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TO #09 CORRECTIVE REPAIRS

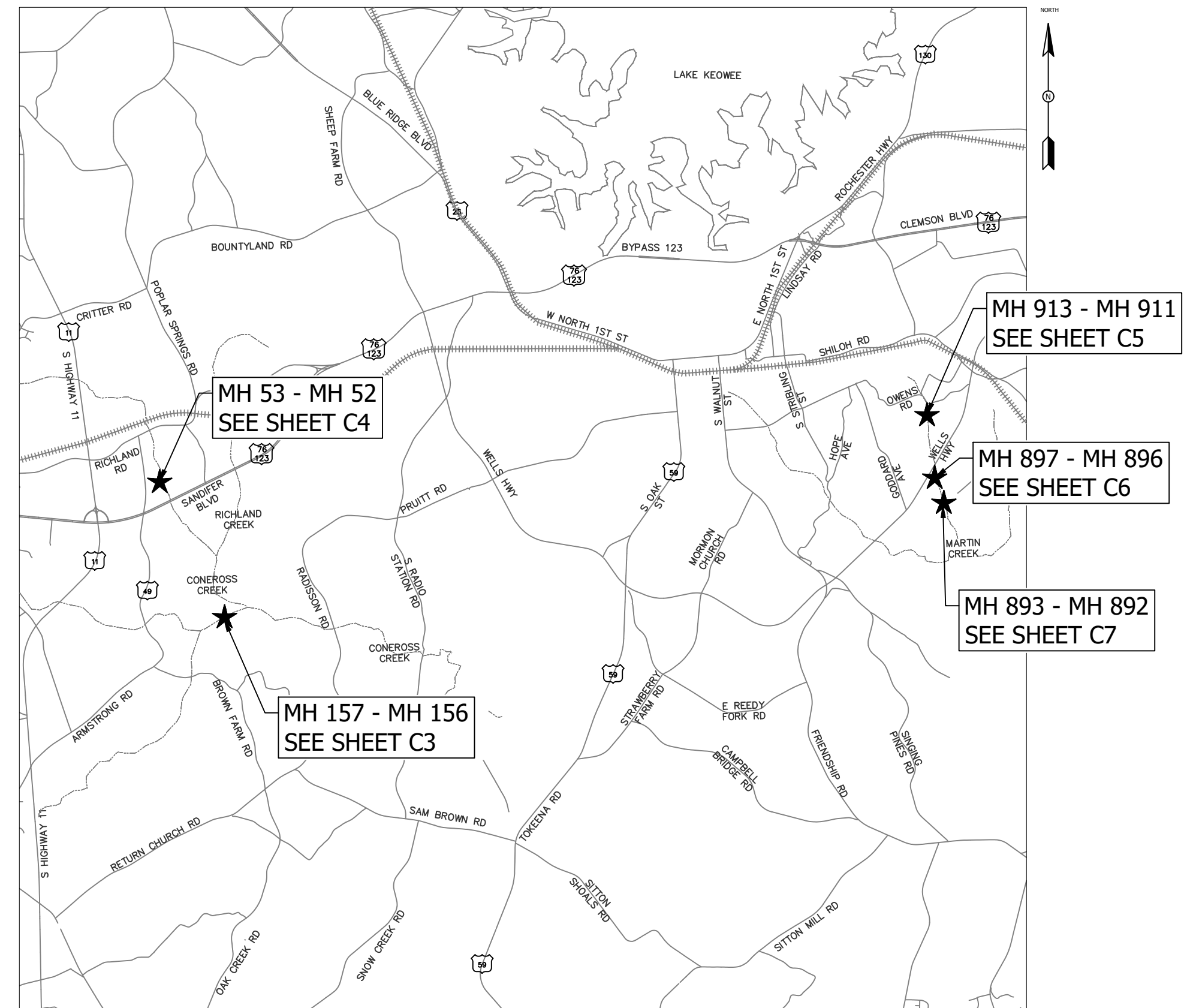
FOR

OCONEE JOINT REGIONAL SEWER AUTHORITY

SENECA, SOUTH CAROLINA 29678

W.K. DICKSON PROJECT NO: 20230009.00.GV

7 June 2023



VICINITY MAP
SCALE: 1" = 5000'

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OCONEE JOINT REGIONAL SEWER AUTHORITY

623 RETURN CHURCH ROAD
SENECA, SOUTH CAROLINA 29678

NOTICE TO CONTRACTOR

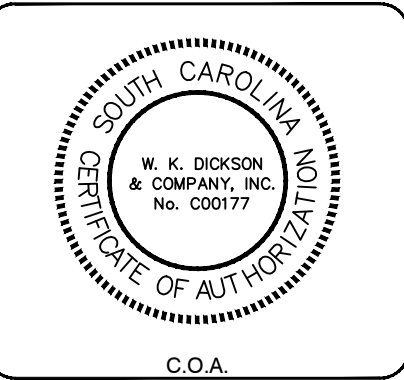
- PRIOR TO CONSTRUCTION, DIGGING, OR EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA(S) OF CONSTRUCTION, WHETHER INDICATED ON THE PLANS OR NOT. CALL "811" A MINIMUM OF 72 HOURS PRIOR TO DIGGING OR EXCAVATING. REPAIRS TO ANY UTILITY DAMAGED RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



**Know what's below.
Call before you dig**


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PROFESSIONAL SEAL

REVISION RECORD	NO.	DATE	DESCRIPTION

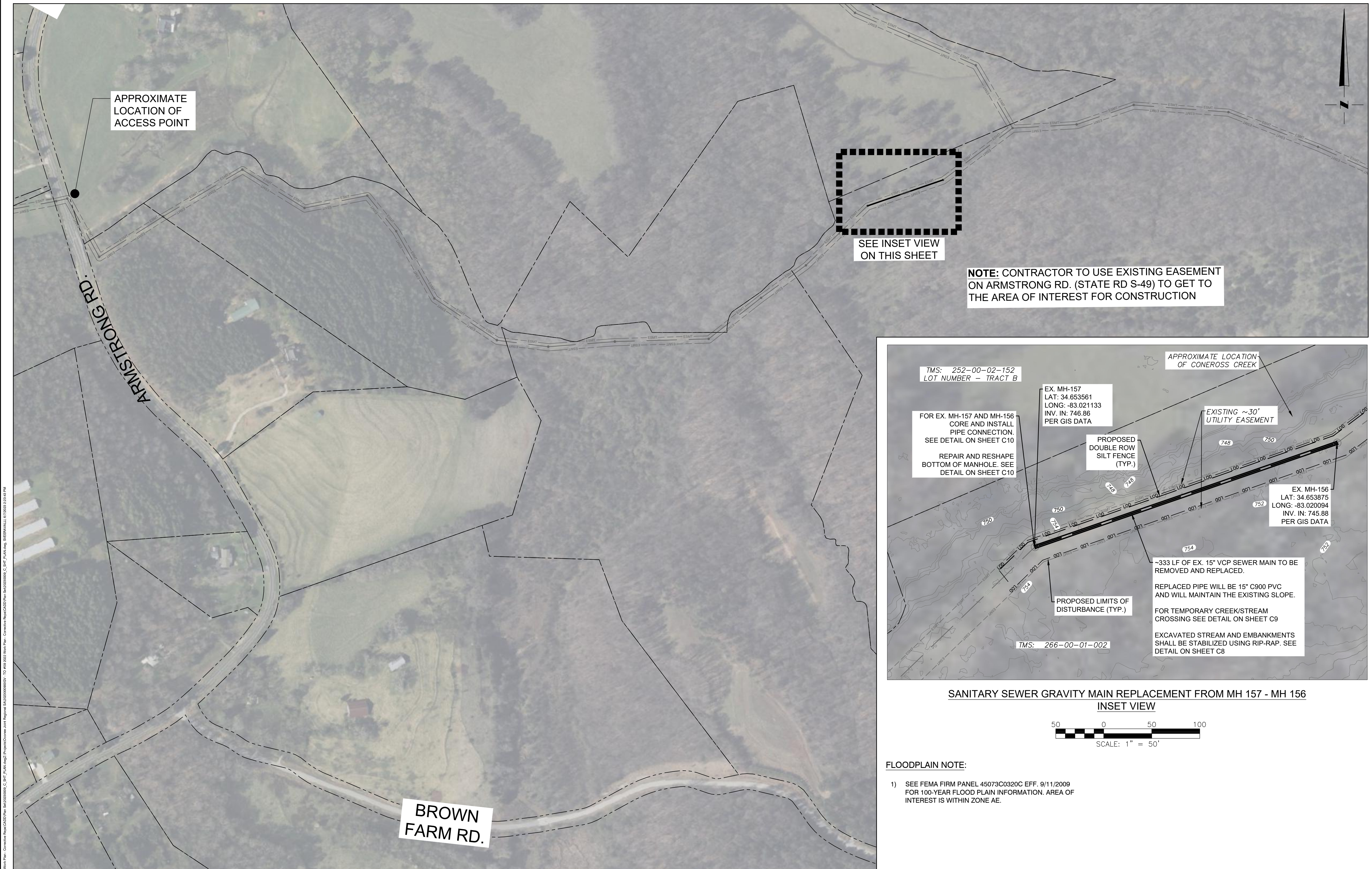
PROJECT NAME: TO #09 CORRECTIVE REPAIRS FOR OCONEE JOINT REGIONAL SEWER AUTHORITY

 DRAWING TITLE: COVER SHEET

PROJ. MGR.: JFS
 DESIGN BY: JFS
 DRAWN BY: SV
 PROJ. DATE: JUN. 2023
 DRAWING NUMBER:
C1
 WKD PROJ. NO.: 20230009.00.GV

BID SET - NOT FOR CONSTRUCTION

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APPROXIMATE
LOCATION OF
ACCESS POINT

SEE INSET VIEW
ON THIS SHEET

NOTE: CONTRACTOR TO USE EXISTING EASEMENT
ON ARMSTRONG RD. (STATE RD S-49) TO GET TO
THE AREA OF INTEREST FOR CONSTRUCTION

TMS: 252-00-02-152
LOT NUMBER - TRACT B

FOR EX. MH-157 AND MH-156
CORE AND INSTALL
PIPE CONNECTION.
SEE DETAIL ON SHEET C10

REPAIR AND RESHAPE
BOTTOM OF MANHOLE. SEE
DETAIL ON SHEET C10

EX. MH-157
LAT: 34.653561
LONG: -83.021133
INV. IN: 746.86
PER GIS DATA

PROPOSED
DOUBLE ROW
SILT FENCE
(TYP.)

EXISTING ~30'
UTILITY EASEMENT

EX. MH-156
LAT: 34.653875
LONG: -83.020094
INV. IN: 745.88
PER GIS DATA

~333 LF OF EX. 15" VCP SEWER MAIN TO BE
REMOVED AND REPLACED.

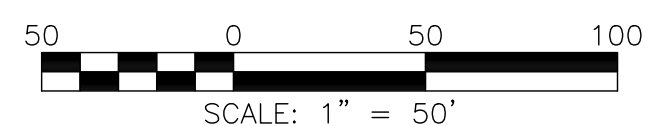
REPLACED PIPE WILL BE 15" C900 PVC
AND WILL MAINTAIN THE EXISTING SLOPE.

FOR TEMPORARY CREEK/STREAM
CROSSING SEE DETAIL ON SHEET C9

EXCAVATED STREAM AND EMBANKMENTS
SHALL BE STABILIZED USING RIP-RAP. SEE
DETAIL ON SHEET C8

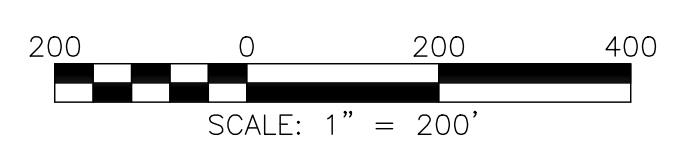
TMS: 266-00-01-002

SANITARY SEWER GRAVITY MAIN REPLACEMENT FROM MH 157 - MH 156
INSET VIEW



FLOODPLAIN NOTE:

- SEE FEMA FIRM PANEL 45073C0320C EFF. 9/11/2009 FOR 100-YEAR FLOOD PLAIN INFORMATION. AREA OF INTEREST IS WITHIN ZONE AE.



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REGISTERED PROFESSIONAL ENGINEER
STATE OF SOUTH CAROLINA
NO. 000177
C.O.A.

PROFESSIONAL SEAL

NO.	DATE	DESCRIPTION	BY

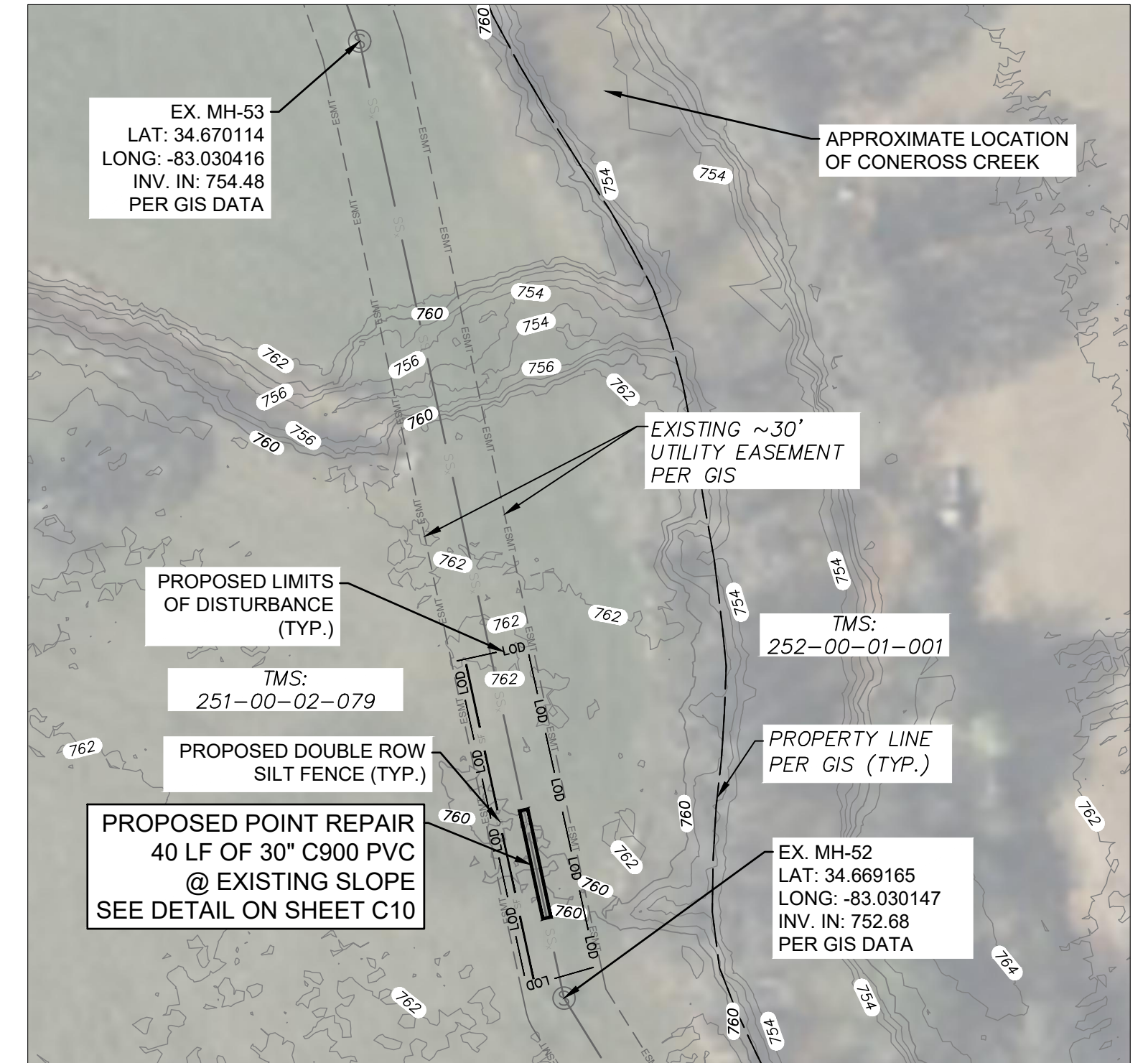
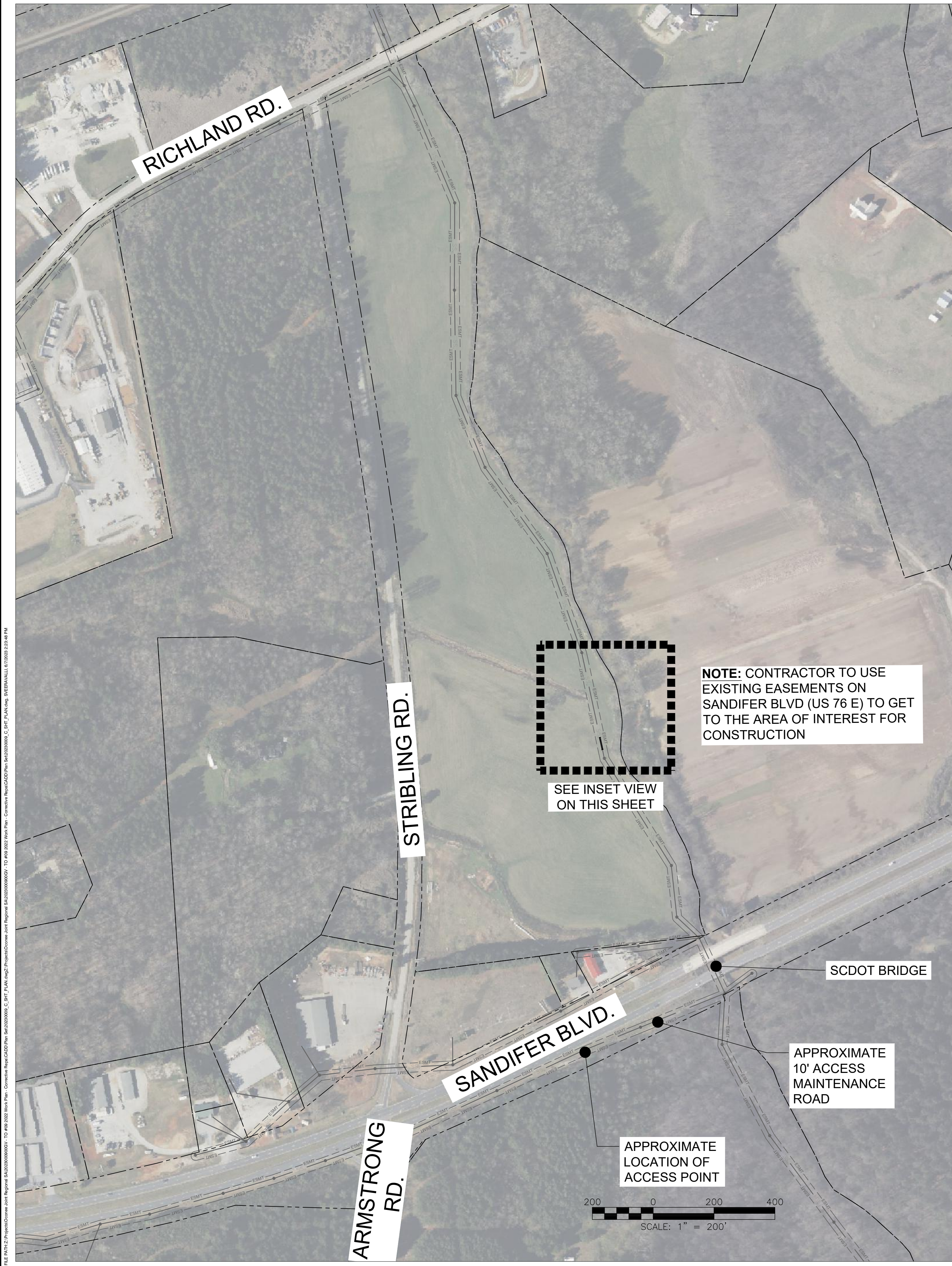
PROJECT NAME: TO #09 CORRECTIVE REPAIRS FOR THE OCOFEE JOINT REGIONAL SEWER AUTHORITY 623 RETURN CHURCH ROAD

DRAWING TITLE: SANITARY SEWER GRAVITY MAIN REPLACEMENT FROM MH 157 - MH 156

PROJ. MGR.: JFS
DESIGN BY: JFS
DRAWN BY: SV
PROJ. DATE: JUN. 2023
DRAWING NUMBER: C3
WKD PROJ. NO.: 20230009.00.GV

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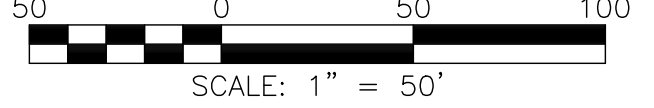
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SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 53 - MH 52

INSET VIEW

SCALE: 1" = 50'



FLOODPLAIN NOTE:

- 1) SEE FEMA FIRM PANEL 45073C0320C EFF. 9/11/2009 FOR 100-YEAR FLOOD PLAIN INFORMATION. AREA OF INTEREST IS WITHIN ZONE AE.

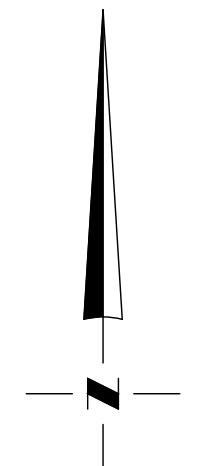
NOTE:

CONTRACTOR WILL USE THE EXISTING OJRSA MAINTENANCE ROAD AND TRAVERSE UNDER THE SCDOT BRIDGE (SANDIFER BLVD, US 76 E) TO ACCESS THE REPAIR LOCATION.

CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE CLEARANCES FROM THE BOTTOM OF THE BRIDGE TO THE GROUND IN COORDINATION WITH SCDOT AND DETERMINING WHAT EQUIPMENT AND MATERIALS CAN SAFELY TRAVERSE UNDER THE BRIDGE WITHOUT DAMAGE TO SCDOT OR SURROUNDING PROPERTY.

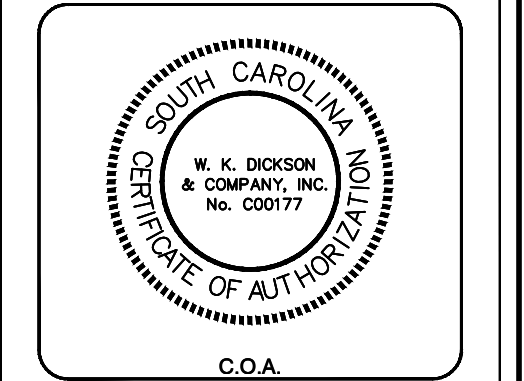
CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE WITH NO ADDITIONAL EXPENSE TO THE OWNER.

IF DETERMINED THE SCDOT CLEARANCES ARE NOT SUITABLE TO TRAVERSE REQUIRED EQUIPMENT AND MATERIALS, CONTRACTOR SHALL NOTIFY THE OWNER TO COORDINATE ALTERNATIVE ACCESS ROUTES.



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REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: TO #09 CORRECTIVE REPAIRS FOR THE OCONEE JOINT REGIONAL SEWER AUTHORITY SENECA, SOUTH CAROLINA

DRAWING TITLE: SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 53 - MH 52

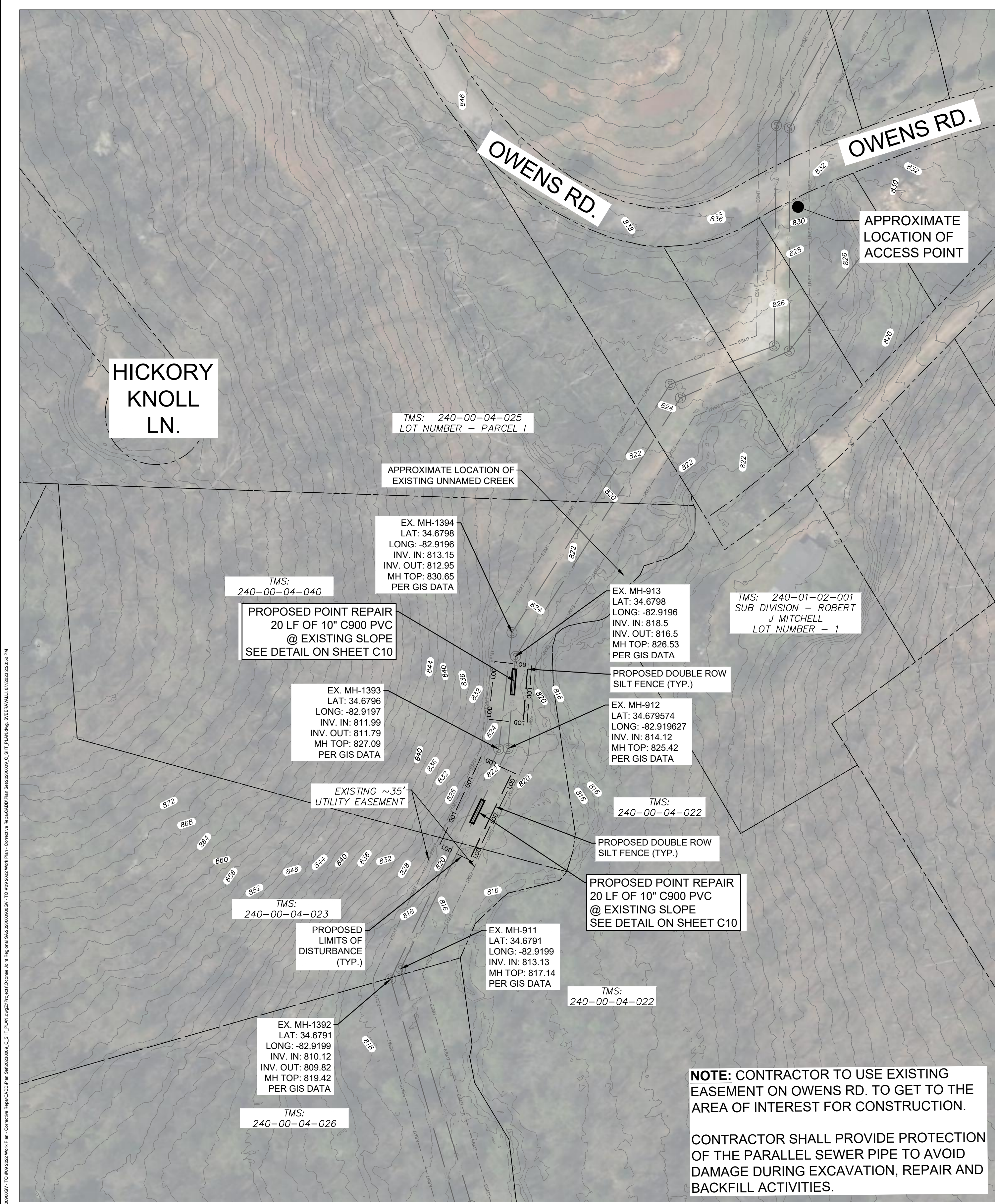
PROJ. MGR.: JFS
DESIGN BY: JFS
DRAWN BY: SV
PROJ. DATE: JUN. 2023
DRAWING NUMBER:

C4

WKD PROJ. NO.: 20230009.00.GV

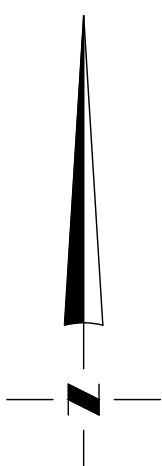
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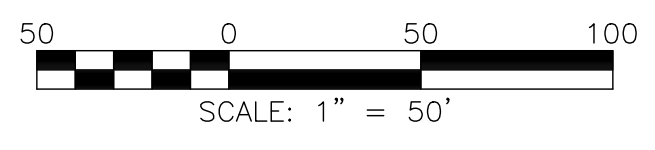
NOTE: CONTRACTOR TO USE EXISTING EASEMENT ON OWENS RD. TO GET TO THE AREA OF INTEREST FOR CONSTRUCTION.

CONTRACTOR SHALL PROVIDE PROTECTION OF THE PARALLEL SEWER PIPE TO AVOID DAMAGE DURING EXCAVATION, REPAIR AND BACKFILL ACTIVITIES.

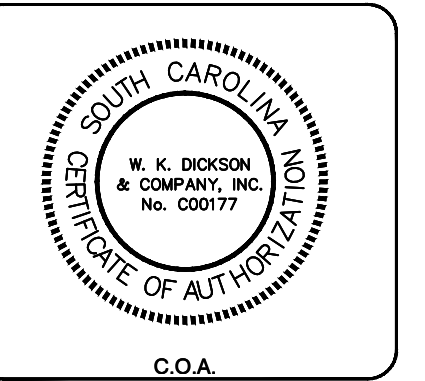


FLOODPLAIN NOTE:
 1) SEE FEMA FIRM PANEL 45073C0345C EFF. 9/11/2009 FOR 100-YEAR FLOOD PLAIN INFORMATION. PARTS OF AREA OF INTEREST IS WITHIN ZONE AE.

SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 913-MH 912-MH 911
 PLAN VIEW



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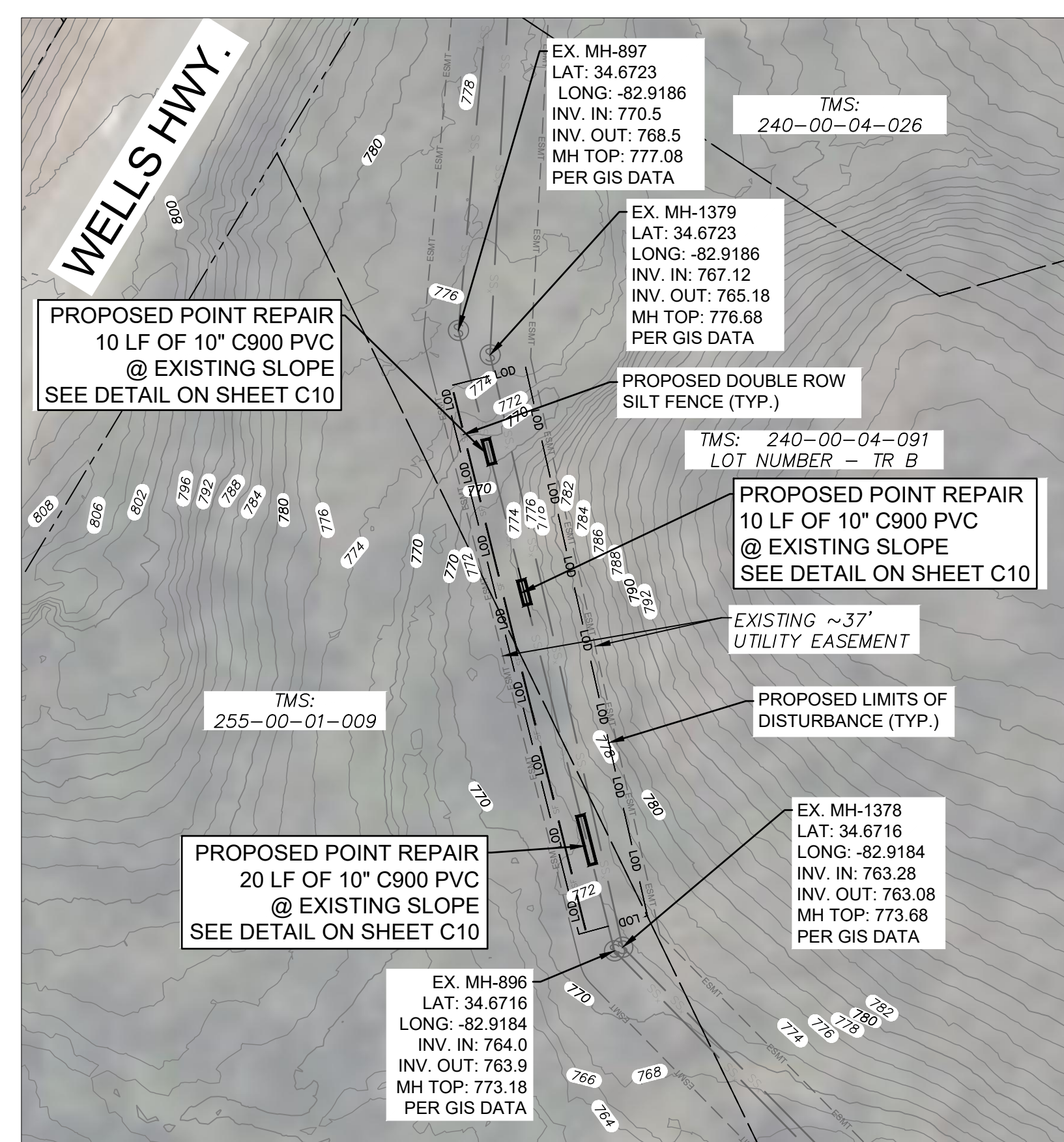
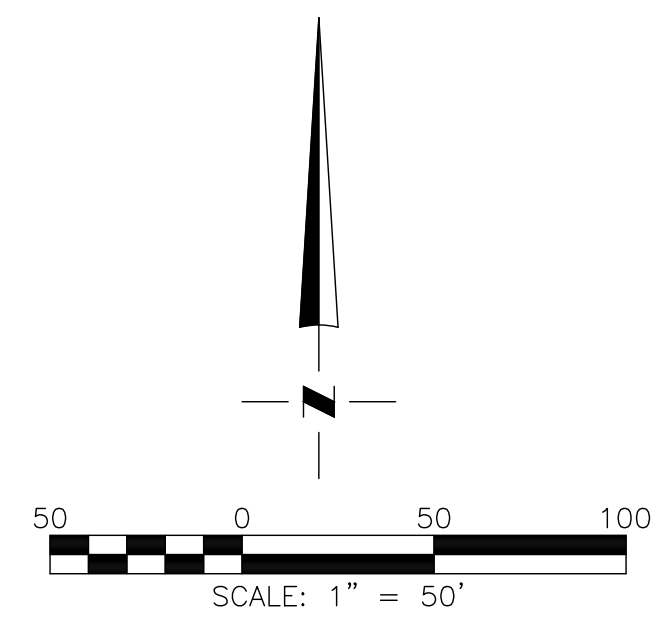
PROJECT NAME: TO #09 CORRECTIVE REPAIRS FOR THE OCONEE JOINT REGIONAL SEWER AUTHORITY SENECA, SOUTH CAROLINA
DRAWING TITLE: SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 913-MH 912-MH 911

PROJ. MGR.: JFS
DESIGN BY: JFS
DRAWN BY: SV
PROJ. DATE: JUN. 2023
DRAWING NUMBER:

C5
 WKD PROJ. NO.: 20230009.00.GV

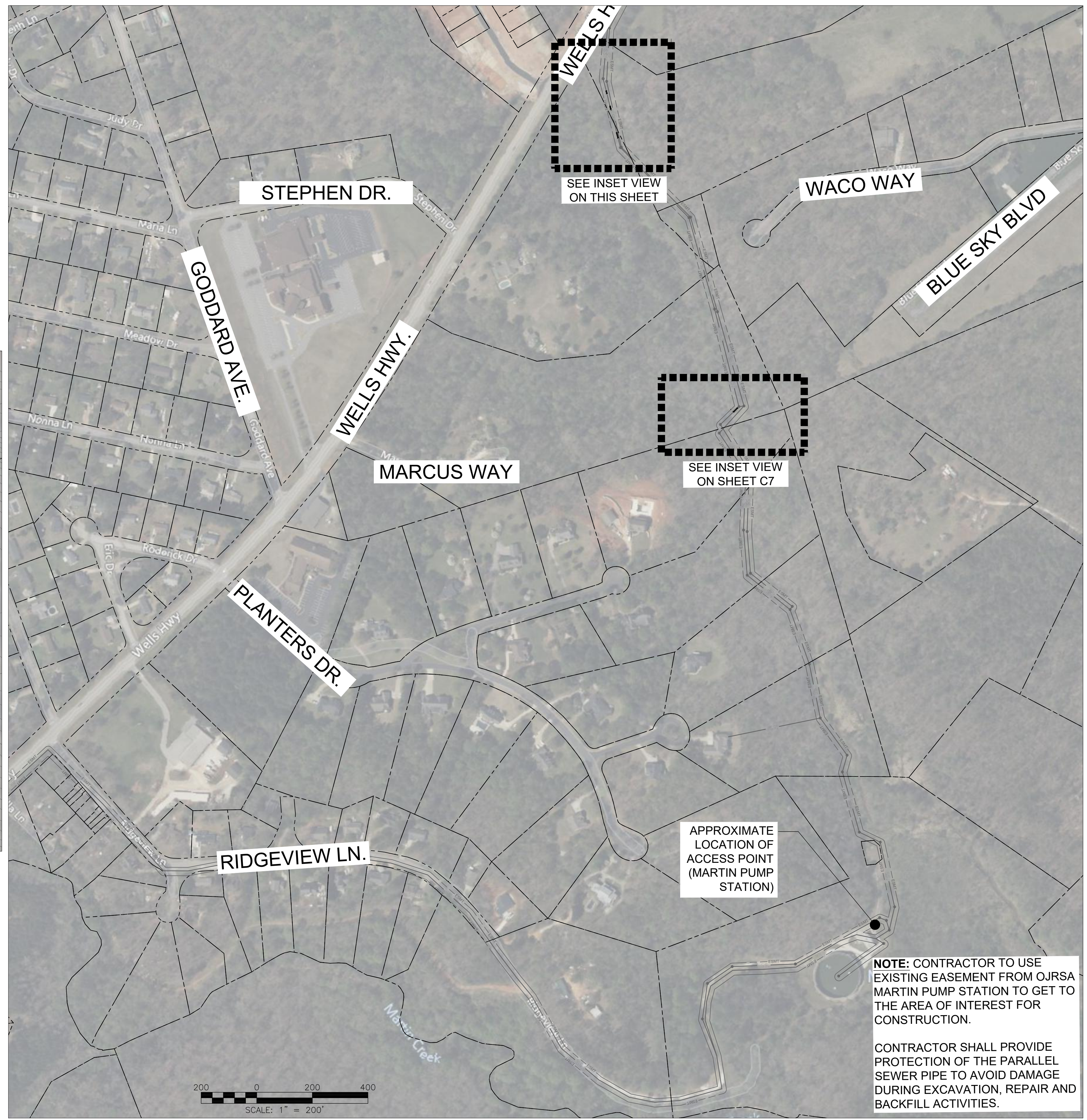
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SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 897 - MH 896
 INSET VIEW
 SCALE: 1" = 50'

FLOODPLAIN NOTE:
 1) SEE FEMA FIRM PANEL 45079C0345C EFF. 9/11/2009 FOR 100-YEAR FLOOD PLAIN INFORMATION. PARTS OF AREA OF INTEREST IS WITHIN ZONE AE.

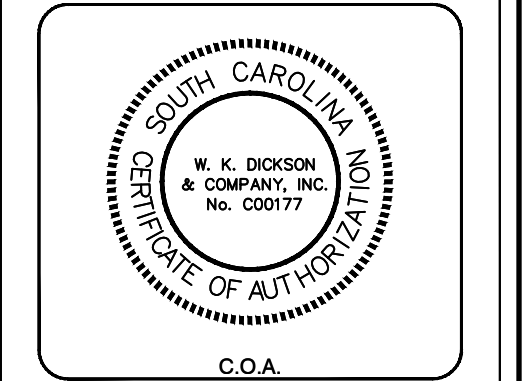


APPROXIMATE
 LOCATION OF
 ACCESS POINT
 (MARTIN PUMP
 STATION)

NOTE: CONTRACTOR TO USE EXISTING EASEMENT FROM OJRSA MARTIN PUMP STATION TO GET TO THE AREA OF INTEREST FOR CONSTRUCTION.

CONTRACTOR SHALL PROVIDE PROTECTION OF THE PARALLEL SEWER PIPE TO AVOID DAMAGE DURING EXCAVATION, REPAIR AND BACKFILL ACTIVITIES.

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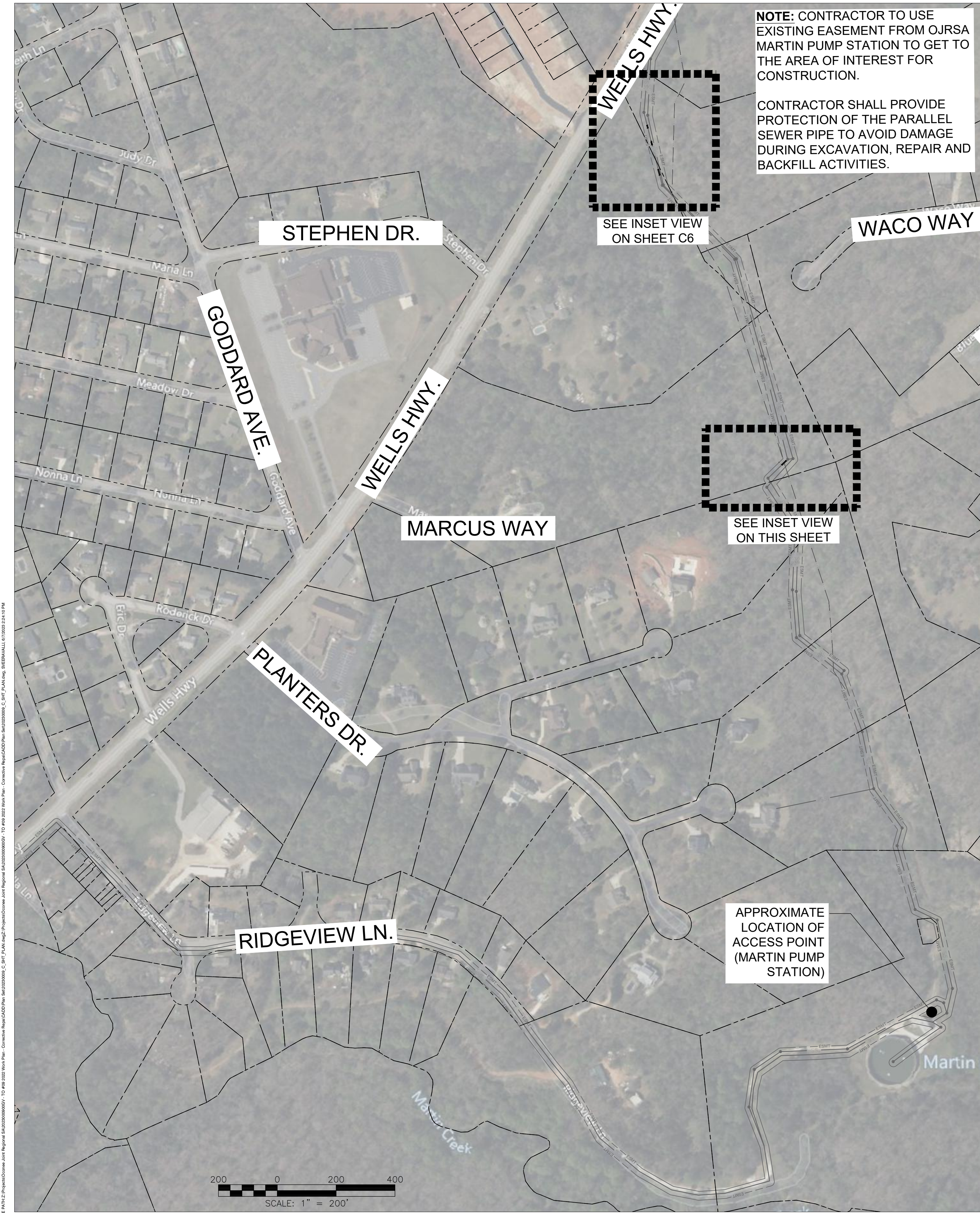
NO.	DATE	DESCRIPTION	BY

PROJECT NAME: TO #09 CORRECTIVE REPAIRS FOR THE OCONEE JOINT REGIONAL SEWER AUTHORITY SENECA, SOUTH CAROLINA
DRAWING TITLE: SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 897 - MH 896

PROJ. MGR.: JFS
DESIGN BY: JFS
DRAWN BY: SV
PROJ. DATE: JUN. 2023
DRAWING NUMBER:
C6
 WKD PROJ. NO.: 20230009.00.GV

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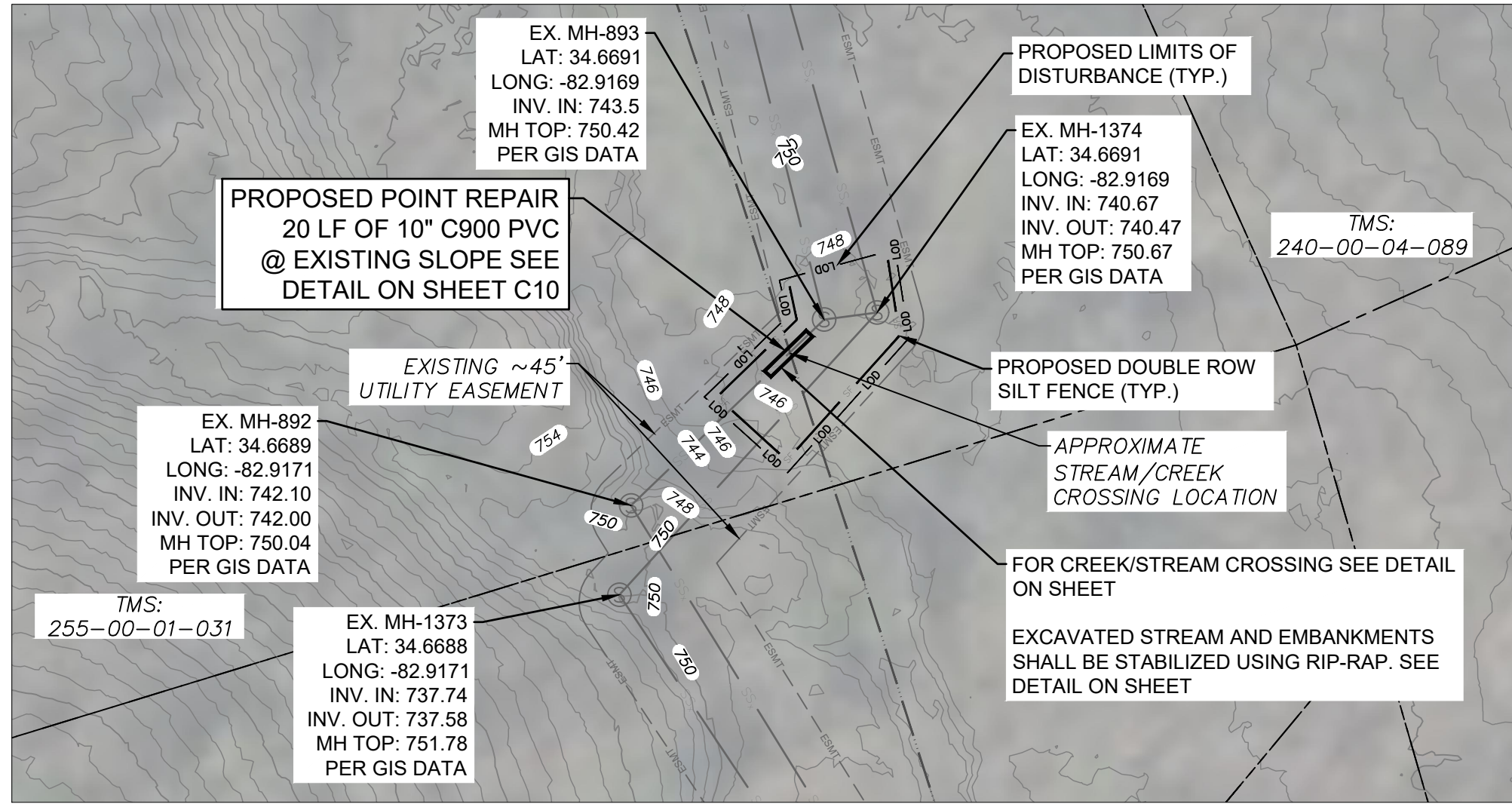
NOTE: CONTRACTOR TO USE EXISTING EASEMENT FROM OJRSA MARTIN PUMP STATION TO GET TO THE AREA OF INTEREST FOR CONSTRUCTION.

CONTRACTOR SHALL PROVIDE PROTECTION OF THE PARALLEL SEWER PIPE TO AVOID DAMAGE DURING EXCAVATION, REPAIR AND BACKFILL ACTIVITIES.

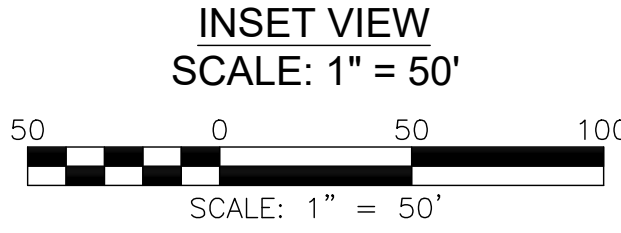
SEE INSET VIEW ON SHEET C6

SEE INSET VIEW ON THIS SHEET

APPROXIMATE LOCATION OF ACCESS POINT (MARTIN PUMP STATION)

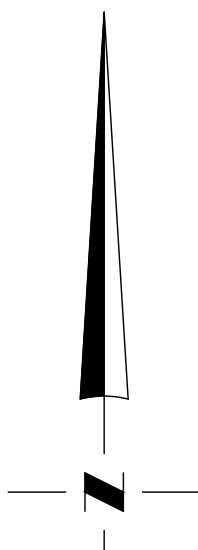


SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 893 - MH 892

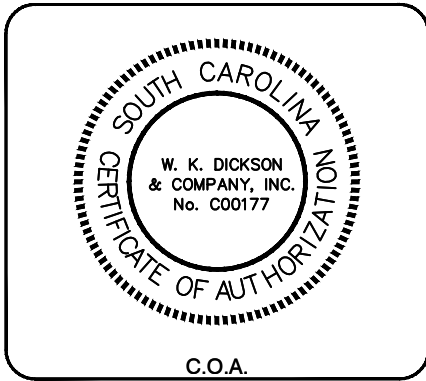


FLOODPLAIN NOTE:

- 1) SEE FEMA FIRM PANEL 45073C0345C EFF. 9/11/2009 FOR 100-YEAR FLOOD PLAIN INFORMATION. PARTS OF AREA OF INTEREST IS WITHIN ZONE AE.



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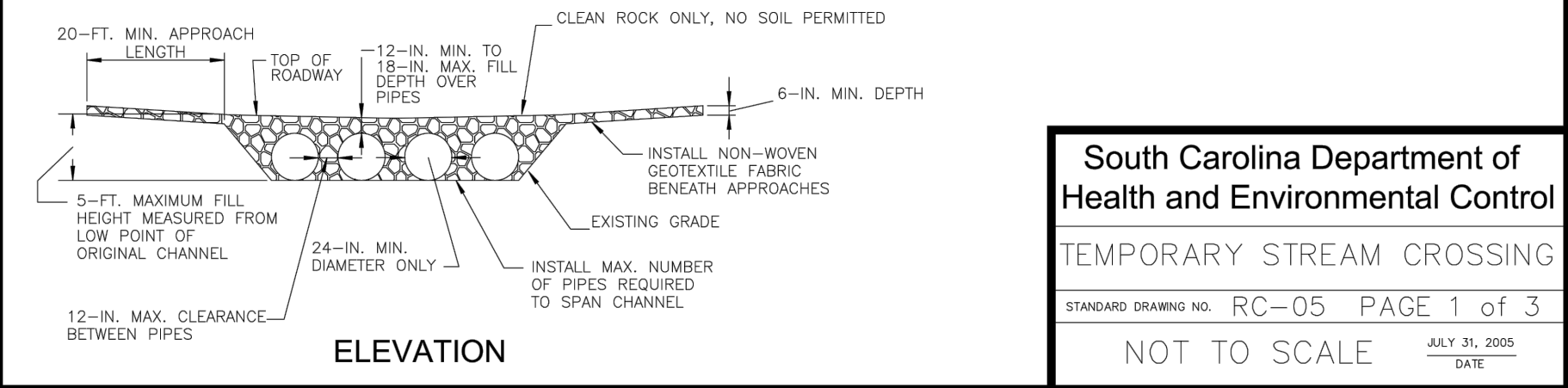
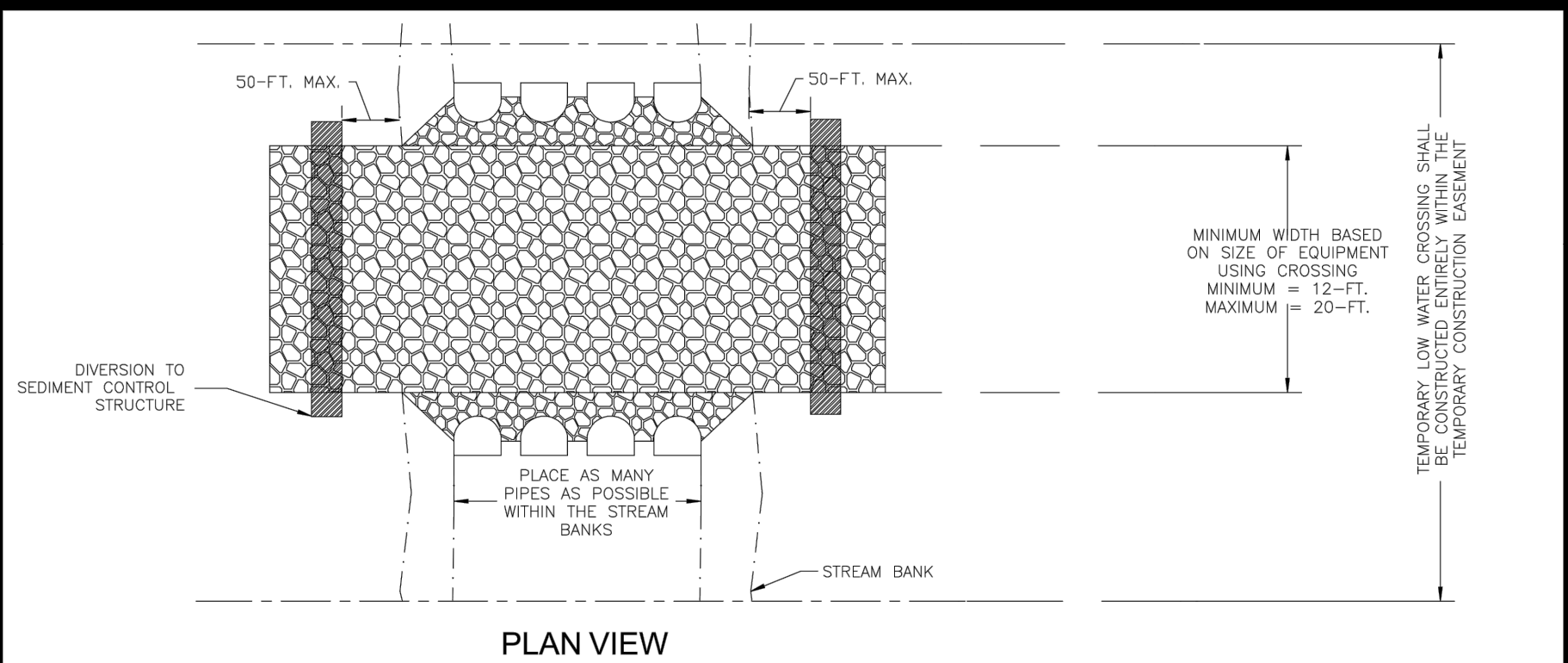
NO.	DATE	DESCRIPTION	BY

PROJECT NAME: TO #08 CORRECTIVE REPAIRS FOR THE OCONEE JOINT REGIONAL SEWER AUTHORITY 623 RETURN CHURCH ROAD
DRAWING TITLE: SANITARY SEWER GRAVITY MAIN POINT REPAIR MH 893 - MH 892

PROJ. MGR.: JFS
DESIGN BY: JFS
DRAWN BY: SV
PROJ. DATE: JUN. 2023
DRAWING NUMBER: **C7**
WKD PROJ. NO.: 20230009.00.GV

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South Carolina Department of Health and Environmental Control
 TEMPORARY STREAM CROSSING
 STANDARD DRAWING NO. RC-05 PAGE 1 of 3
 NOT TO SCALE JULY 31, 2005 DATE

TEMPORARY STREAM LOW WATER CROSSING

Prior to constructing a temporary stream crossing, the owner/person financially responsible for the project must submit an Application for Permit to Construct Across or Along a Stream to the South Carolina Department of Health and Environmental Control (SC DHEC). Temporary stream crossings require authorization. Refer to the US Army Corps of Engineers and SCDHEC nationwide 401 and 404 regulations for information on permitting requirements.

Installation:
 Crossings shall be installed prior to any other activities.
 Pump-around diversions shall be installed and maintained prior to any excavation and during the installation of the crossing.
 Crossings shall be placed in temporary construction easements only.
 The temporary waterway crossing shall be at right angles to the stream. Where approach conditions dictate, the crossing may vary 15 degrees from a line drawn perpendicular to the centerline of the stream at the intended crossing location. However every effort shall be taken to install the crossing perpendicular to the stream. All fill materials associated with the roadway approach shall be limited to a maximum height of 2-feet above the existing flood plain elevation.

A water diverting structure such as a dike or swale shall be constructed (across the roadway on both roadway approaches) 50-feet (maximum) on either side of the waterway crossing. This will prevent roadway surface runoff from directly entering the waterway. The 50-feet is measured from the top of the waterway bank. The flow captured in these dikes and swales shall be directed to a sediment trapping structure. If the roadway approach is constructed with a reverse grade away from the waterway, a separate diverting structure is not required.

Streambank clearing shall be kept to a minimum. Do not excavate rock bottom streambeds to install the crossing. Lay the culvert pipes on the streambed "as is" when applicable. Place as many pipes as possible within the low area of the stream. Place remaining pipes required to cross the stream on the existing stream bottom.

The maximum number of pipes as possible should be placed within the stream banks with a maximum spacing of 12-inches between pipes. The minimum sized pipe culvert that may be used is 24-inches.

The length of the culvert shall be adequate to extend the full width of the crossing, including side slopes. The slope of the culvert shall be at least 0.25 feet per foot.

Coarse aggregate of clean limestone riprap with a 6-inch D50 stone or greater will be used to form the crossing. The depth of stone cover over the culvert shall be equal to 1/2 the diameter of the culvert or 12-inches, whichever is greater but no greater than 18-inches.

South Carolina Department of Health and Environmental Control
 TEMPORARY STREAM CROSSING
 STANDARD DRAWING NO. RC-05 PAGE 2 of 3
 GENERAL NOTES JULY 31, 2005 DATE

TEMPORARY STREAM LOW WATER CROSSING

Installation:
 All fill materials associated with the roadway approach shall be limited to a maximum height of 2-feet above the existing flood plain elevation.
 The approaches to the structure shall consist of clean stone or concrete fill only with a minimum thickness of 6-inches. The minimum approach length shall be 20-feet and the width shall be equal to the width of the structure.

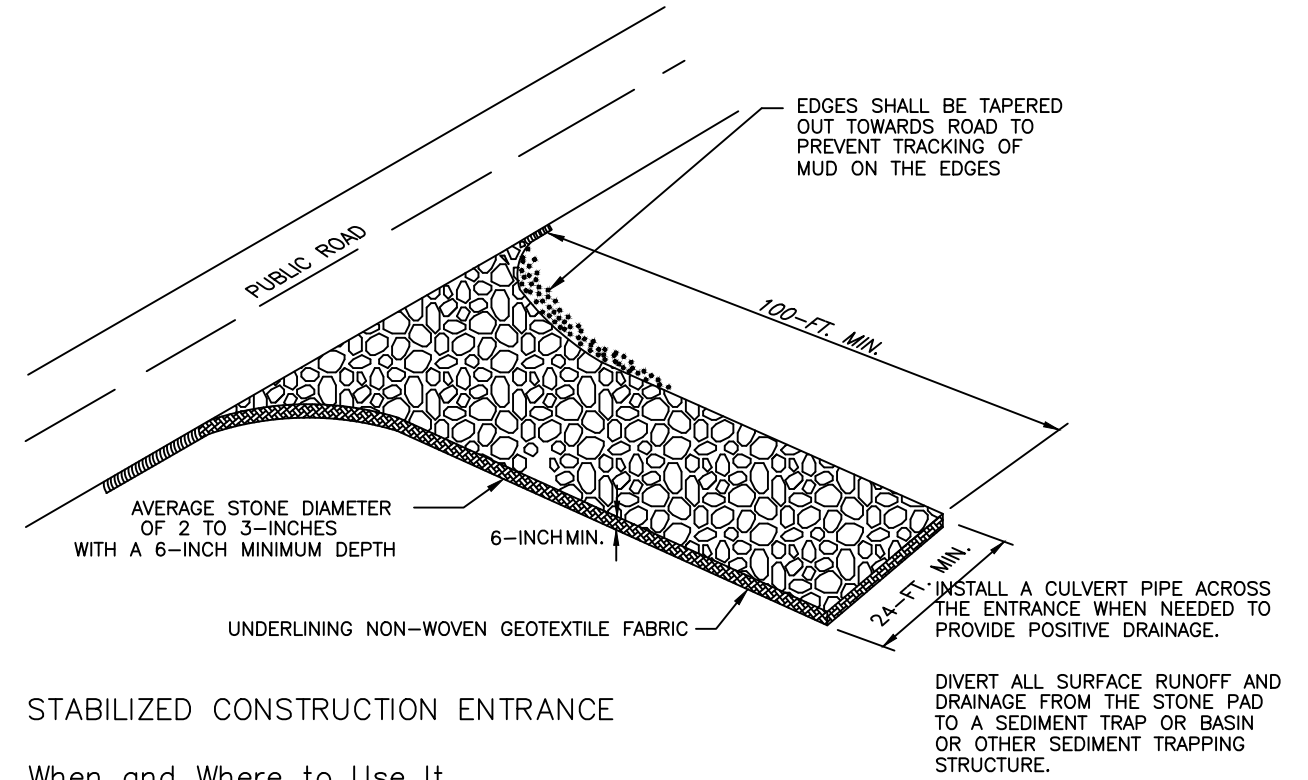
Inspection and Maintenance:
 Inspect crossings every seven (7) calendar days and within 24-hours after each rainfall event that produces 1/2-inches or more of precipitation. Check the structure integrity and for excessive sediment deposition and replace fill stone as needed.
 Clean mud and/or sediment from the roadway and do not allow it to enter the stream.
 The structure shall be removed when it is no longer required to provide access to the construction area. During removal, leave stone and geotextile fabric for approaches in place. Place fill over the approaches as part of the stream bank restoration operation.

A temporary culvert crossing should be in place no longer than 24-months.

South Carolina Department of Health and Environmental Control
 TEMPORARY STREAM CROSSING
 STANDARD DRAWING NO. RC-05 PAGE 3 of 3
 GENERAL NOTES JULY 31, 2005 DATE

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When and Where to Use It
 Stabilized construction entrances should be used at all points where traffic will be leaving a construction site and moving directly onto a public road.

Important Considerations
 If washing is used, provisions must be made to intercept the wash water and trap the sediment before it is carried offsite. Washdown facilities shall be required as directed by SCDHEC as needed. Washdown areas in general must be established with crushed gravel and drain into a sediment trap or sediment basin. Construction entrances should be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by vehicles.

Installation:

- Remove all vegetation and any objectionable material from the foundation area.
- Divert all surface runoff and drainage from stones to a sediment trap or basin.
- Install a non-woven geotextile fabric prior to placing any stone.
- Install a culvert pipe across the entrance when needed to provide positive drainage.
- The entrance shall consist of 1-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.
- Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
- The edges of the entrance shall be tapered out towards the road to prevent tracking of mud at the edge of the entrance.

Inspection and Maintenance:

Inspect construction entrances every seven (7) calendar days and within 24-hours after each rainfall event that produces 1/2-inches or more of precipitation, or after heavy use. Check for mud and sediment buildup and pad integrity. Make daily inspections during periods of wet weather. Maintenance is required more frequently in wet weather conditions. Reshape the stone pad as needed for drainage and runoff control.

Wash or replace stones as needed and as directed by the inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone.

Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.

Repair any broken pavement immediately.

CONSTRUCTION ENTRANCE/EXIT DETAIL
 NOT TO SCALE

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: TO #09 CORRECTIVE REPAIRS FOR OCOONEE JOINT REGIONAL SEWER AUTHORITY
 DRAWING TITLE: DETAILS (2)

PROJ. MGR.: JFS
 DESIGN BY: JFS
 DRAWN BY: SV
 PROJ. DATE: JUN. 2023
 DRAWING NUMBER:
C9
 WKD PROJ. NO.: 20230009.00.GV

FILE PATH: Z:\Projects\102300090001 TO #09 CORRECTIVE REPAIRS FOR OCOONEE JOINT REGIONAL SEWER AUTHORITY FOR CONSTRUCTION\Drawings\2300090001\2300090001.dwg
 PLOT DATE: 06/22/2023 10:00 AM
 PLOT BY: JFS

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