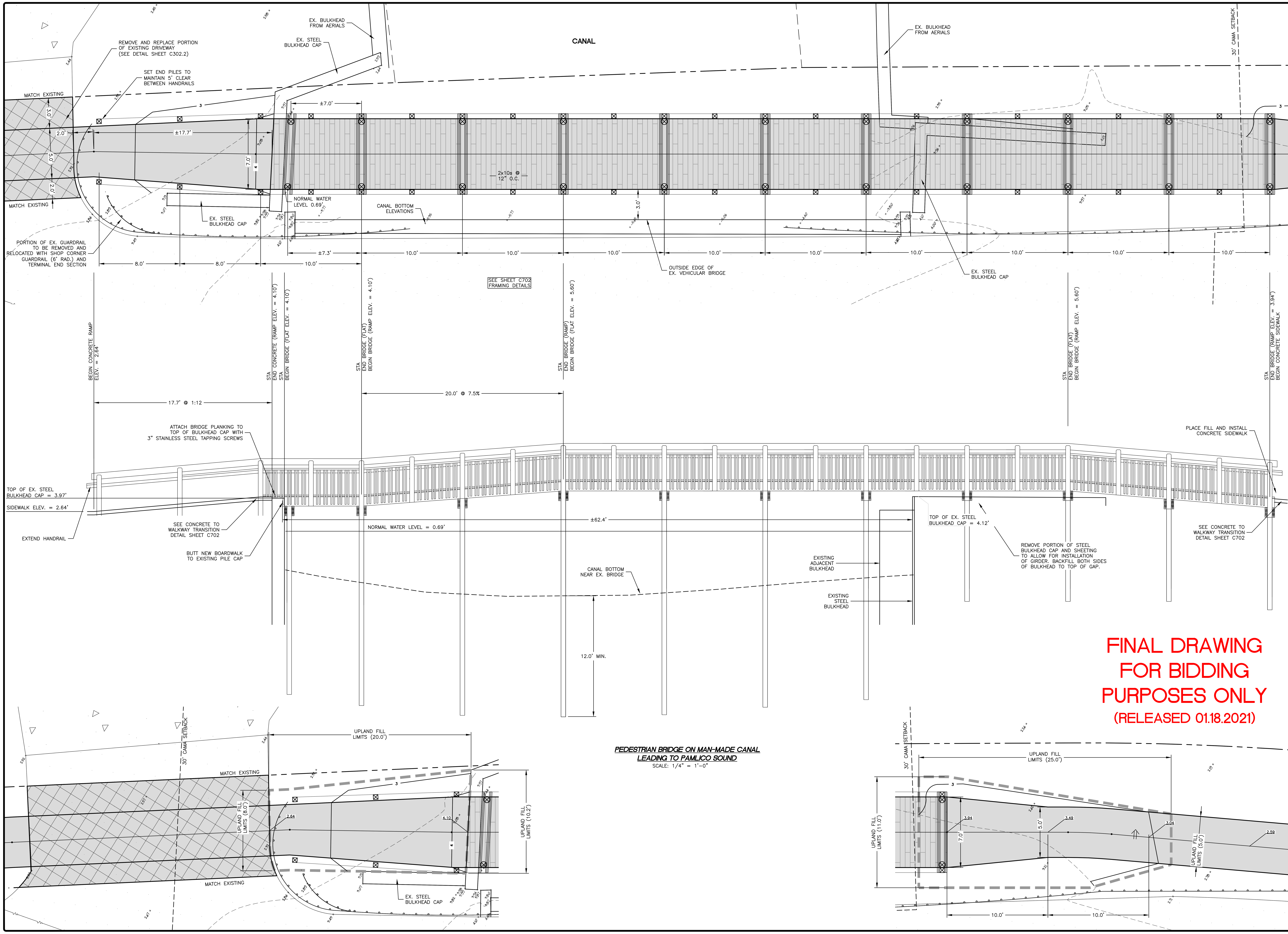
HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: AS SHOWN

C503

PROJ. NO. 08343B



PEDESTRIAN BRIDGE ON MAN-MADE CANAL LEADING TO PAMLICO SOUND

SCALE: 1/4" = 1'-0"

FINAL DRAWING FOR BIDDING PURPOSES ONLY (RELEASED 01.18.2021)

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HATTERAS, NC 27948
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Fax: (252) 441-0965
www.AlbemarleAssociates.com
Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 16759 JOHN M. DELUCIA, PE

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	07.08.2020	ENVIRONMENTAL PERMITTING	KCA
3	11.12.2020	NCDOT SUBMITTAL	KCA

BRIDGE PLAN

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT
SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	01.08.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1/4"=1'

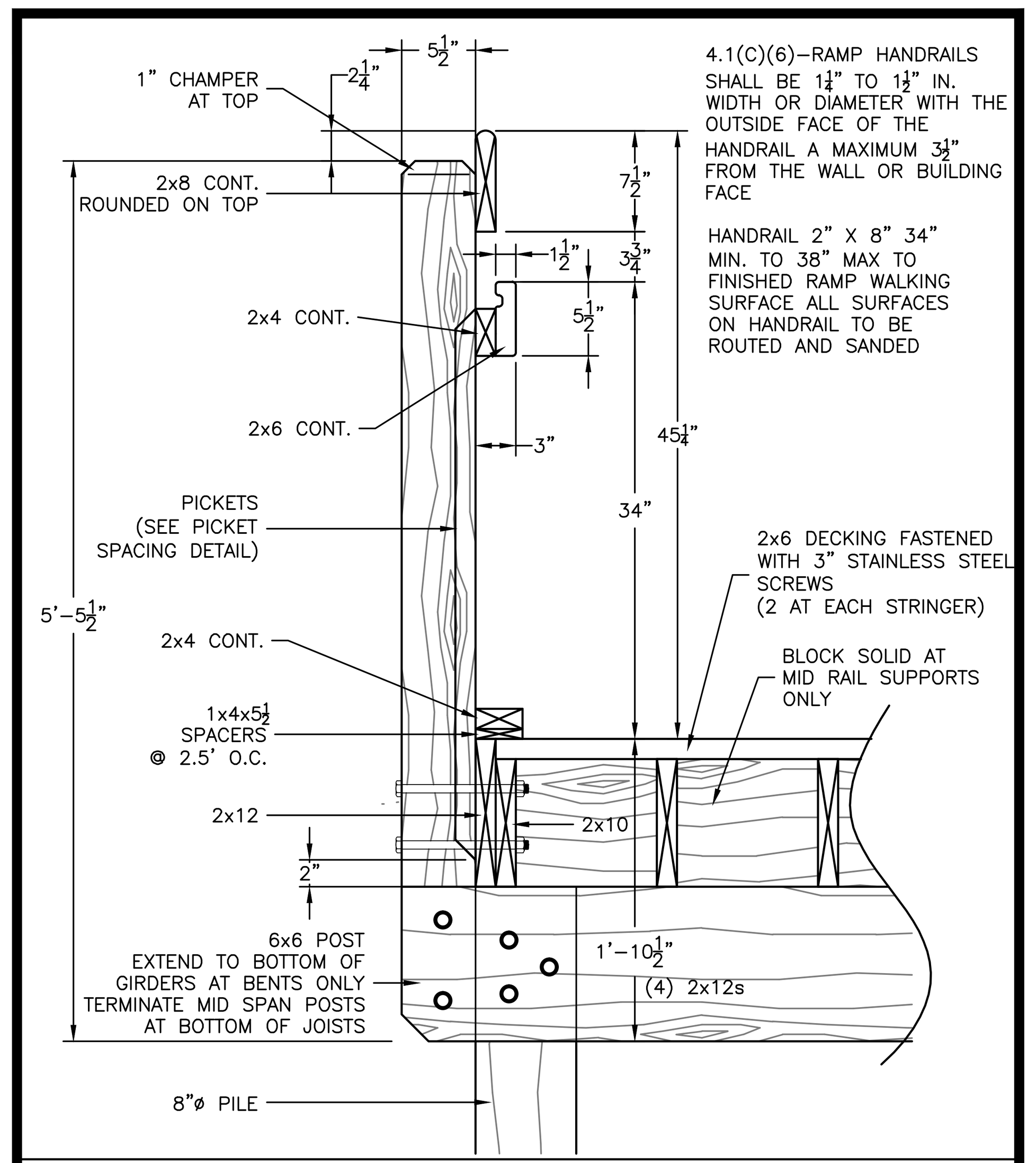
C701

PROJ. NO. 08343B

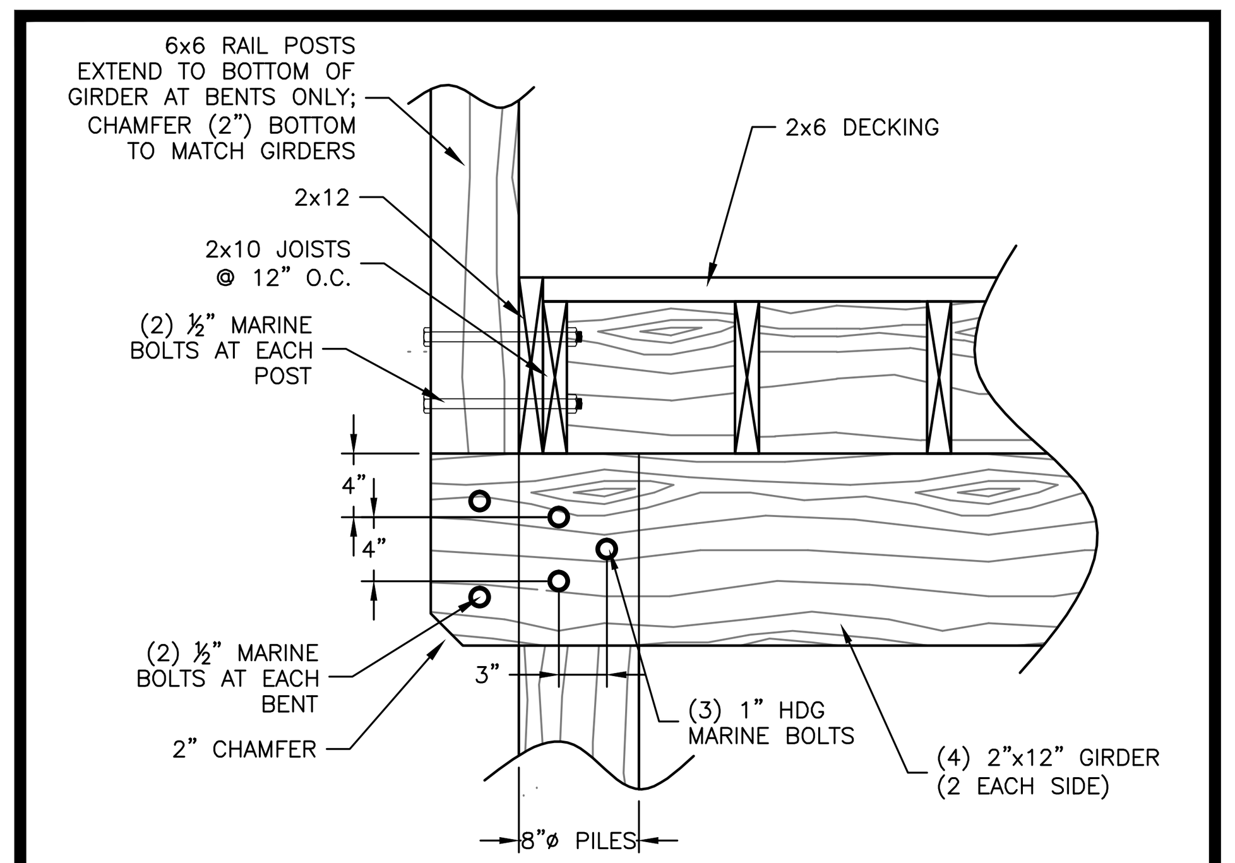
STRUCTURAL NOTES:

1. WHERE A DETAIL IS SHOWN ON STRUCTURAL DRAWINGS FOR ONE CONDITION, IT SHALL APPLY TO ALL SIMILAR OR LIKE CONDITIONS UNLESS NOTED OR SHOWN OTHERWISE ON PLANS.
2. ALL ITEMS SHALL BE TIGHTLY ANCHORED OR ATTACHED SQUARE, PLUMB AND TRUE, OR IN OTHER PLANES AND SHAPES AS SHOWN ON THE DRAWINGS. JOINTS SHALL BE TIGHT, EVEN AND FREE OF OFFSETS. NO FIELD ALTERING OF ANY MEMBERS WILL BE ALLOWED THAT WILL CAUSE THEM NOT TO BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS WITHOUT WRITTEN APPROVAL OF THE PROJECT ENGINEER.
3. IF THE CONTRACTOR FINDS A DIFFERENCE BETWEEN THESE DRAWINGS AND EXISTING ELEVATIONS OR OTHER CONDITIONS THAT PROHIBIT EXECUTION OF THE WORK AS DIRECTED IN THESE DRAWINGS, THE CONTACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. 8"ø AND 6x6 TIMBER PILES SHALL BE A MINIMUM OF 2.5 CCA UC5B (8"ø) OR UC4B (6x6) AND SHALL MEET OR EXCEED AWPA STANDARDS (C–18) FOR PRESERVATION TREATMENT AS APPLICABLE. PILES SHALL ACHIEVE A MINIMUM OF 10' PENETRATION INTO SUITABLE SUBSURFACE MATERIAL.
5. STRUCTURAL FRAMING SHALL BE #2 SYP, 0.6 CCA TREATMENT AS SHOWN, AND SHALL MEET OR EXCEED AWPA STANDARDS (UC4C) FOR PRESERVATION TREATMENT AS APPLICABLE.
6. DECKING, HANDRAILS AND PICKETS SHALL BE #1 SYP, TREATMENT AS SHOWN, AND SHALL MEET OR EXCEED AWPA STANDARDS (UC4B) FOR PRESERVATION TREATMENT AS APPLICABLE, 0.6 ACQ OR ACZA, NO CCA.
7. ALL CROSS BRACING SHALL BE #2 GRADE MATERIAL WITH A MINIMUM OF 2.5 CCA UC5B AND SECURED WITH (2) ¾"ø HDG BOLTS IN PRE–DRILLED HOLES.
8. ALL FASTENERS SHALL BE STAINLESS STEEL OR HOT–DIP ZINC COATED IN ACCORDANCE WITH ASTM A 153 AS INDICATED ON PLANS.

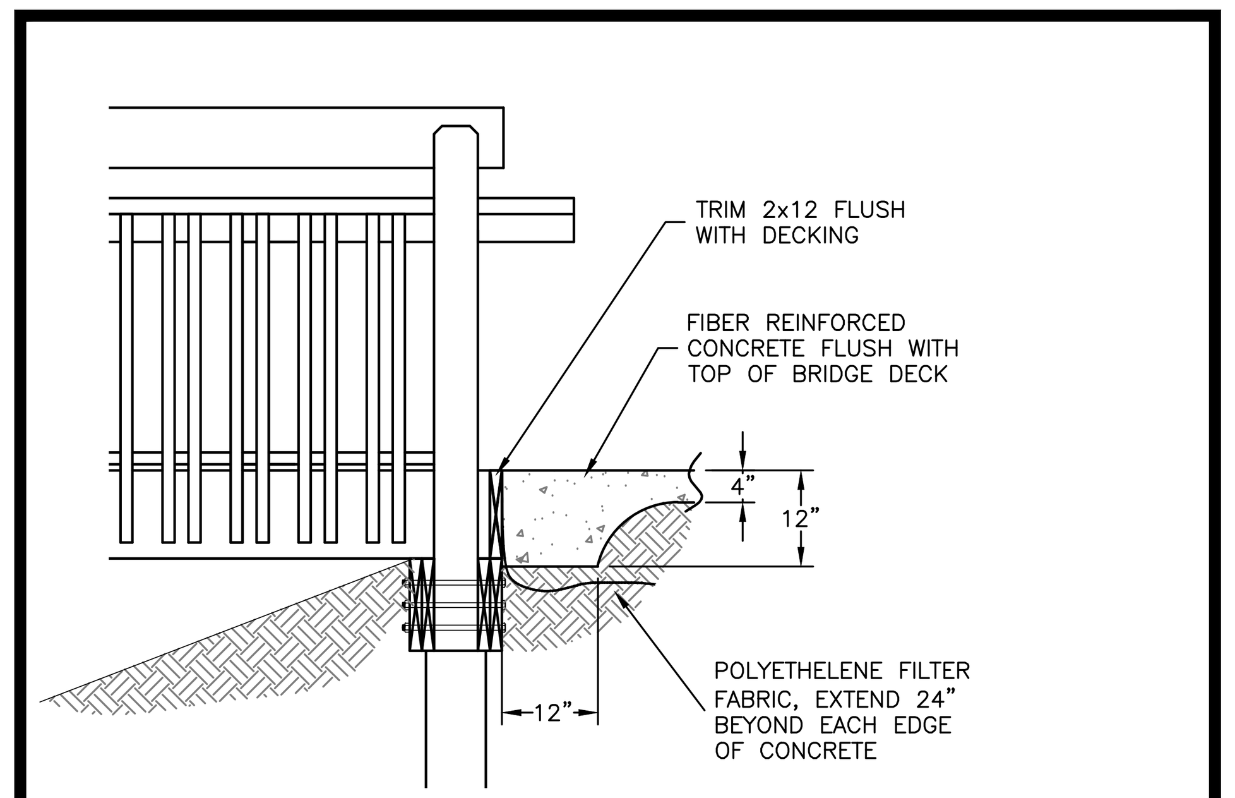
FINAL DRAWING FOR BIDDING PURPOSES ONLY (RELEASED 01.18.2021)



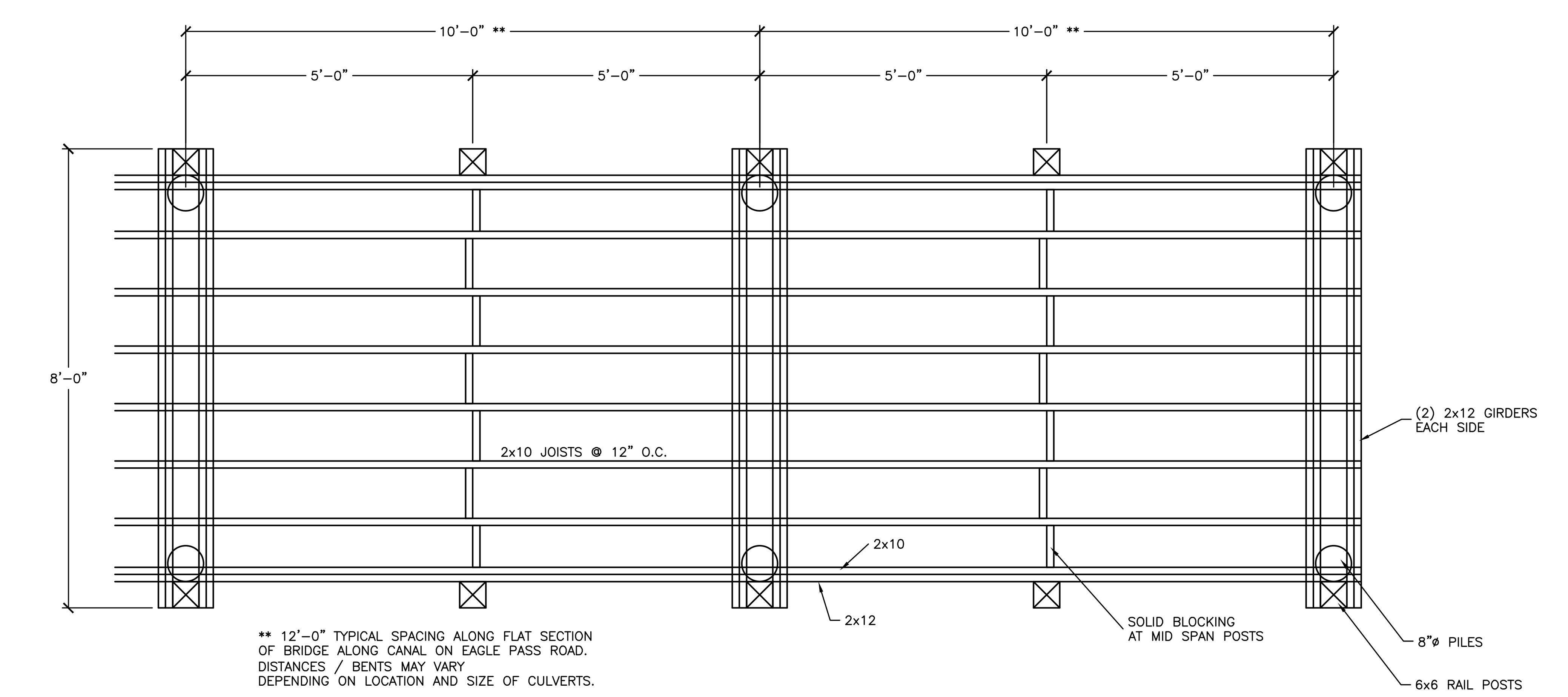
HANDRAIL DETAIL
NTS



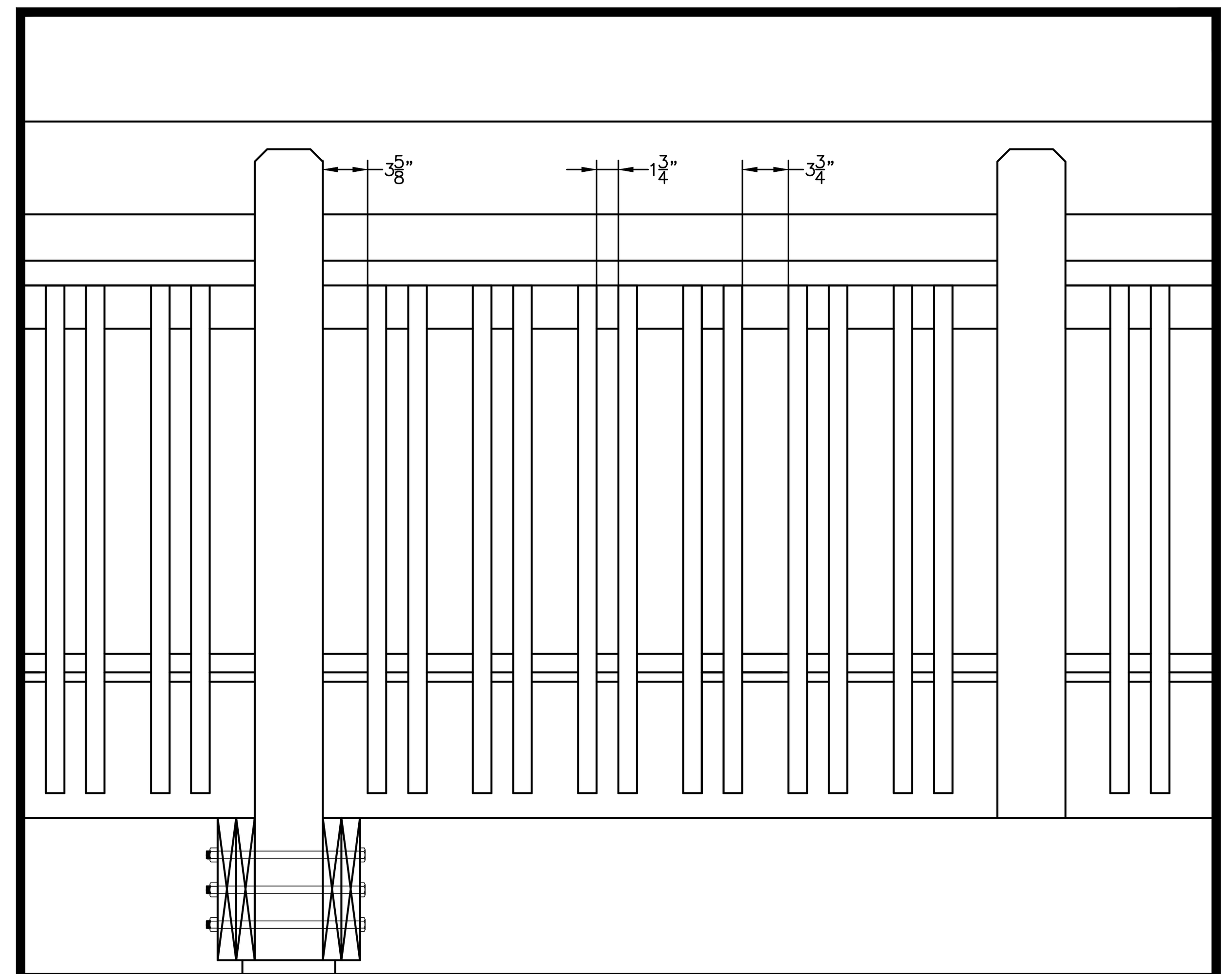
GIRDER CONNECTION DETAIL
NTS



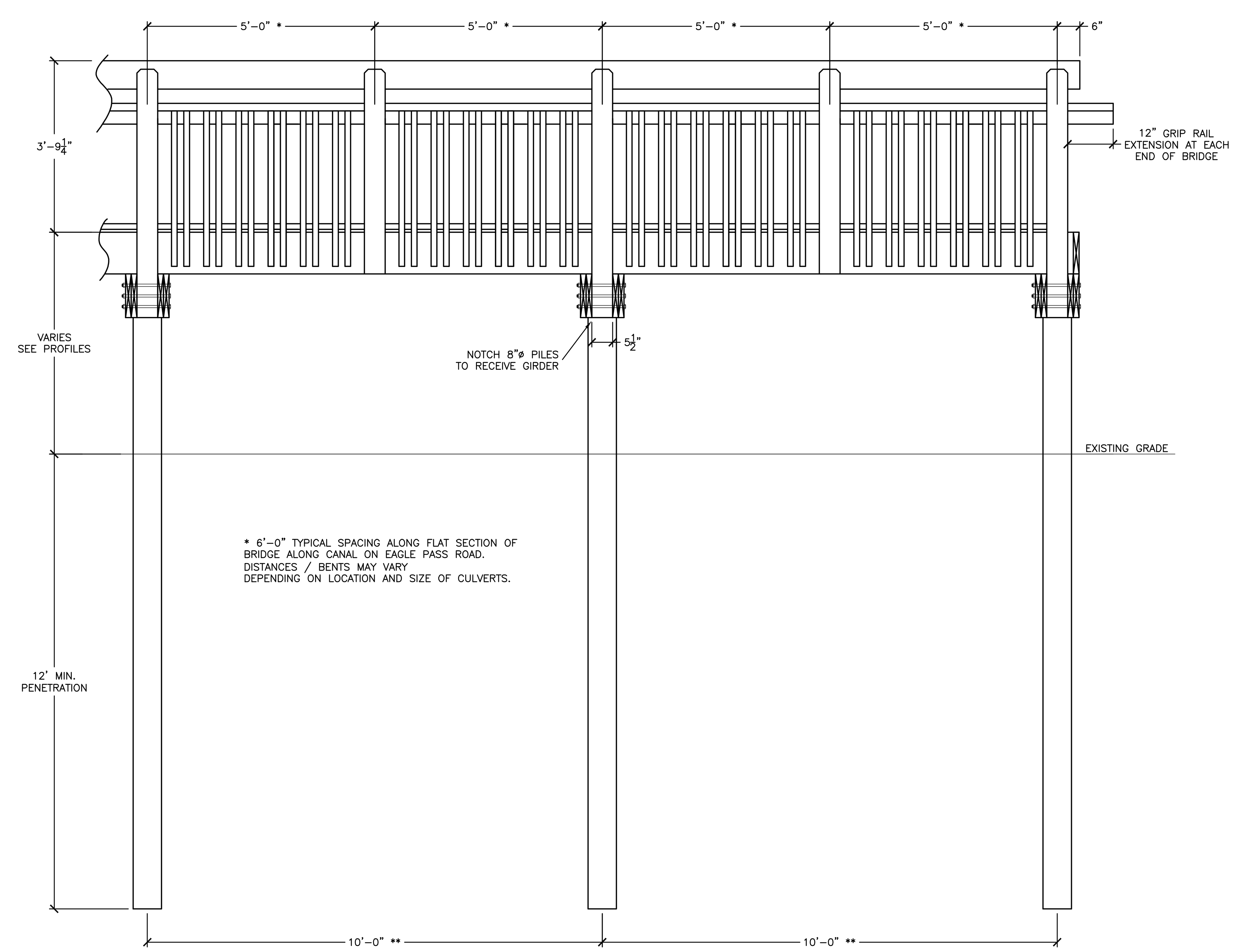
CONCRETE TO WALKWAY TRANSITION
NTS



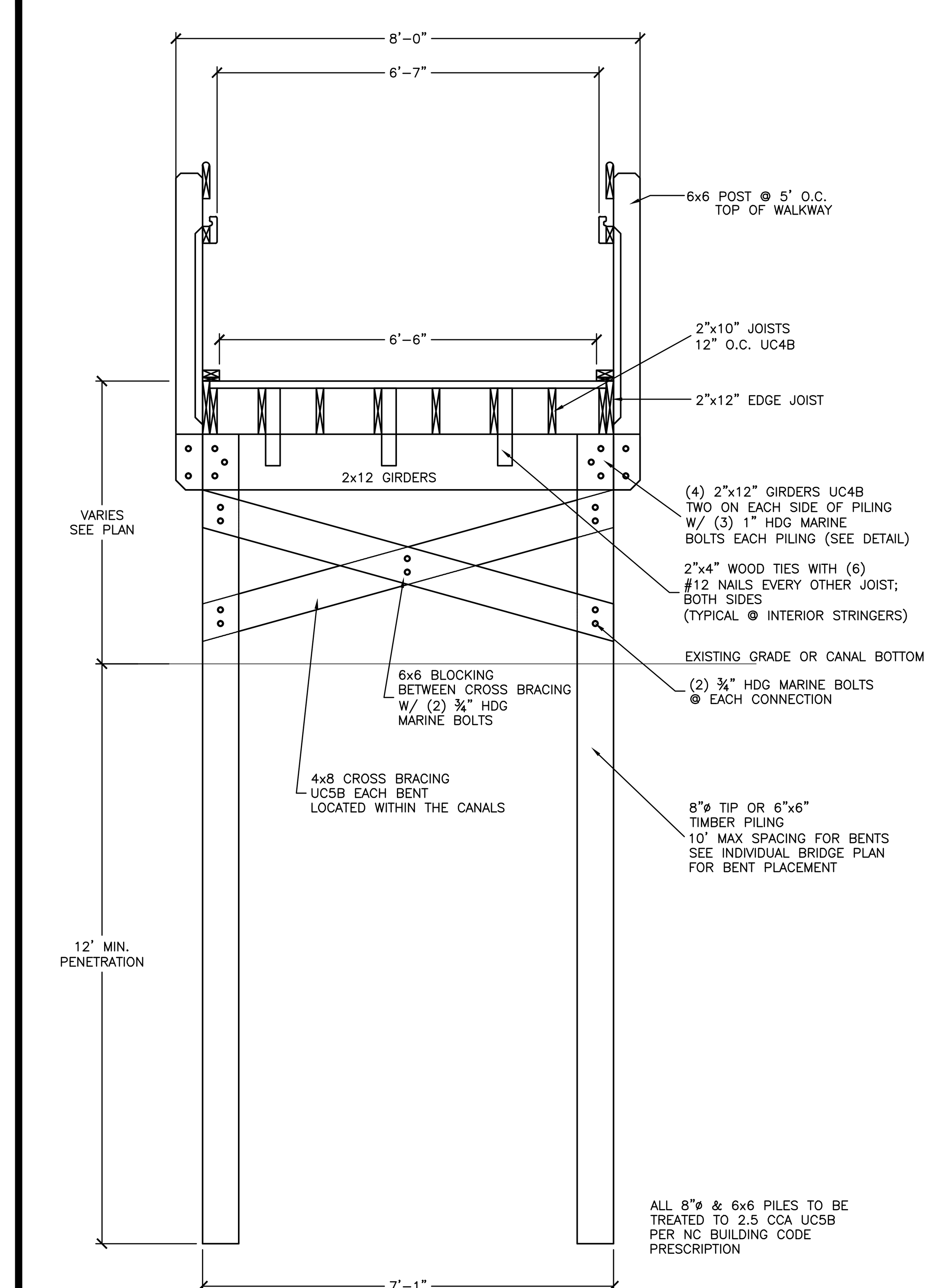
TYPICAL JOIST FRAMING SECTION
SCALE: 1/2" = 1'–0"



PICKET SPACING DETAIL
SCALE: 1" = 1'–0"



PROFILE VIEW DETAIL
SCALE: 1/2" = 1'–0"



WALKWAY DETAIL
SCALE: 1/2" = 1'–0"

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www.AlbemarleAssociates.com
Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL SEAL 16759 ENGINEER JOHN M. DELUCIA, PE

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02.13.2020	ENVIRONMENTAL PERMITTING	KCA
2	11.12.2020	NCDOT SUBMITTAL	KCA

BRIDGE SECTIONS & CONSTRUCTION DETAILS

SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD
HATTERAS VILLAGE COMMUNITY CENTER DISTRICT

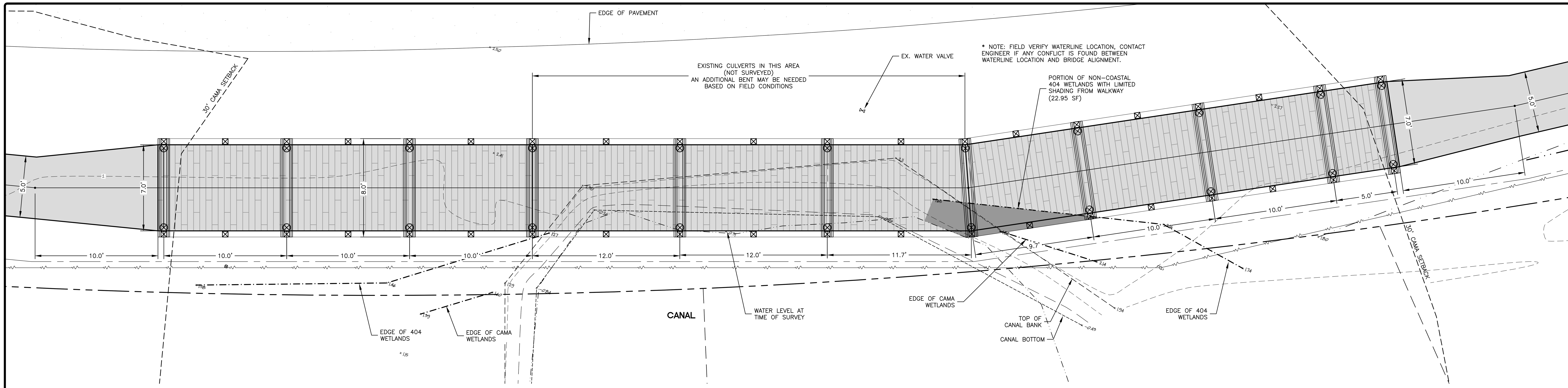
HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

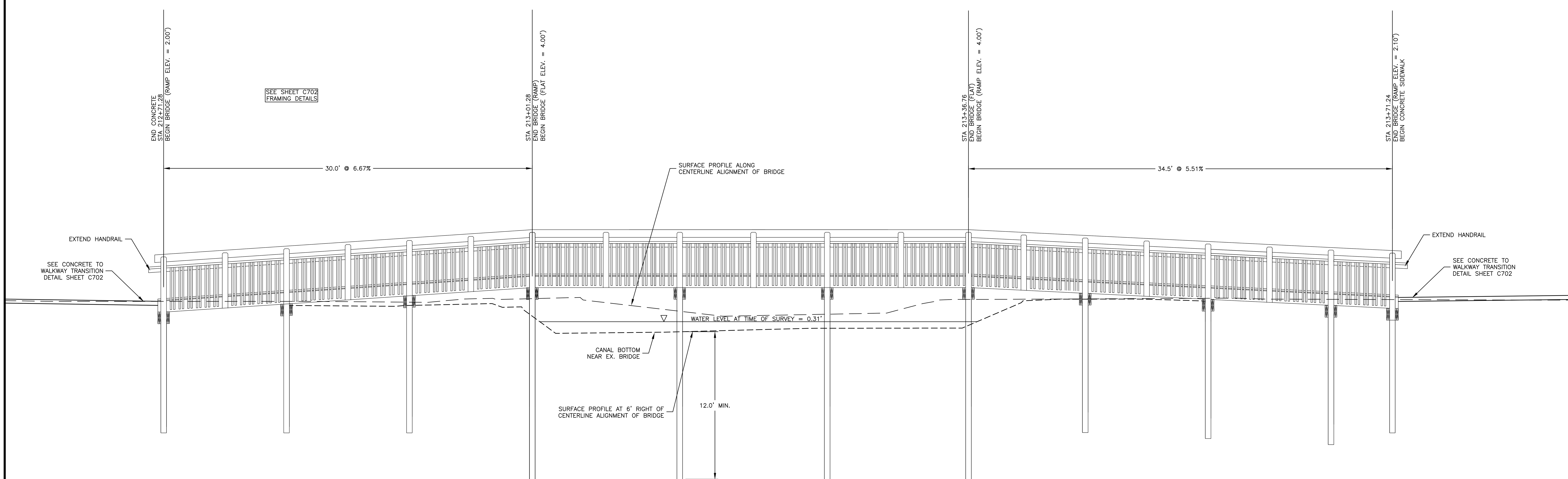
DATE:	01.08.2020
SURVEYED:	N/A
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: NTS

C702

PROJ. NO. 08343B





PEDESTRIAN BRIDGE AT CANAL
ON EAGLE PASS ROAD
SCALE: 1/4" = 1'-0"

FINAL DRAWING
FOR BIDDING
PURPOSES ONLY
(RELEASED 01.18.2021)

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Cert. of Licensure No. C-1027

NORTH CAROLINA PROFESSIONAL SEAL 16759 ENGINEER JOHN M. DELUCIA

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	11.17.2020	ADDED 'SHADED' AREA OF 404 WETLANDS	KCA

BRIDGE PLAN (EAGLE PASS ROAD)

HATTERAS VILLAGE COMMUNITY CENTER DISTRICT
SIDEWALKS ALONG NC 12 HIGHWAY AND EAGLE PASS ROAD

HATTERAS ISLAND | HATTERAS TOWNSHIP | DARE COUNTY | NORTH CAROLINA

DATE:	11.12.2020
SURVEYED:	SSP
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08343B

SCALE: 1/4"=1'

C703

PROJ. NO. 08343B