

CHINQUAPIN AND MAGNOLIA INTERSECTION & STORMWATER IMPROVEMENTS PROJECT

VILLAGE OF PINEHURST

MOORE COUNTY, NORTH CAROLINA

PROJECT ADDRESS

MAGNOLIA ROAD & CHINQUAPIN ROAD INTERSECTION
PINEHURST, NC, 28374

PROPERTY OWNER

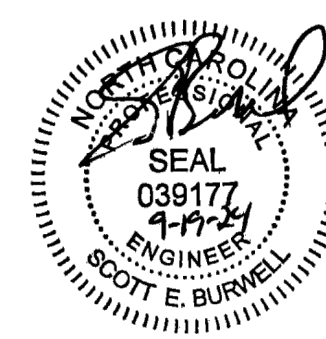
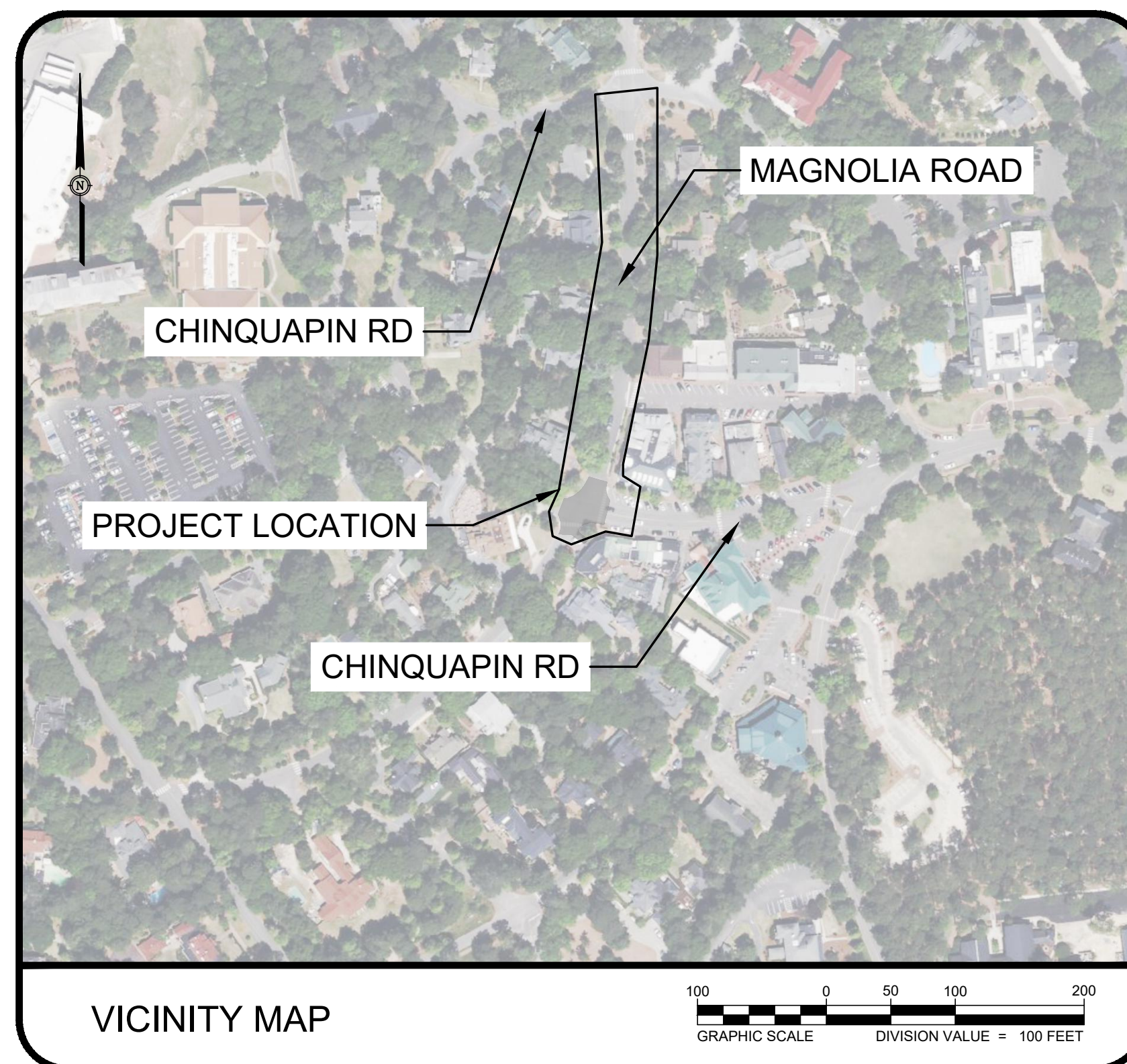
VILLAGE OF PINEHURST
395 MAGNOLIA ROAD
PINEHURST, NC 28374

PROJECT ENGINEER

MR. SCOTT BURWELL, PE
55 BROAD STREET
ASHEVILLE, NC 28801
828.252.0575

SCHEDULE OF DRAWINGS

GENERAL SHEETS	ALTERNATE BID SHEETS
G-001 COVER SHEET	CE-100A . . . EXISTING CONDITIONS PLAN
G-002 GENERAL NOTES AND LEGENDS	CD-100A . . . INTERSECTION DEMOLITION PLAN
	CD-101A . . . MAGNOLIA ROAD DEMOLITION PLAN
	C-101A INTERSECTION SITE PLAN
	C-102A MAGNOLIA ROAD SITE PLAN
	C-103A INTERSECTION GRADING PLAN
	C-104A MAGNOLIA ROAD GRADING PLAN
	C-200A STORM DRAINAGE PLAN - STORM RUN 100
	C-201A STORM DRAINAGE PLAN - STORM RUN 100
	C-202A STORM DRAINAGE PLAN - STORM RUN 200, 300, 400 + 500
	DETAIL SHEETS (BASE AND ALTERNATE BID)
	C-501 MISCELLANEOUS DETAILS
	C-502 MISCELLANEOUS DETAILS
	C-503 MISCELLANEOUS DETAILS
	C-504 MISCELLANEOUS DETAILS



SEPTEMBER 2024

BID DOCUMENTS

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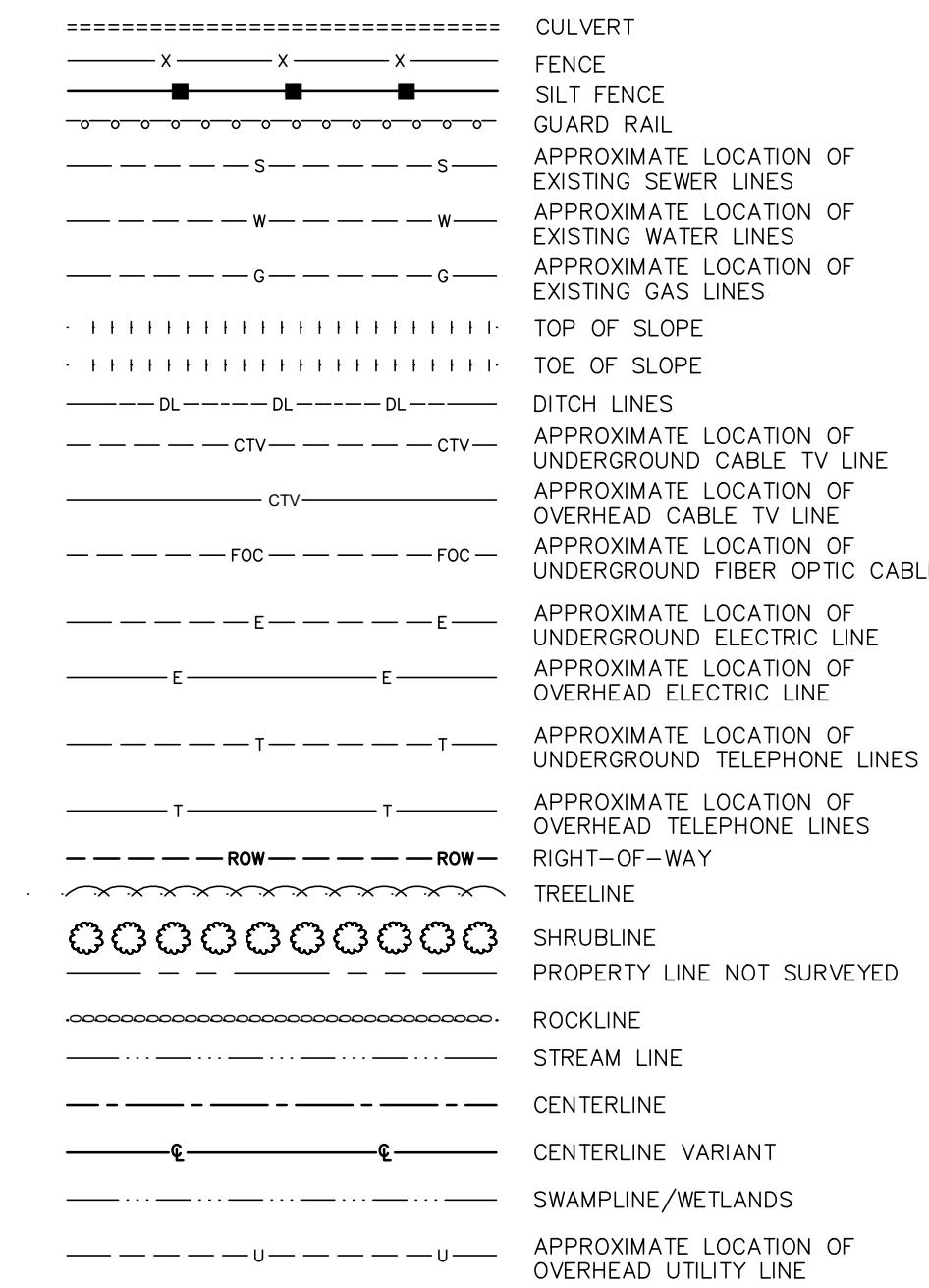
23-01905_VILLAGE OF PINEHURST_C-001 - COVER

EC 43 GENERAL CONSTRUCTION CONTROL NOTES
 UPDATED JANUARY, 2023

- FINISH GRADE TOLERANCES SHALL BE AS NOTED IN THE SPECIFICATIONS. THE ENGINEER MAY MAKE GRADE CHANGES AS REQUIRED IN THE FIELD WITHOUT EFFECTING THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION.
- UNLESS OTHERWISE STATED, ALL FILL AREAS SHALL BE CONSTRUCTED IN LAYERS OF 8" MAXIMUM THICKNESS, WITH WATER ADDED OR SOIL CONDITIONED TO THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE ENGINEER AND COMPACTED WITH A SHEEP'S FOOT ROLLER TO A COMPACTION EQUAL TO OR GREATER THAN 95% (100% IN THE TOP 2' OF THE SUB GRADE BELOW ROADWAYS AND PARKING LOTS) OF THE DENSITY OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH THE STANDARD PROCTOR METHOD OF MOISTURE-DENSITY RELATIONSHIP TEST, ASTM D698 OR AASHTO-99 UNLESS SPECIFIED IN OTHER SPECIFICATIONS.
- ENTIRE AREA TO BE GRADED SHALL BE CLEARED AND GRUBBED. NO FILL SHALL BE PLACED ON ANY AREA NOT CLEARED AND GRUBBED.
- ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES, ETC., SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY ON THE ENGINEER'S APPROVAL. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO CLEARING AND GRUBBING. IF DURING THE LIFE OF THE PROJECT, A STORM CAUSES SOIL EROSION WHICH CHANGES FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS", THESE SHALL BE REPAIRED AT NO EXTRA COST, AND ALL SILT WASHED OFF OF THE PROJECT SITE ONTO ADJACENT PROPERTY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AT NO EXTRA COST. THE CONTRACTOR SHALL ADHERE TO ANY APPROVED EROSION CONTROL PLANS WHETHER INDICATED IN THE CONSTRUCTION PLANS OR UNDER SEPARATE COVER.
- DISPOSABLE MATERIAL
 - CLEARING AND GRUBBING WASTES SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE, UNLESS SPECIFIED OTHERWISE.
 - SOLID WASTES TO BE REMOVED, SUCH AS SIDEWALKS, CURBS, PAVEMENT, ETC., MUST BE PLACED IN SPECIFIC DISPOSAL AREAS DELINEATED ON THE PLANS OR REMOVED FROM THE SITE AS REQUIRED BY THE SPECIFICATIONS. THIS MATERIAL SHALL HAVE A MINIMUM COVER OF 2'. THE CONTRACTOR SHALL MAINTAIN SPECIFIED COMPACTION REQUIREMENTS IN THESE AREAS. WHEN DISPOSAL SITES ARE NOT PROVIDED, THE CONTRACTOR SHALL REMOVE THIS WASTE FROM THE SITE AND PROPERLY DISPOSE OF IT AT HIS EXPENSE.
 - ABANDONED UTILITIES SUCH AS CULVERTS, WATER PIPE, HYDRANTS, CASTINGS, PIPE APPURTENANCES, UTILITY POLES, ETC., SHALL BE THE PROPERTY OF THE SPECIFIC UTILITY AGENCY, OR COMPANY HAVING JURISDICTION, BEFORE THE CONTRACTOR CAN REMOVE, DESTROY, SALVAGE, REUSE, SELL OR STORE FOR HIS OWN USE ANY ABANDONED UTILITY, HE MUST PRESENT TO THE OWNER WRITTEN PERMISSION FROM THE UTILITY INVOLVED.
- IN THE EVENT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR EVALUATION AND INSTRUCTION ON HOW TO PROCEED. IN THE EVENT THAT DEWATERING OR LOWERING OF THE WATER TABLE IS NECESSARY, NCDOT DWR SHALL BE CONTACTED PRIOR TO ANY WORK BEING PERFORMED. ALL WORK SHALL BE PAID FOR BASED UPON THE UNIT BIDS UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ADJUSTMENT OF ALL UTILITY SURFACE ACCESSES WHETHER HE PERFORMS THE WORK OR A UTILITY COMPANY PERFORMS THE WORK.
- THE CONTRACTOR SHALL CONTROL ALL "DUST" BY PERIODIC WATERING AND SHALL PROVIDE ACCESS AT ALL TIMES FOR PROPERTY OWNERS WITHIN THE PROJECT AREA AND FOR EMERGENCY VEHICLES. ALL OPEN DITCHES AND HAZARDOUS AREAS SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL AREAS WHERE THERE IS EXPOSED DIRT SHALL BE SEEDED, FERTILIZED AND MULCHED ACCORDING TO THE SPECIFICATIONS. THE FINISHED SURFACE SHALL BE TO GRADE AND SMOOTH, FREE OF ALL ROCKS LARGER THAN 3", EQUIPMENT TRACKS, DIRT CLODS, BUMPS, RIDGES AND GOUGES PRIOR TO SEEDING; THE SURFACE SHALL BE LOOSENEED TO A DEPTH OF ±4"-6" TO ACCEPT SEED. THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING OPERATIONS WITHOUT FIRST OBTAINING THE ENGINEER'S APPROVAL OF THE GRADED SURFACE. ALL SEEDING SHALL BE PERFORMED BY A MECHANICAL "HYDRO-SEEDER". HAND SEEDING SHALL BE AUTHORIZED ON AN AREA BY AREA APPROVAL BY THE ENGINEER.
- WHERE SPECIFIED, STORM DRAIN PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CONFORMING TO AASHTO M-170, AS CONTAINED IN NCDOT STANDARD SPECIFICATION 1032-9 FOR WALL "B" TYPE.
- WHERE SPECIFIED, ALL STORM DRAIN PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE). SMOOTH WALL INTERIOR WITH WATER TIGHT JOINTS, BACKFILLED WITH # 57 WASHED STONE UP TO MIN. 6" OVER THE TOP OF THE PIPE. HDPE PIPE USED FOR STORM DRAINAGE DETENTION SYSTEMS SHALL BE "HANCOR BLUE SEAL" OR APPROVED EQUAL.
- ALL CORRUGATED METAL STORM DRAIN PIPE (CMP) SHALL BE ALUMINIZED TYPE 2 CORRUGATED STEEL MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO M-36. THE PIPE SHALL BE MANUFACTURED FROM ALUMINIZED STEEL TYPE 2 MATERIAL CONFORMING TO THE REQUIREMENTS OF AASHTO M-274. ALL PIPE SHALL BE FURNISHED WITH RE-ROLLED ENDS AND SHALL BE JOINED WITH HUGGER BANDS. THE USE OF DIMPLE BANDS WILL NOT BE ALLOWED. PIPE THROUGH 24" DIAMETER SHALL BE 16 GAUGE, PIPE THROUGH 42" DIAMETER SHALL BE 14 GAUGE, PIPE THROUGH 54" DIAMETER SHALL BE 12 GAUGE.
- CONTRACTOR SHALL VERIFY ALL ELEVATIONS BEFORE INSTALLATION OF FACILITIES.
- CATCH BASINS CAST-IN-PLACE SHALL CONFORM TO THE REQUIREMENTS OF NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (LATEST EDITION) ARTICLES 840-1 THROUGH 840-3. CURB INLET CATCH BASIN SHALL CONFORM TO NCDOT STANDARD DETAILS 840.02 THROUGH 840.04. DROP INLETS SHALL CONFORM TO STANDARD DETAIL 840.14. JUNCTION BOXES SHALL CONFORM TO STANDARD DETAIL 840.31.
- CURB INLET FRAME, GRATE AND HOOD SHALL BE NEENAH R-3233D, PRODUCTS BY DEWEY BROS., U.S. FOUNDRY OR EQUAL. DROP INLET FRAME AND GRATE SHALL BE NEENAH R-3339A OR EQUAL. FIELD INLET COVER SHALL CONFORM TO NCDOT STANDARD DETAIL 840.04, OPENING FACING UPSTREAM.
- CONCRETE AND MASONRY SHALL MEET THE REQUIREMENTS OF APPROPRIATE SECTION OF NCDOT STANDARD SPECIFICATIONS FOR ROAD AND STRUCTURES (LATEST EDITION). CONCRETE SHALL BE CLASS A OR B, 4000 PSI MINIMUM, MEETING THE REQUIREMENTS OF SECTION 1000, CONSTRUCTED IN ACCORDANCE WITH SECTION 825. MASONRY SHALL MEET THE REQUIREMENTS OF SECTION 1040, CONSTRUCTED IN ACCORDANCE WITH SECTION 830 AND/OR 834.
- TOPS OF PROPOSED FRAMES AND GRATES SHALL BE FLUSH WITH FINISHED GRADE.
- PRE-CAST CONCRETE BOXES ARE ACCEPTABLE ALTERNATIVES FOR PROPOSED CATCH BASINS.

EXISTING CONDITIONS LEGEND

TEL PED	TELEPHONE PEDESTAL	△	CALCULATED POINT
ELEC PED	ELECTRIC PEDESTAL	○ IPS	1/2" REBAR SET WITH CAP
CATV PED	CABLE TV PEDESTAL	⊠	CONCRETE MONUMENT
SGN	SIGN	⊠ CN-R/W	RIGHT-OF-WAY MONUMENT
CATV	UNDERGROUND CABLE TV SIGN	⊠ DOT MON	D.O.T. CONTROL POINT
UG FOC	UNDERGROUND FIBER OPTIC CABLE SIGN	● RBF	REBAR FOUND
UG TCS	UNDERGROUND TELEPHONE CABLE SIGN	● RRSPIKE	RAILROAD SPIKE
UG GAS	UNDERGROUND GAS LINE SIGN	○ PK NL	PK NAIL FOUND / SET
UG ELEC	UNDERGROUND ELECTRIC LINE SIGN	⊠ SPINDLE	SPINDLE FOUND / SET
LP	LIGHT POLE	⊠ CP/HUB	HUB & TACK SET
UP	GUY WIRE ANCHOR	△ CP/NL GPS	CONTROL POINT NAIL SET / FOUND
TSP	TRAFFIC SIGNAL POLE	△ CP/NL	CONTROL POINT/NAIL SET GPS
RXR	RAILROAD CROSSING SIGNAL	⊠ CP/TEMP	CONTROL POINT TEMPORARY MARK
MH	MANHOLE	⊠ NGS METAL ROD	NATIONAL GEODETIC SURVEY METAL ROD
SSMH	SANITARY SEWER MANHOLE	⊠ NGS CM	NATIONAL GEODETIC SURVEY CONCRETE MONUMENT
SDMH	STORM DRAIN MANHOLE	⊠	TEMPORARY CONTROL POINT SET
COMM	COMMUNICATION MANHOLE	⊠	NETWORK TRIANGULATION POINT
ELMH	ELECTRICAL MANHOLE	▲ STAKE	STAKE FOUND
J.B.	JUNCTION BOX	⊠	INTERSTATE HIGHWAY
SPIGOT	SPIGOT/YARD HYDRANT	⊠	U.S. HIGHWAY
C.O.	SEWER CLEAN-OUT	⊠ ELEVATION	FINISHED FLOOR ELEVATION
E.SS	ELECTRIC SERVICE STUB-OUT	⊠ MW	MONITORING WELL
G.SS	GAS SERVICE STUB-OUT	● PZ	PIEZOMETER
CB	CATCH BASIN	⊠	LANDFILL GAS MONITORING PROBE
CI	CURB INLET	●	SURFACE WATER SAMPLING LOCATION
WM	WATER METER	⊠	LANDFILL GAS VENT
PH	FIRE HYDRANT	⊠	LANDFILL GAS COLLECTION WELLHEAD
WV	WATER VALVE	⊠	POTABLE WATER WELL
BLOWOFF VALVE	BLOW OFF VALVE	DB	MAILBOX OR PAPER BOX
G/M	GAS METER	⊠ PB	POSTAL DROP BOX
G/V	GAS VALVE	⊠ SAT DISH	SATELLITE DISH
ICV	IRRIGATION CONTROL VALVE	⊠ YARD ORNAMENT	STATUE, BIRD BATHS, ETC.
PIV	POST INDICATOR VALVE	⊠	TREES
E.JUNC	ELECTRIC JUNCTION BOX OR OUTLET	⊠	SHRUBS / BUSHES
SIG BOX	TRAFFIC SIGNAL BOX	(H)	HORIZONTAL GROUND DISTANCE
		(G)	NC STATE PLANE GRID DISTANCE



IPS	IRON PIN SET	CMU	CONCRETE MASONRY UNIT
RBF	REBAR FOUND	CPP	CORRUGATED PLASTIC PIPE
OTIPF	OPEN TOP IRON PIN FOUND	DIP	DUCTILE IRON PIPE
CTIPF	CRIMPED TOP IRON PIN FOUND	E&T	ELECTRIC & TELEPHONE
CMU	CONCRETE MASONRY UNIT	FOC	FIBER OPTIC CABLE
R/W	RIGHT OF WAY	GIP	GALVANIZED IRON PIPE
CL	CENTERLINE	O/H	OVERHEAD
C	CURVE (SEE CURVE TABLE)	RCP	REINFORCED CONCRETE PIPE
POB	POINT OF BEGINNING	U/G	UNDERGROUND
CP	CALCULATED POINT	VCP	VITRIFIED CLAY PIPE
PB	PLAT BOOK	PVC	POLYVINYL CHLORIDE PIPE
DB	DEED BOOK	FFE	FINISHED FLOOR ELEVATION
L	LINE (SEE LINE TABLE)	PG	PAGE
BLDG	BUILDING	REF	REFERENCE
CIP	CAST IRON PIPE	DOT	DEPARTMENT OF TRANSPORTATION
CMP	CORRUGATED METAL PIPE	NGS	NATIONAL GEODETIC SURVEY
CONC	CONCRETE	NCS	NORTH CAROLINA STATE PLANE
		MTR BOX	METER BOX

BID DOCUMENTS

NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
 DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
 MOORE COUNTY, NORTH CAROLINA

NOT TO SCALE

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

GENERAL NOTES AND LEGENDS

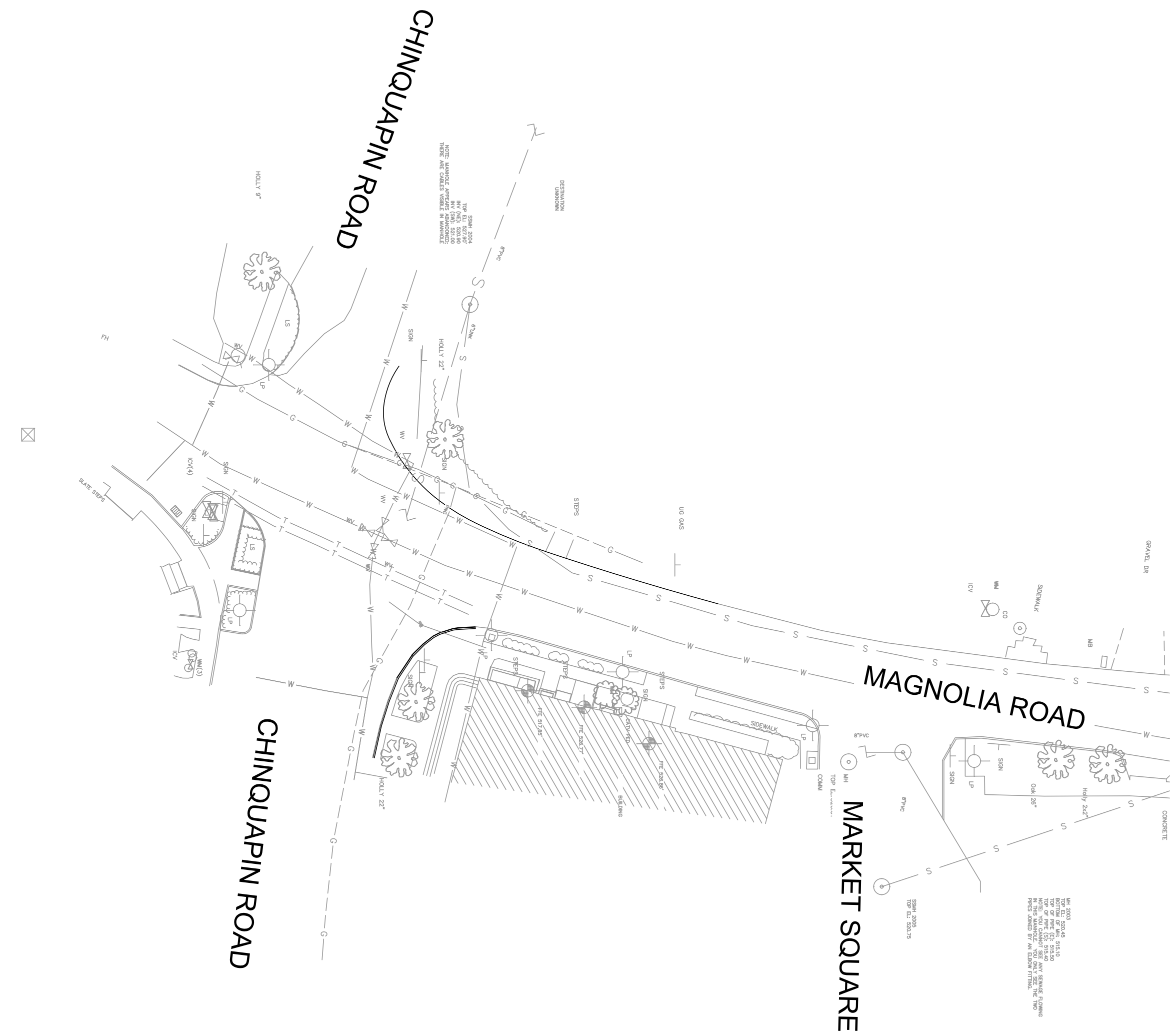
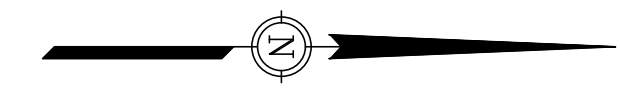
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A
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SHEET
G-002

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23.01905 VILLAGE OF PINEHURST G-002 GEN NOTES

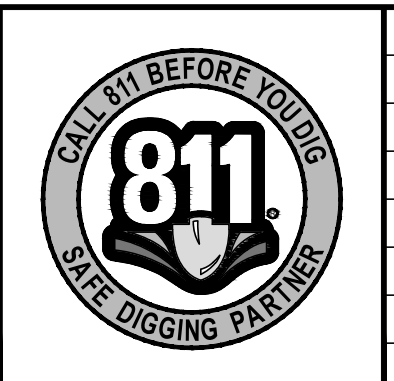
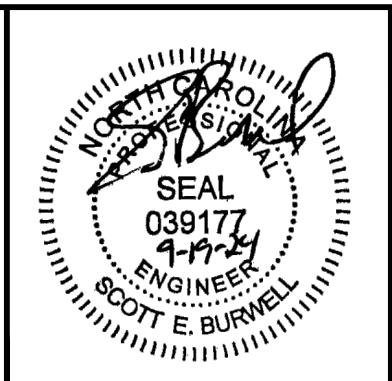
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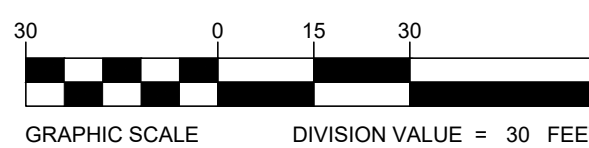


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MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA



OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

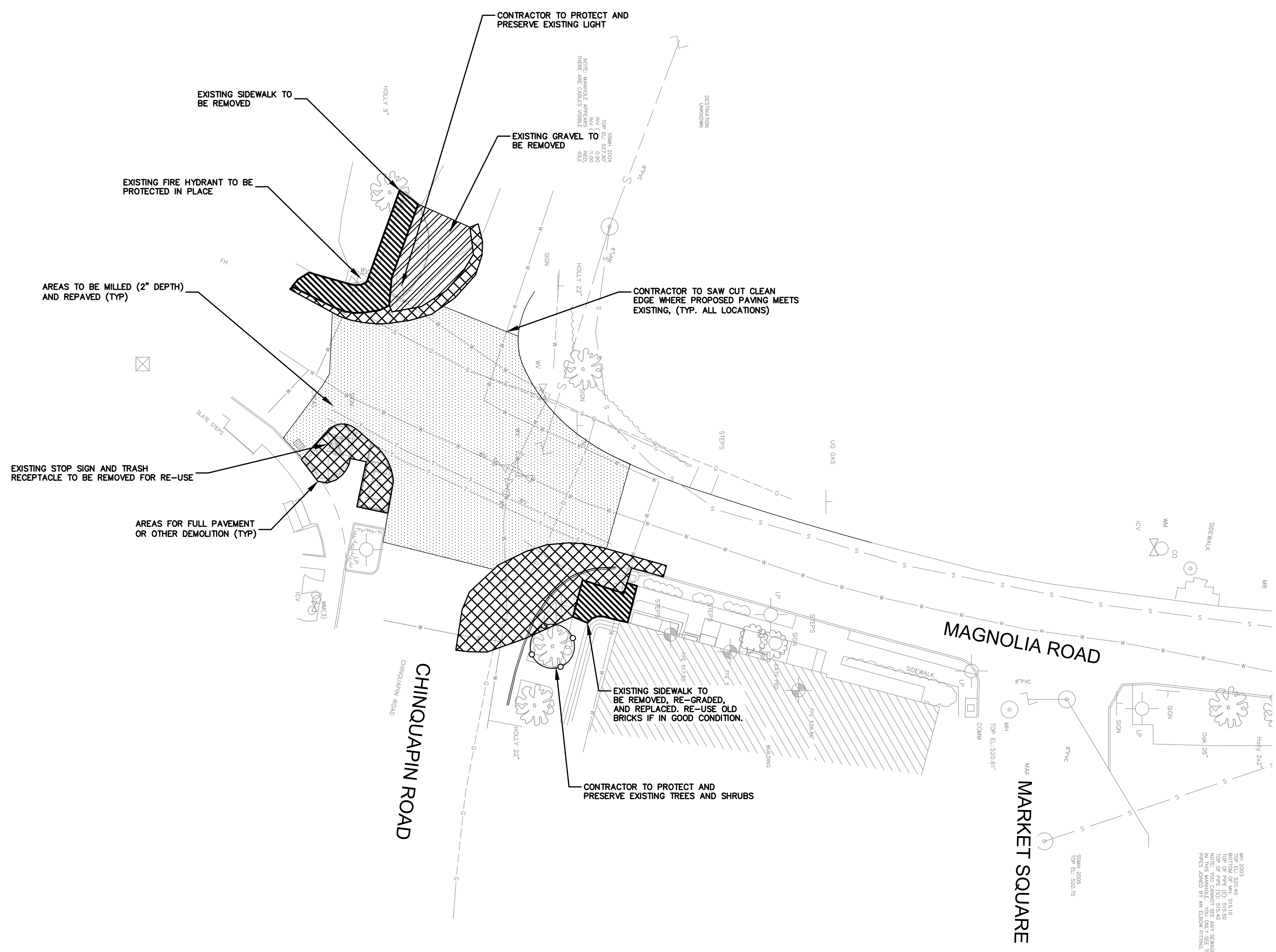
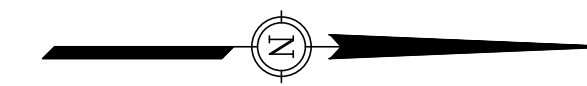
EXISTING CONDITIONS PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
CE-100

LEGEND:

- AREAS TO BE MILLED AND REPAVED -
- AREAS OF TOTAL ASPHALT DEMOLITION OR OTHER DEMOLITION -
- AREAS OF SIDEWALK DEMOLITION -
- AREAS OF GRAVEL DEMOLITION -
- BRICK CURB TO BE DEMOLISHED -

PLAN



BID DOCUMENTS - BASE BID

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MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

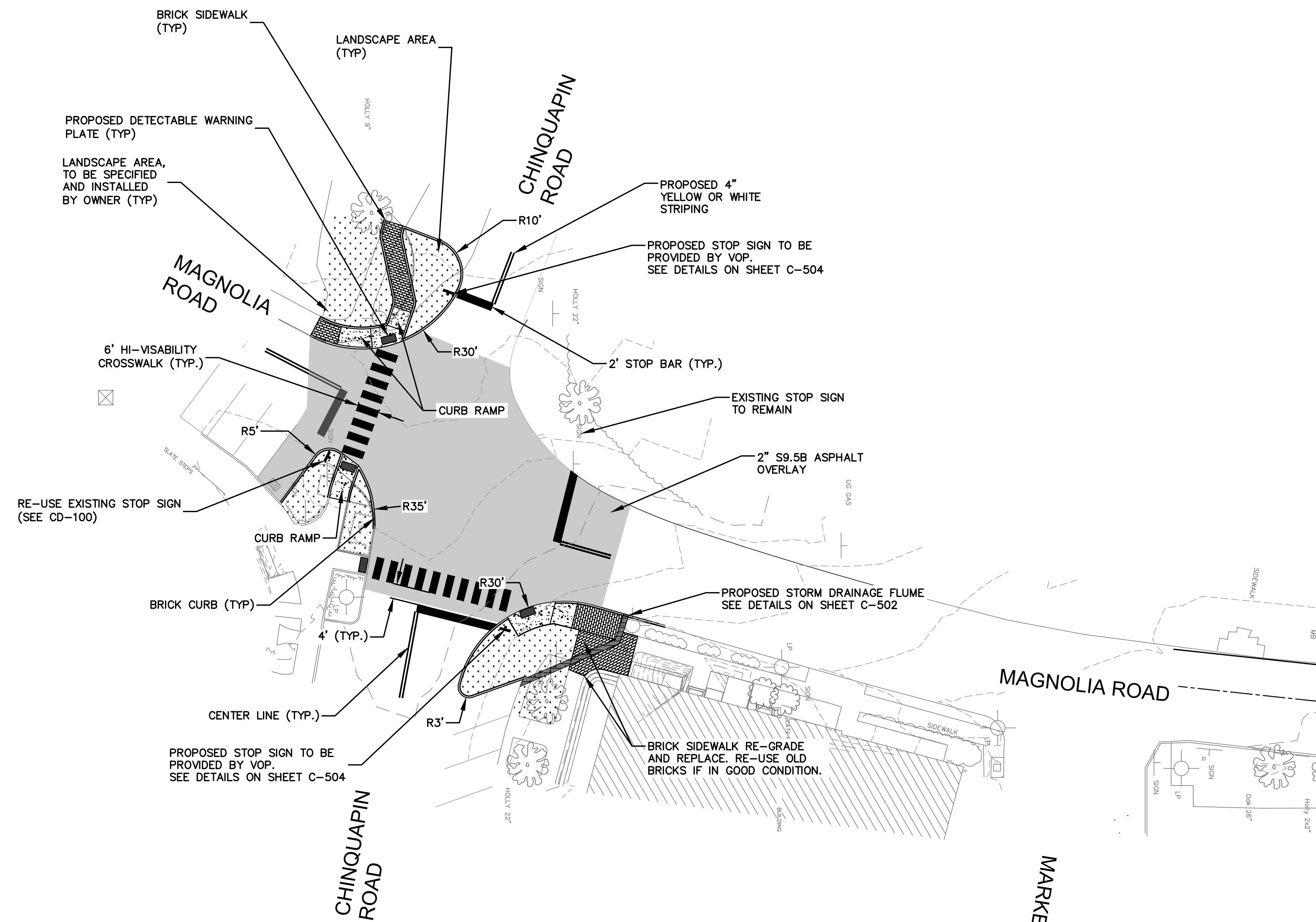
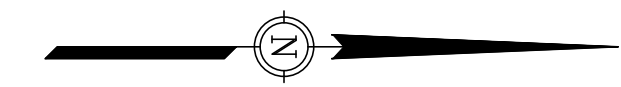
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OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

INTERSECTION DEMOLITION PLAN			
DATE SEPTEMBER 2024	PROJECT # 23.011905	FUNDING # N/A	

SHEET
CD-100

23.011905 VILLAGE OF PINEHURST CD-100 INTERSECTION DEMO PLAN



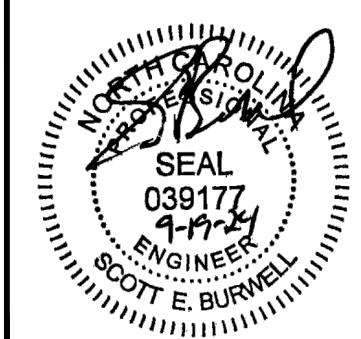
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23.01905 VILLAGE OF PINEHURST C-101 INTERSECTION SITE PLAN



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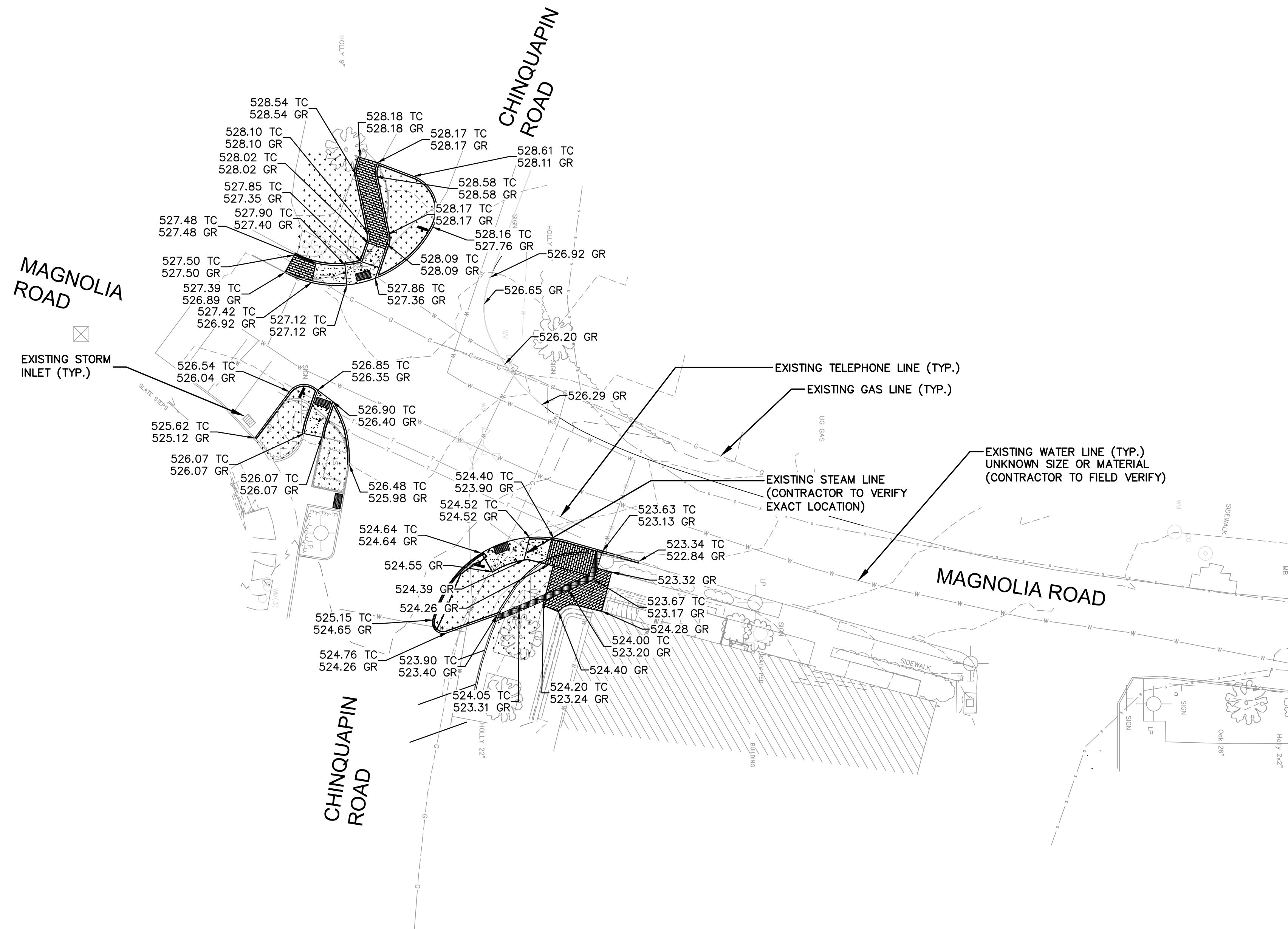
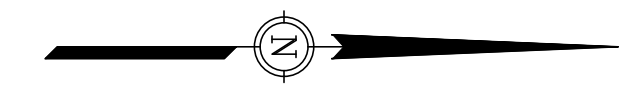
MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

INTERSECTION SITE PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
C-101

LEGEND:
 TC - TOP OF CURB SHOT
 GR - GROUND SHOT

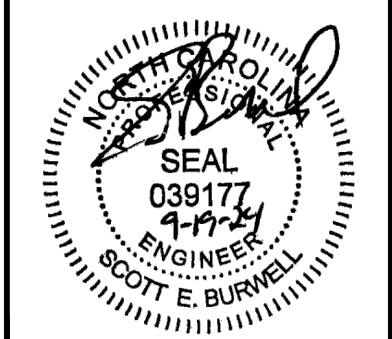


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23.01905 VILLAGE OF PINEHURST C-103 INTERSECTION GRADING PLAN

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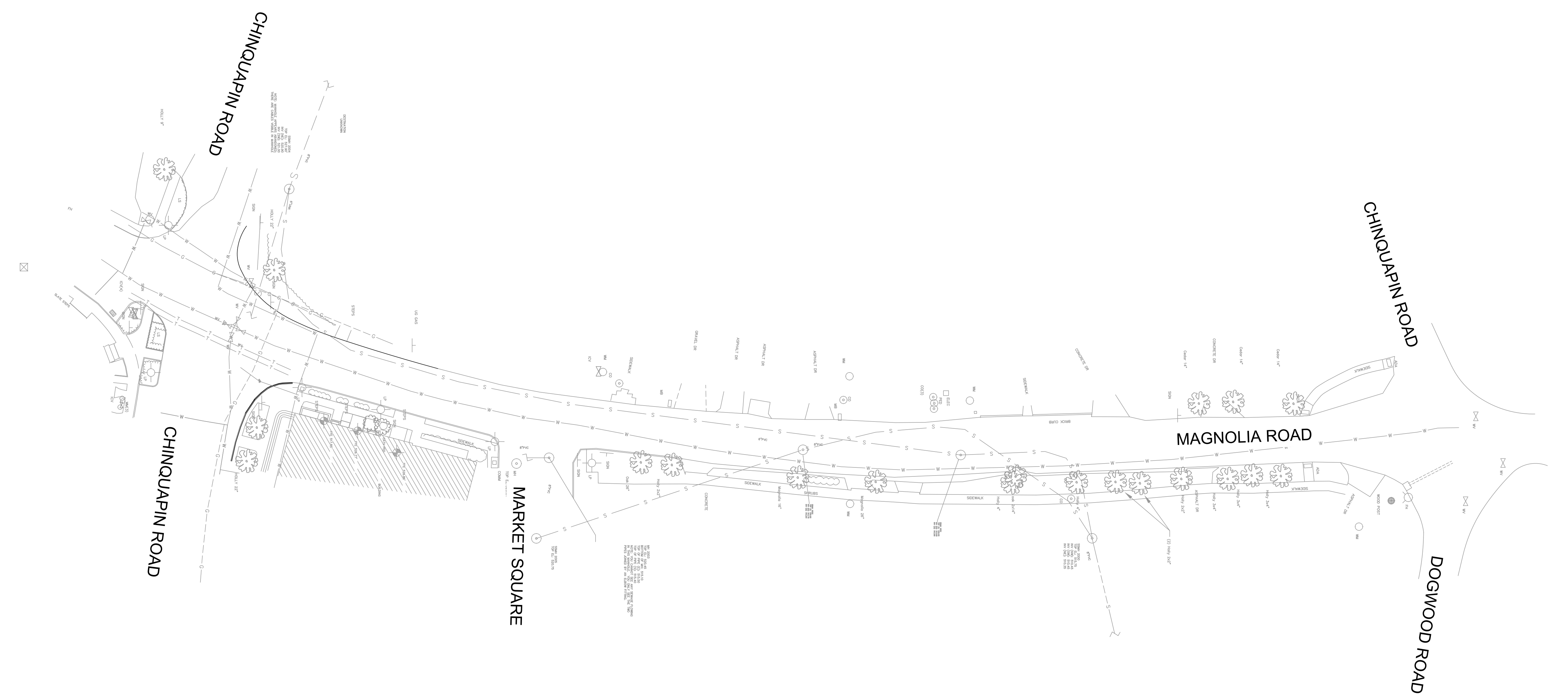
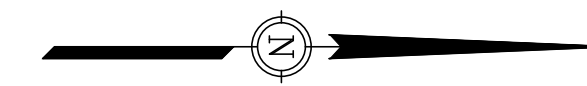
MAGNOLIA AND CHINQUAPIN INTERSECTION
 DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
 MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

INTERSECTION GRADING PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
C-103

PLAN



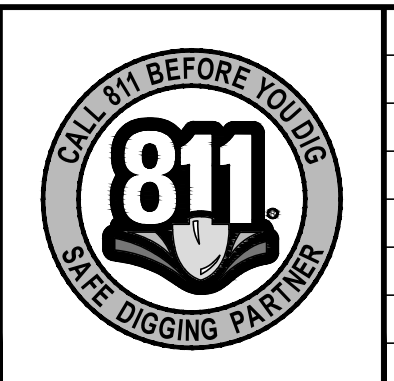
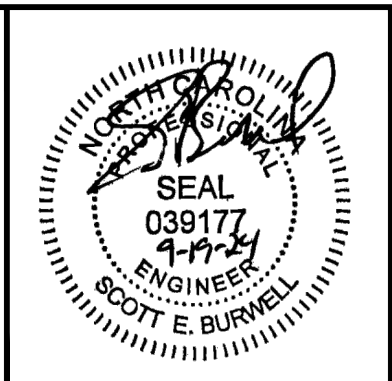
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23.01905 VILLAGE OF PINEHURST CE-100A EXCOND PLAN



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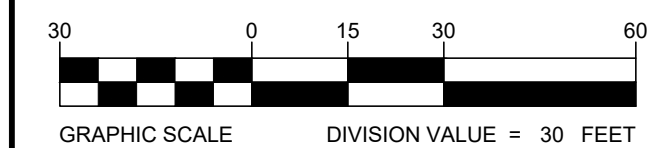
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MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT		DESIGNER N. SAWYER	
PROJECT MANAGER S. BURWELL		REVIEWER B. CATHEY	

EXISTING CONDITIONS PLAN			
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A	

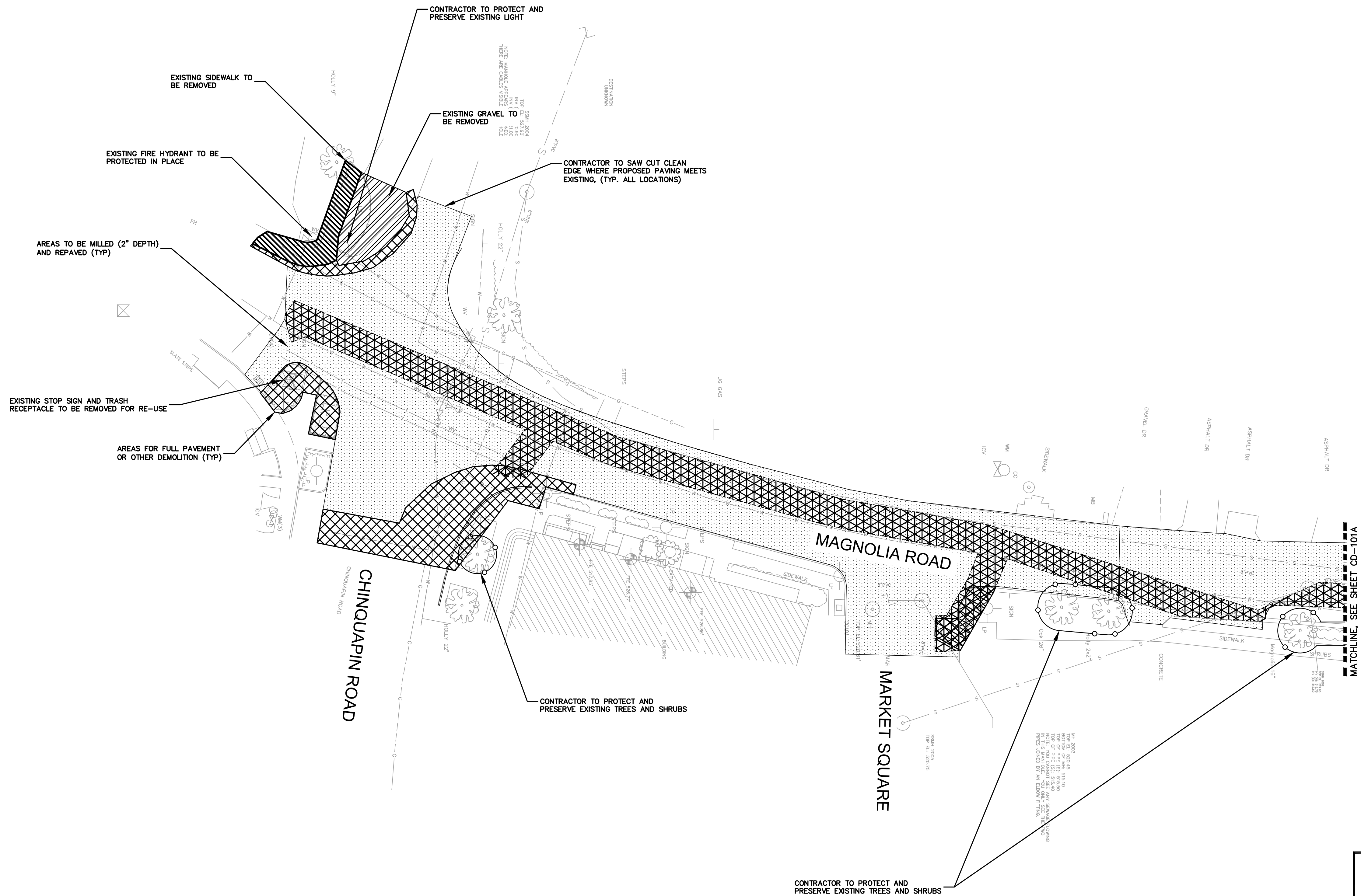
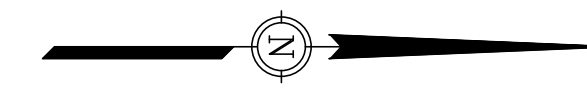
SHEET
CE-100A



LEGEND:

- AREAS TO BE MILLED AND REPAVED -
- AREAS OF TOTAL ASPHALT DEMOLITION OR OTHER DEMOLITION -
- AREAS OF SIDEWALK DEMOLITION -
- AREAS OF GRAVEL DEMOLITION -
- STORM INSTALLATION TRENCH -
- BRICK CURB TO BE DEMOLISHED -

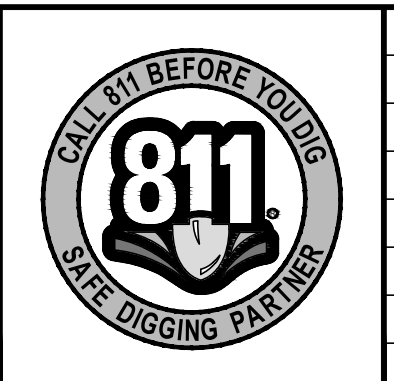
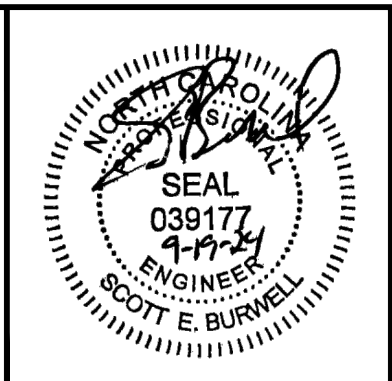
PLAN



BID DOCUMENTS - ALT. BID

P:\2023\23.01905-PINEHURST-INTERSECTION_DESIGN\DRAWINGS\SHEET\23.01905 DEMO PLAN.DWG PLOT DATE 9/19/2024 1:15 PM KHIYA ARMSTRONG

5 Regional Circle
Suite A
Pinehurst, NC 28374
910.295.3159
NC Firm License # C-0459
mcgillassociates.com



NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

INTERSECTION DEMOLITION PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

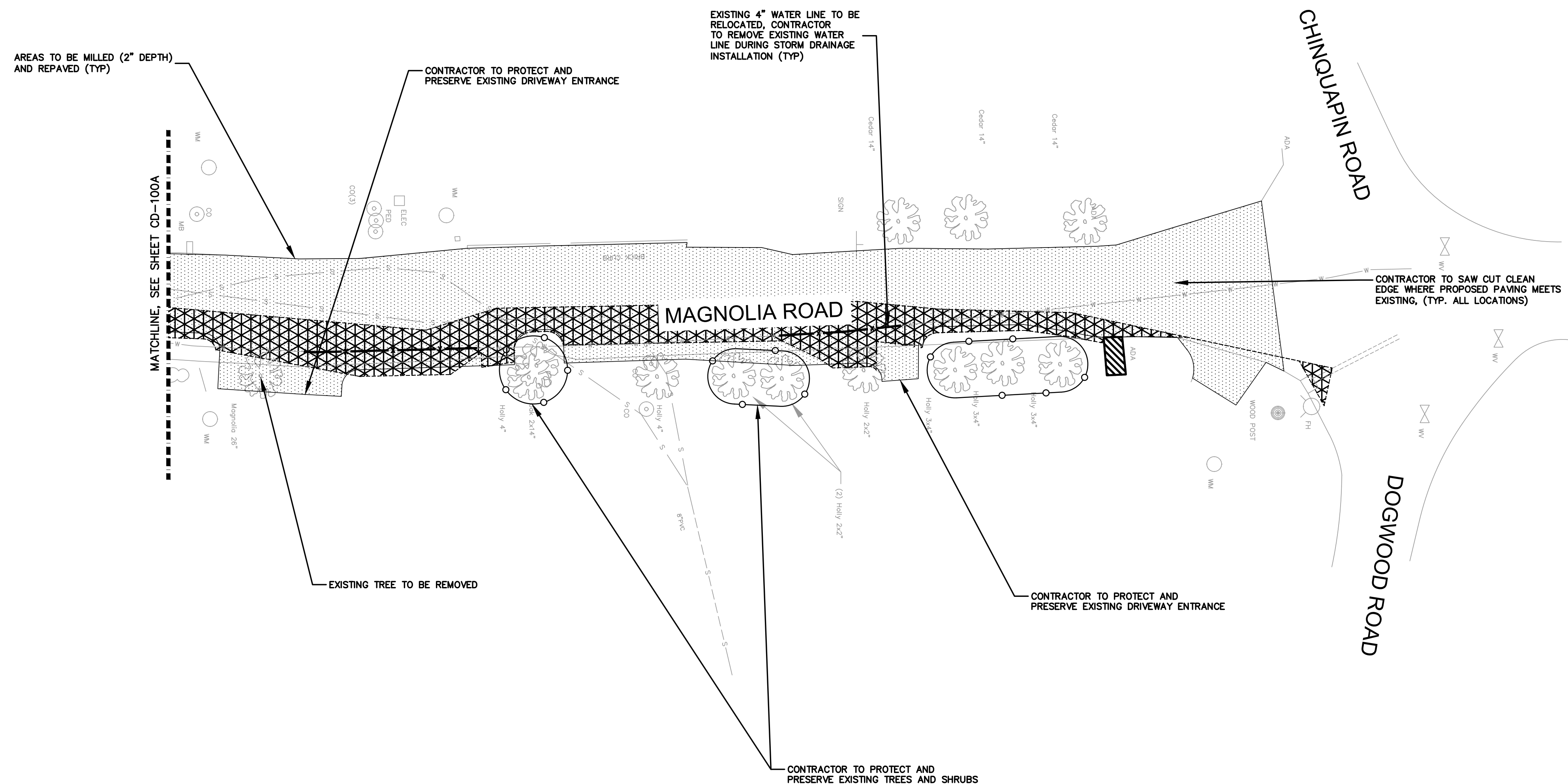
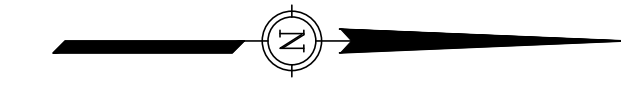
SHEET
CD-100A

23.01905 VILLAGE OF PINEHURST CD-100A INTERSECTION DEMO PLAN

LEGEND:

- AREAS TO BE MILLED AND REPAVED -
- AREAS OF TOTAL ASPHALT DEMOLITION -
- AREAS OF SIDEWALK DEMOLITION -
- AREAS OF GRAVEL DEMOLITION -
- BRICK CURB TO BE DEMOLISHED -
- WATER LINE TO BE DEMOLISHED -

PLAN

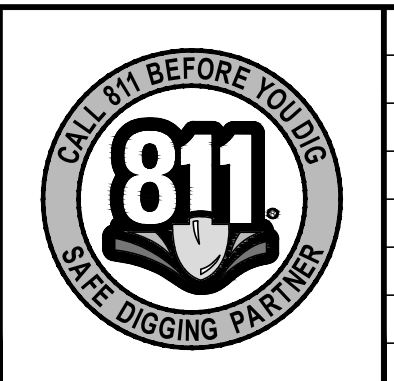
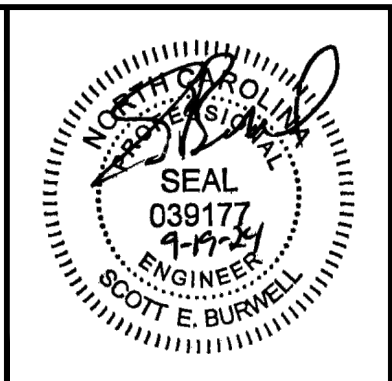


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23.01905 VILLAGE OF PINEHURST CD-101A UPPER PARKING DEMO PLAN

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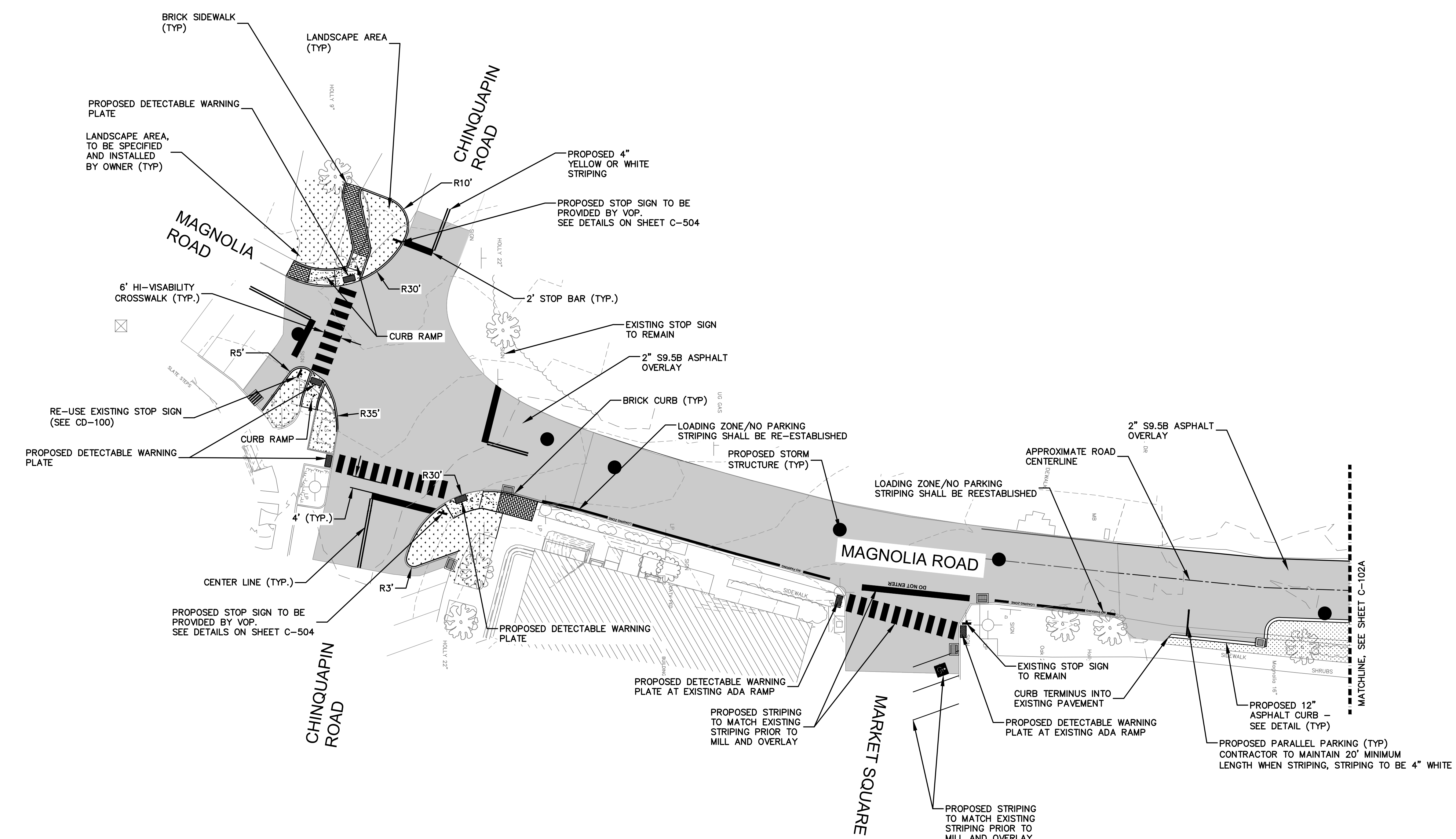
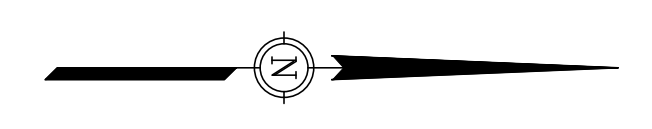
NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

MAGNOLIA ROAD DEMOLITION PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
CD-101A

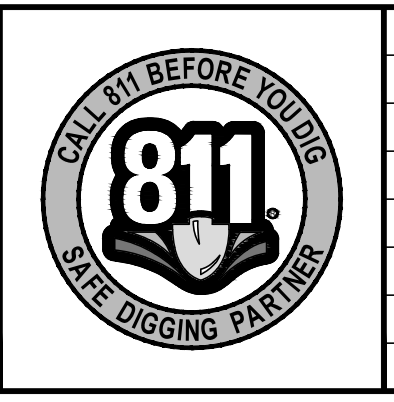
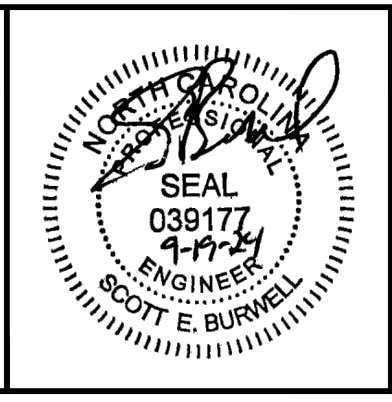


MATCHLINE SEE SHEET C-102A

BID DOCUMENTS - ALT. BID

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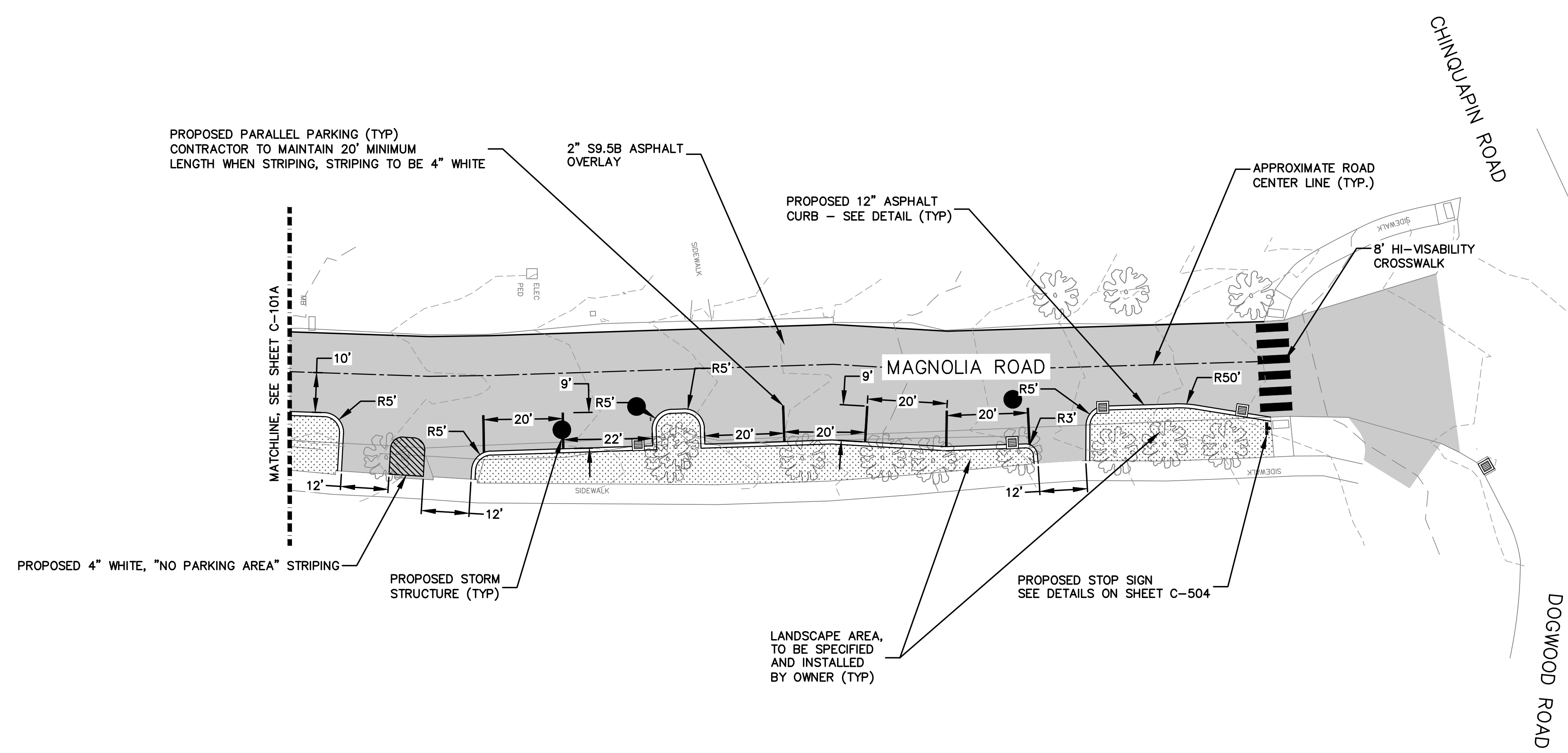
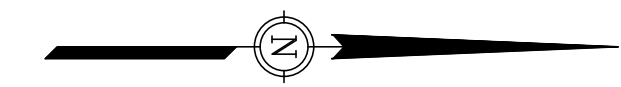
NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

INTERSECTION SITE PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
C-101A



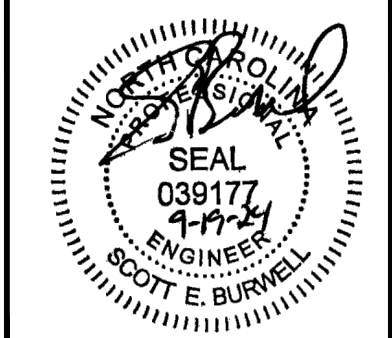

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23.01905 VILLAGE OF PINEHURST C-102A UPPER PARKING SITE PLAN

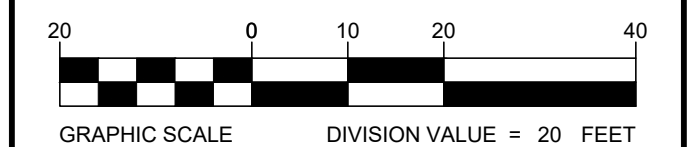


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Pinehurst, NC 28374
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NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

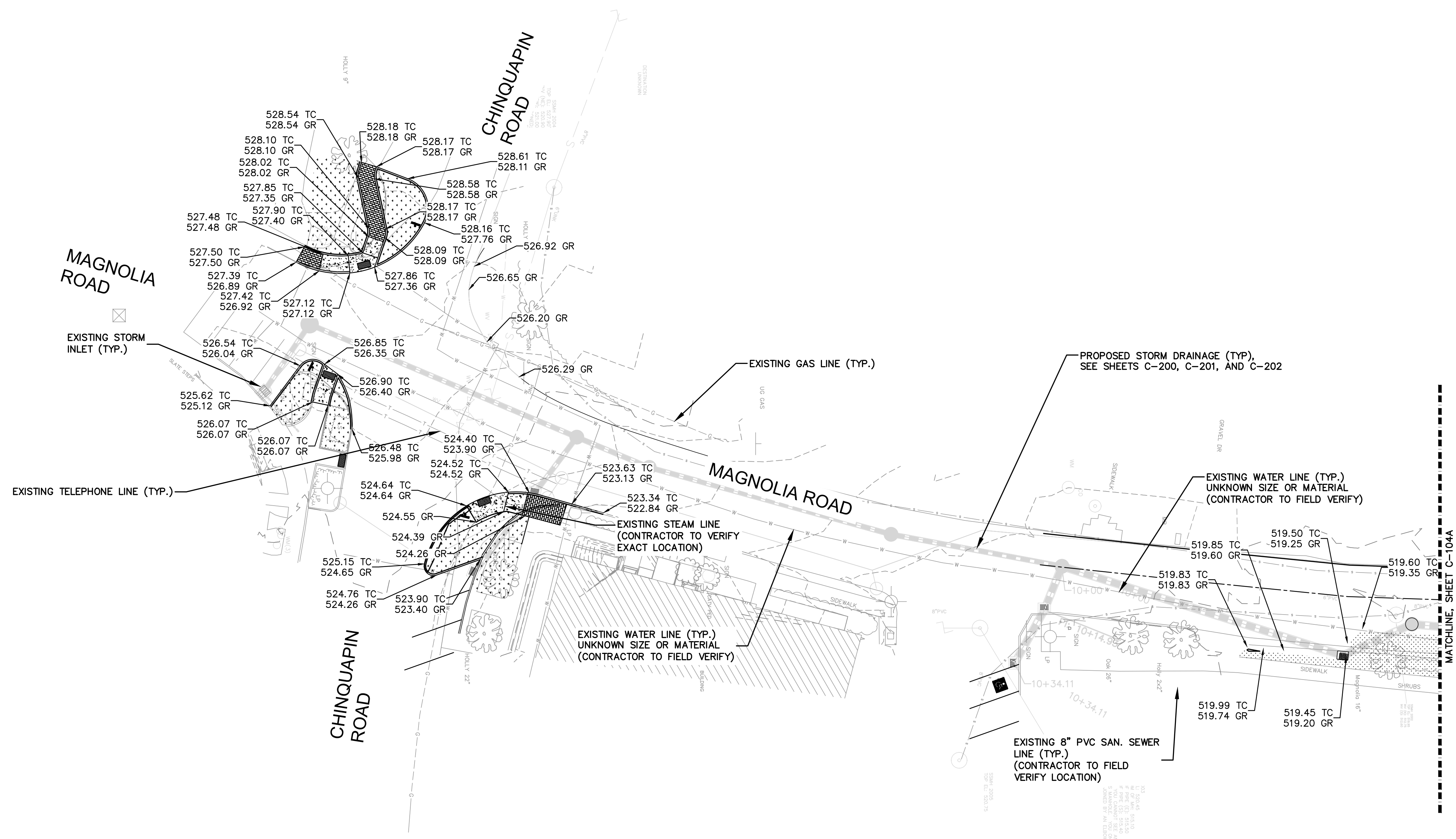
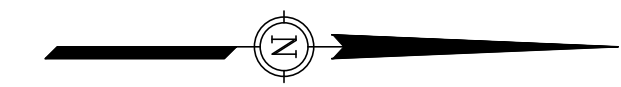


OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

MAGNOLIA ROAD SITE PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
C-102A

LEGEND:
 TC - TOP OF CURB SHOT
 GR - GROUND SHOT

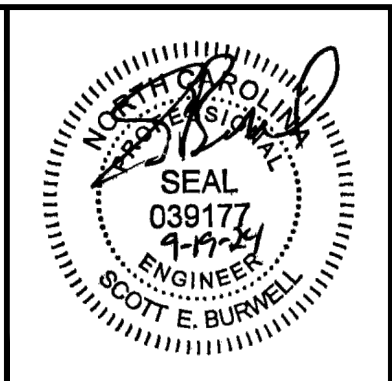


BID DOCUMENTS - ALT. BID

P:\2023\23.01905-PINEHURST-INTERSECTION_DESIGN\DRAWINGS\SHEET\23_01905 GRADING PLAN.DWG PLOT DATE 9/19/2024 1:17 PM KHYA ARMSTRONG

23.01905 VILLAGE OF PINEHURST C-103A INTERSECTION GRADING PLAN

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 Suite A
 Pinehurst, NC 28374
 910.295.3159
 NC Firm License # C-0459
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NO.	DATE	BY	DESCRIPTION

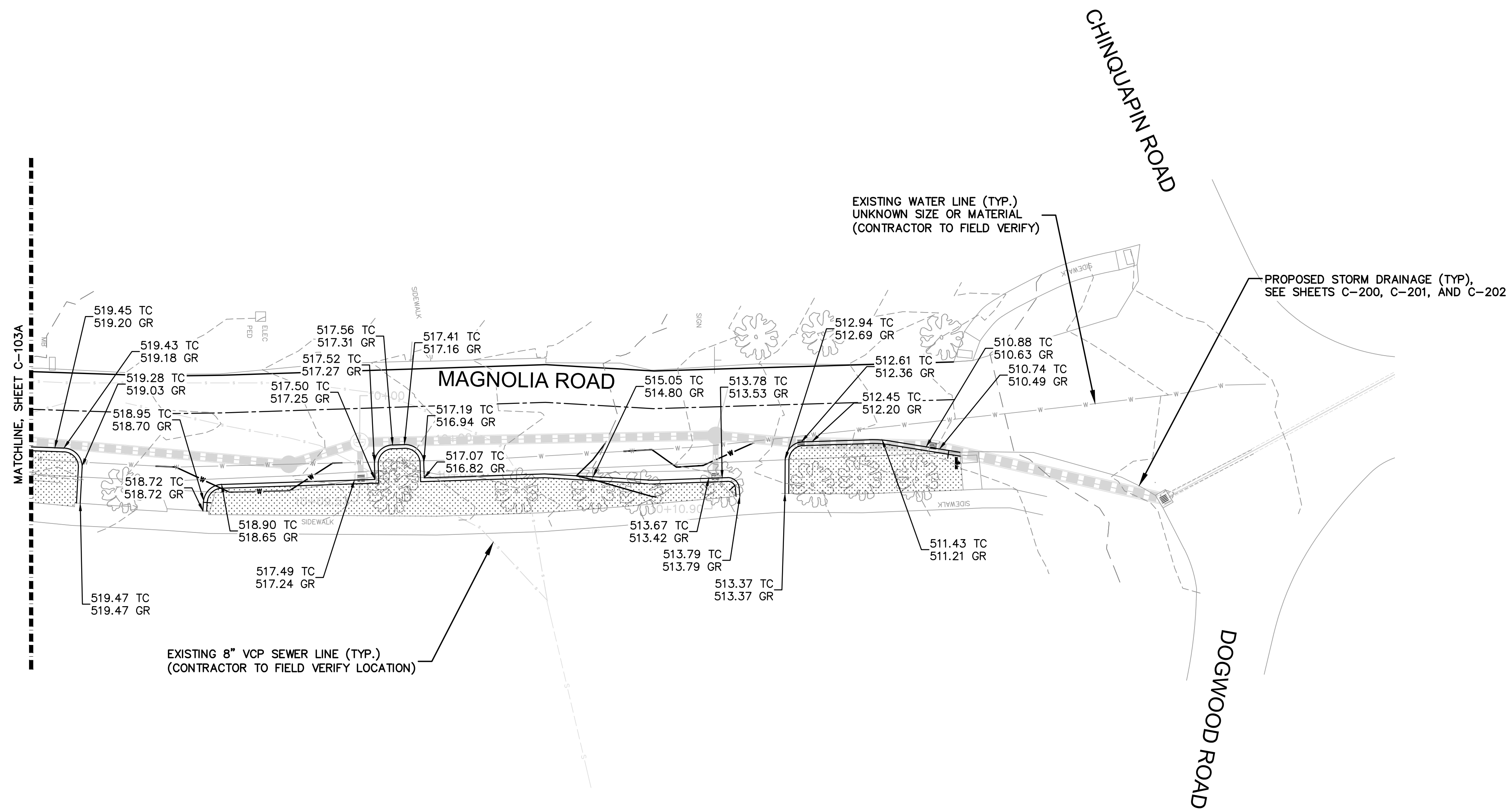
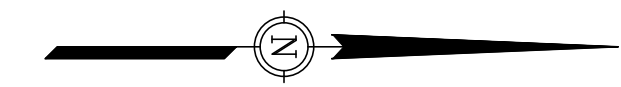
MAGNOLIA AND CHINQUAPIN INTERSECTION
 DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
 MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

INTERSECTION GRADING PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

SHEET
C-103A

LEGEND:
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 GR - GROUND SHOT

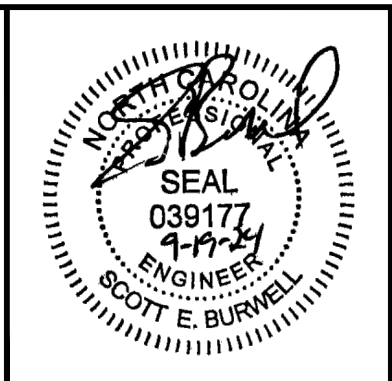


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23.01905 VILLAGE OF PINEHURST C-104A UPPER PARKING GRADING PLAN

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 Pinehurst, NC 28374
 910.295.3159
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NO.	DATE	BY	DESCRIPTION

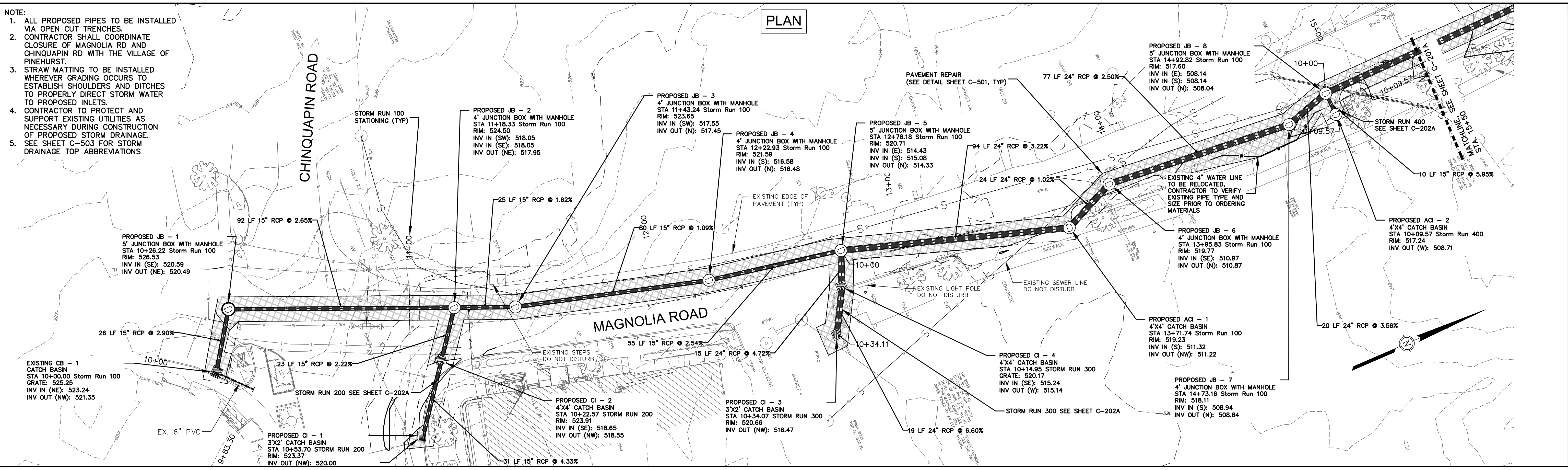
MAGNOLIA AND CHINQUAPIN INTERSECTION
 DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
 MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

MAGNOLIA ROAD GRADING PLAN		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

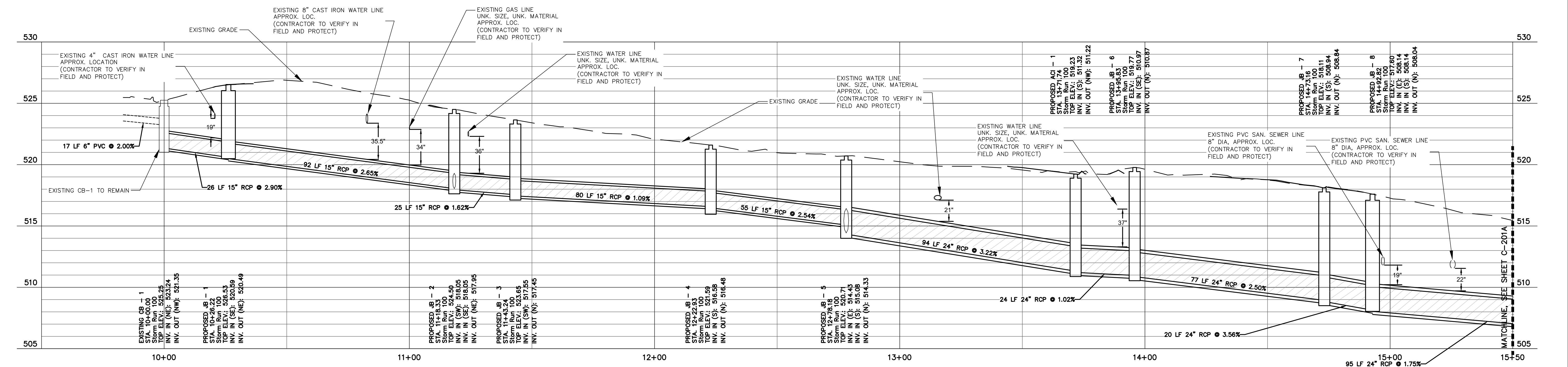
SHEET
C-104A

- NOTE:
1. ALL PROPOSED PIPES TO BE INSTALLED VIA OPEN CUT TRENCHES.
 2. CONTRACTOR SHALL COORDINATE CLOSURE OF MAGNOLIA RD AND CHINQUAPIN RD WITH THE VILLAGE OF PINEHURST.
 3. STRAW MATTING TO BE INSTALLED WHEREVER GRADING OCCURS TO ESTABLISH SHOULDERS AND DITCHES TO PROPERLY DIRECT STORM WATER TO PROPOSED INLETS.
 4. CONTRACTOR TO PROTECT AND SUPPORT EXISTING UTILITIES AS NECESSARY DURING CONSTRUCTION OF PROPOSED STORM DRAINAGE.
 5. SEE SHEET C-503 FOR STORM DRAINAGE TOP ABBREVIATIONS



PROFILE
SCALE: HORIZ. 1"= 20'
VERT. 1"= 4'

BID DOCUMENTS - ALT. BID



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NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER C. WILLIS
PROJECT MANAGER S. BURWELL	REVIEWER N. SAWYER

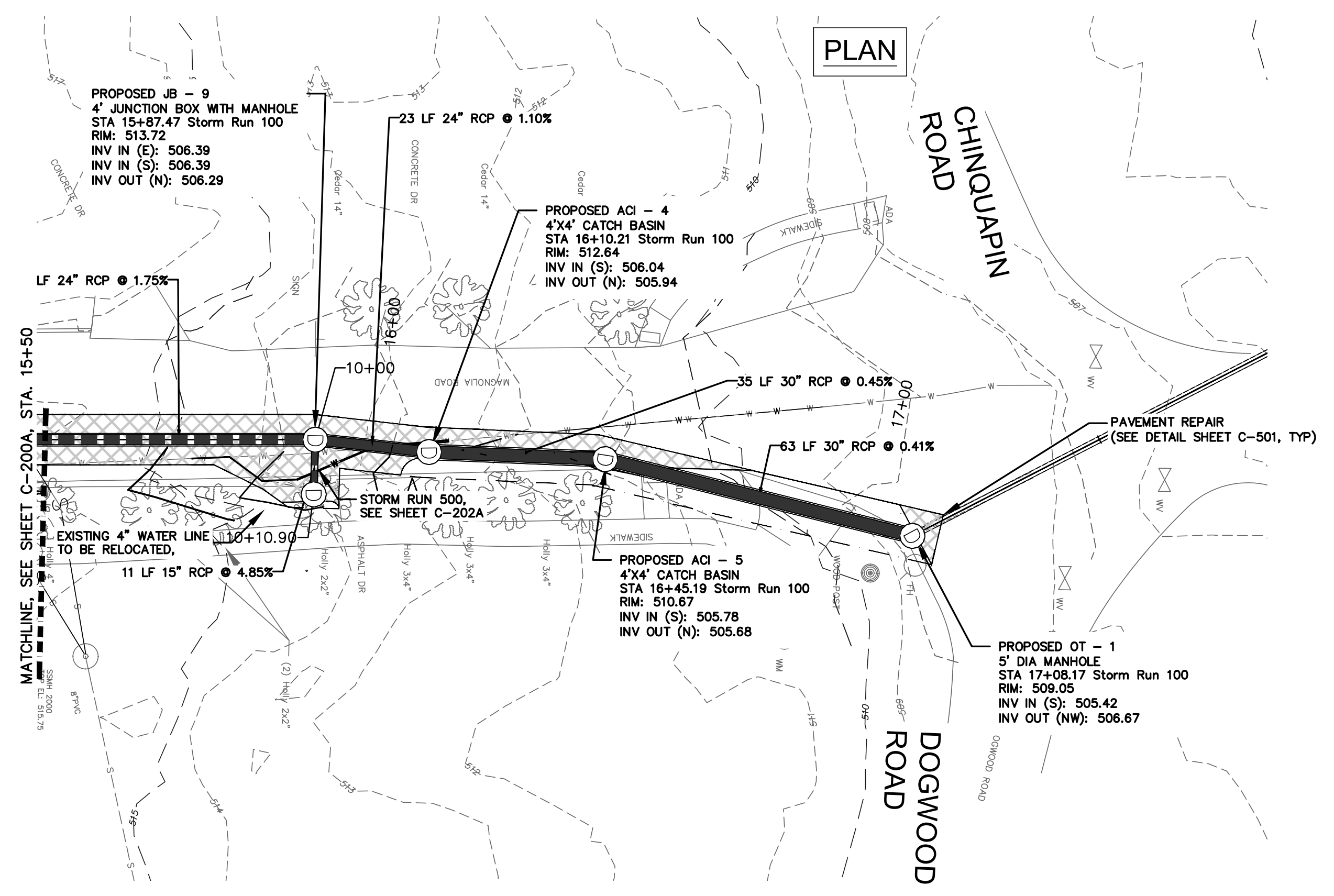
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A
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SHEET
C-200A

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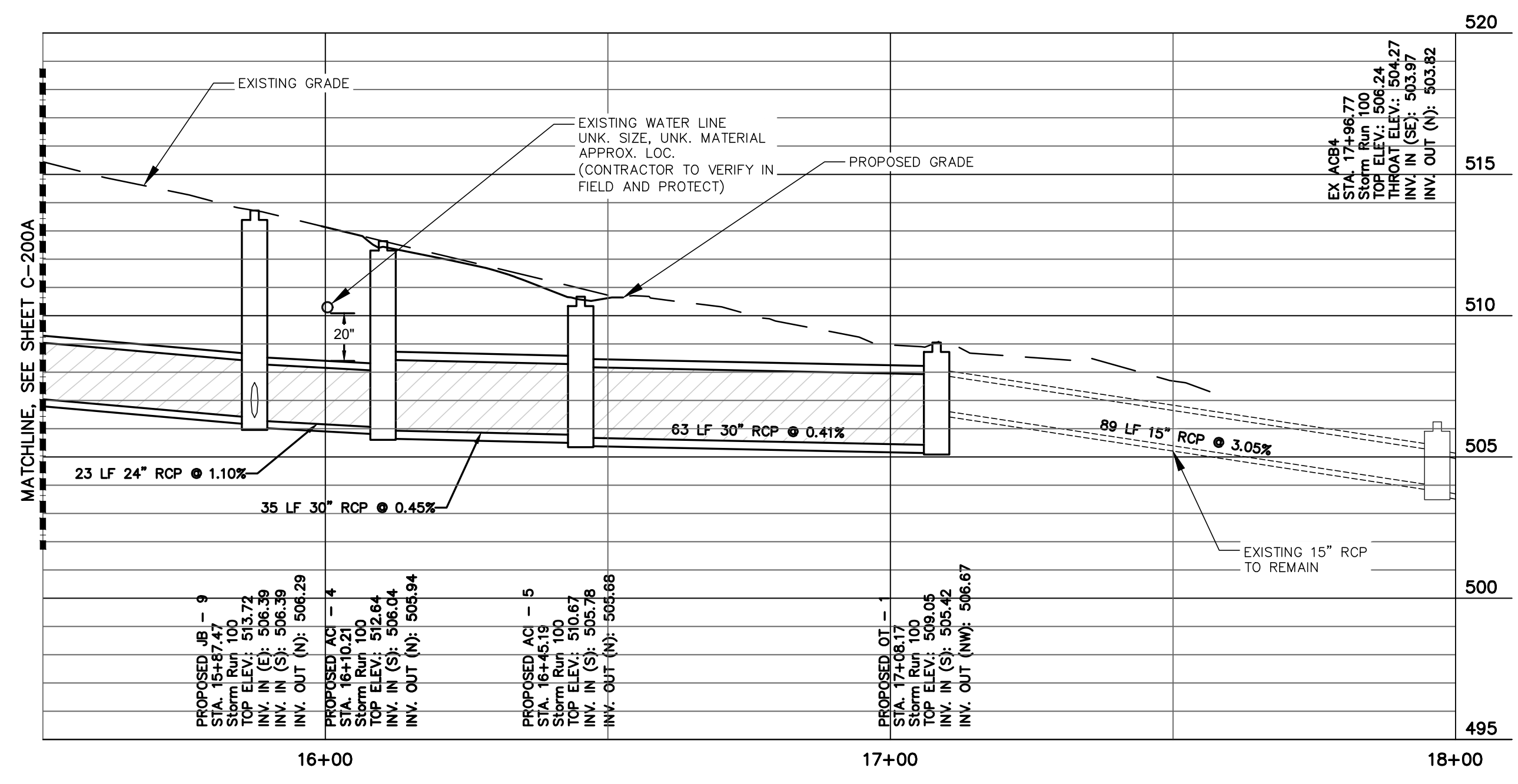
23.01905_VILLAGE OF PINEHURST_C-200 DRAINAGE PLAN STA 10+00 TO 15+50

- NOTE:
1. ALL PROPOSED PIPES TO BE INSTALLED VIA OPEN CUT TRENCHES.
 2. CONTRACTOR SHALL COORDINATE CLOSURE OF MAGNOLIA RD AND CHINQUAPIN RD WITH THE VILLAGE OF PINEHURST.
 3. STRAW MATTING TO BE INSTALLED WHEREVER GRADING OCCURS TO ESTABLISH SHOULDERS AND DITCHES TO PROPERLY DIRECT STORM WATER TO PROPOSED INLETS.
 4. CONTRACTOR TO PROTECT AND SUPPORT EXISTING UTILITIES AS NECESSARY DURING CONSTRUCTION OF PROPOSED STORM DRAINAGE.
 5. SEE SHEET C-503 FOR STORM DRAINAGE TOP ABBREVIATIONS



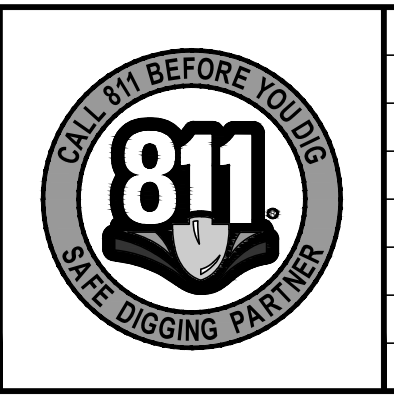
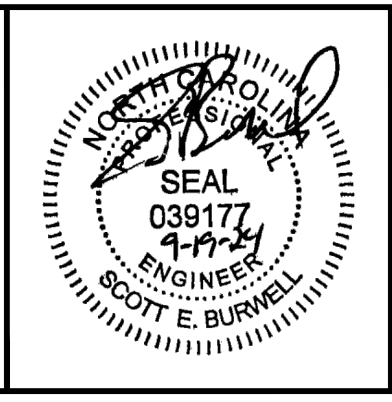
BID DOCUMENTS - ALT. BID

PROFILE
SCALE: HORIZ. 1"= 20'
VERT. 1"= 4'



P:\2023\23.01905-PINEHURST-INTERSECTION_DESIGN\DRAWINGS\SHEETS\23.01905 DRAINAGE PLAN.DWG PLOT DATE 9/19/2024 1:19 PM KHIYA ARMSTRONG

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Suite A
Pinehurst, NC 28374
910.295.3159
NC Firm License # C-0459
mcgillassociates.com



NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

OFFICE MANAGER D. HONEYCUTT	DESIGNER C. WILLIS
PROJECT MANAGER S. BURWELL	REVIEWER N. SAWYER

STORM DRAINAGE PLAN - STORM RUN 100		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

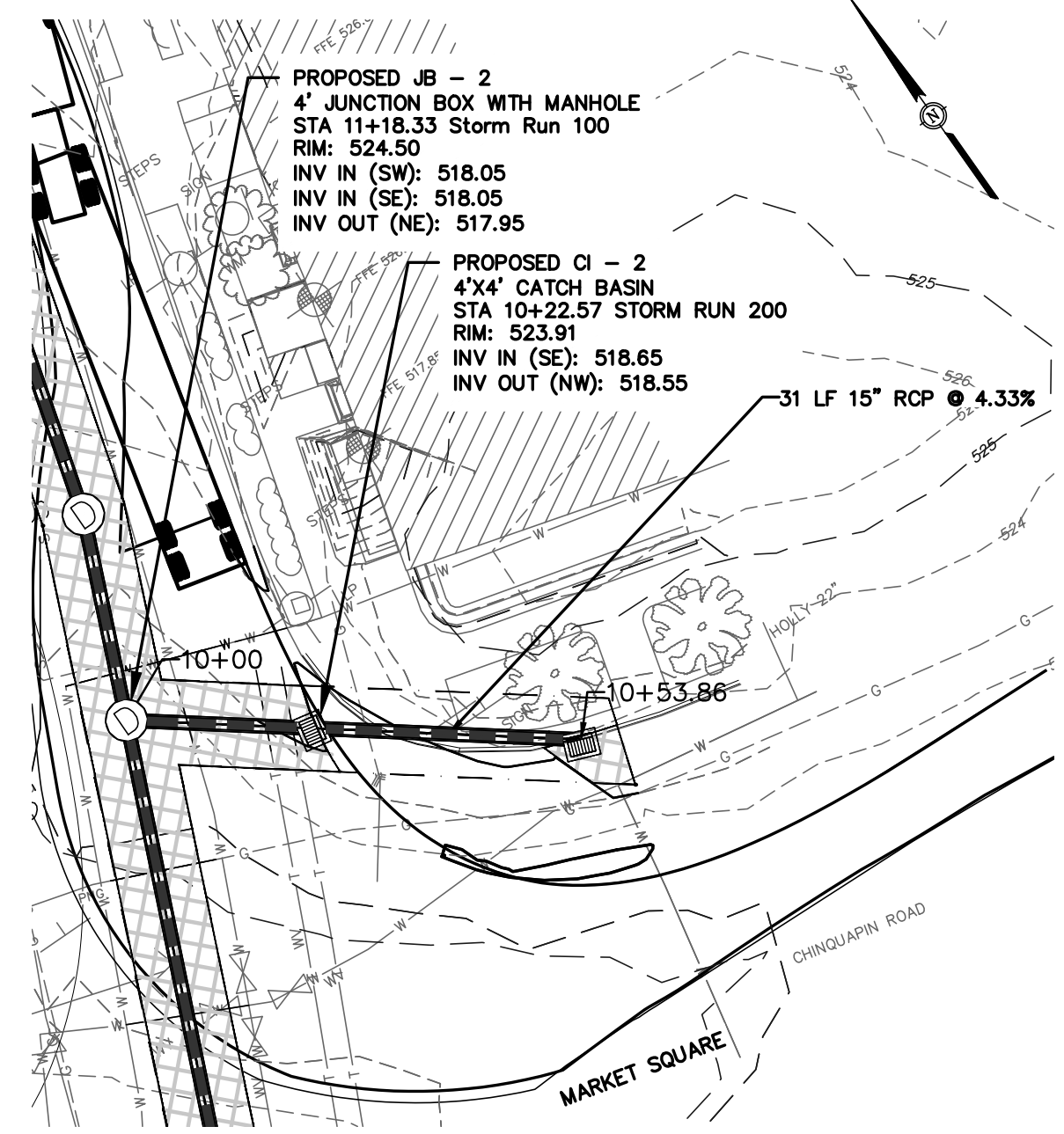
SHEET
C-201A

23.01905 - VILLAGE OF PINEHURST - C-201 DRAINAGE PLAN 15+50 TO 17+24.87

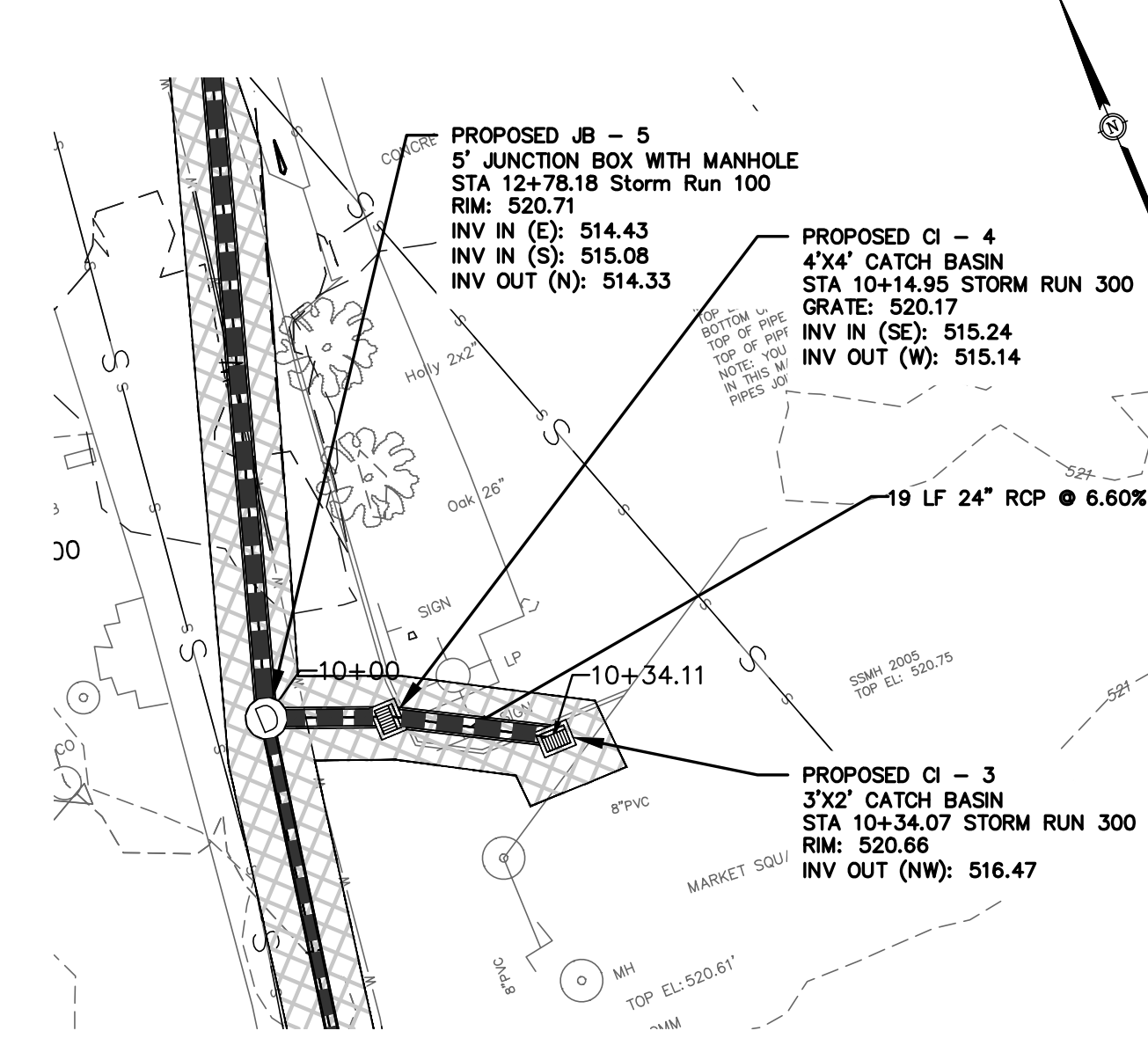
PLAN

BID DOCUMENTS - ALT. BID

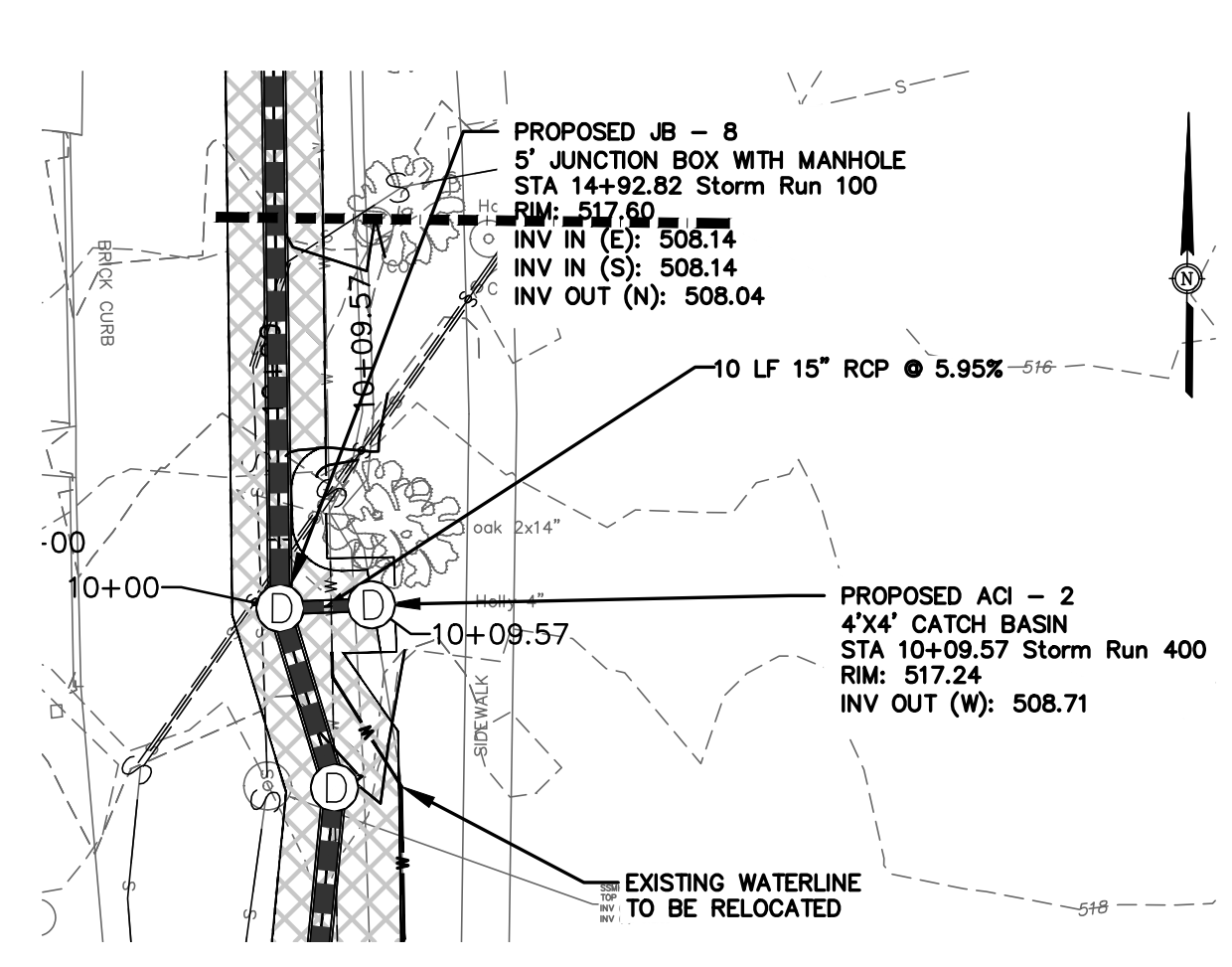
- NOTE:
1. ALL PROPOSED PIPES TO BE INSTALLED VIA OPEN CUT TRENCHES.
 2. CONTRACTOR SHALL COORDINATE CLOSURE OF MAGNOLIA RD AND CHINQUAPIN RD WITH THE VILLAGE OF PINEHURST.
 3. STRAW MATTING TO BE INSTALLED WHEREVER GRADING OCCURS TO ESTABLISH SHOULDERS AND DITCHES TO PROPERLY DIRECT STORM WATER TO PROPOSED INLETS.
 4. CONTRACTOR TO PROTECT AND SUPPORT EXISTING UTILITIES AS NECESSARY DURING CONSTRUCTION OF PROPOSED STORM DRAINAGE.
 5. SEE SHEET C-503 FOR STORM DRAINAGE TOP ABBREVIATIONS



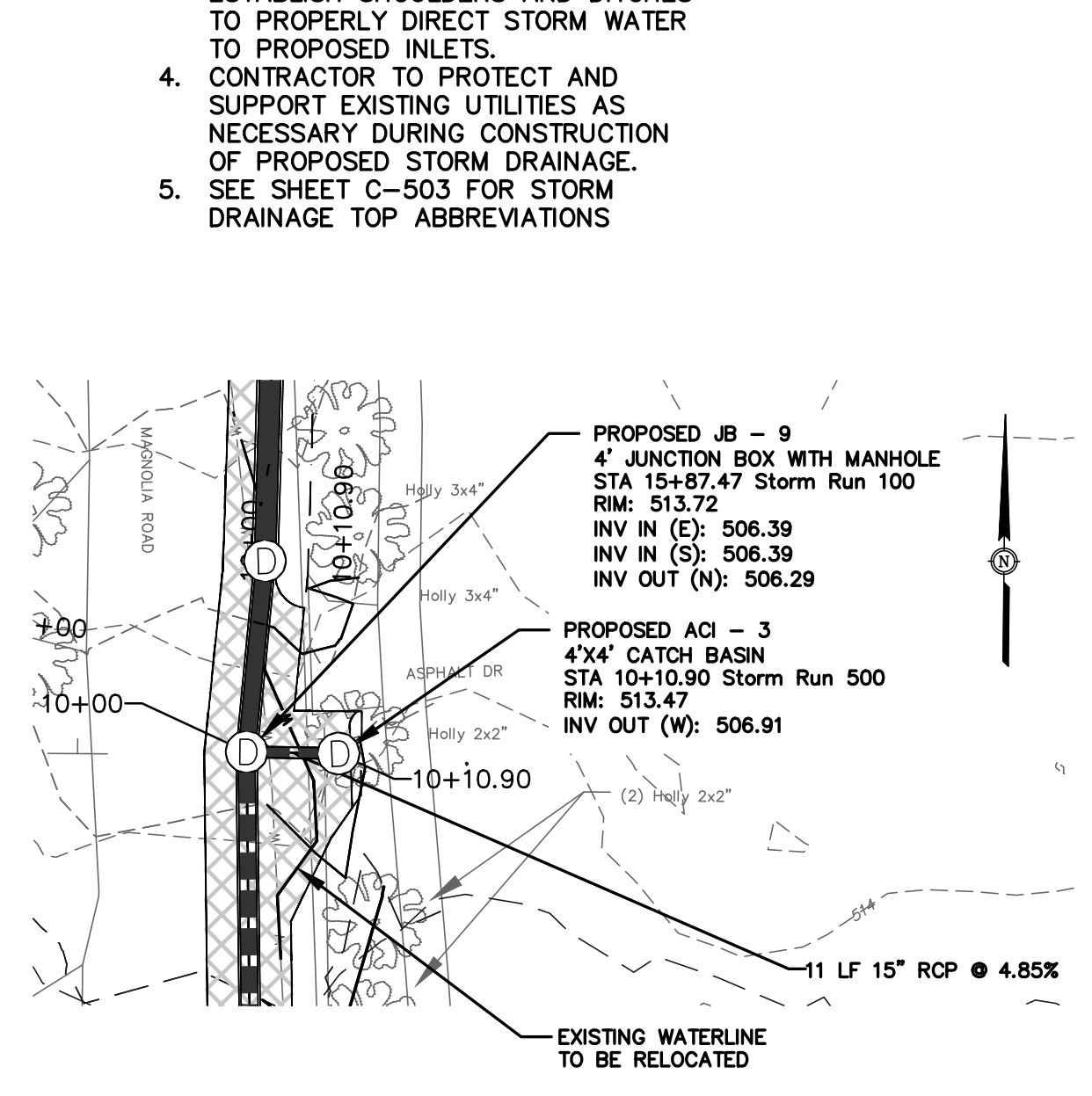
STORM RUN 200 PLAN



STORM RUN 300 PLAN

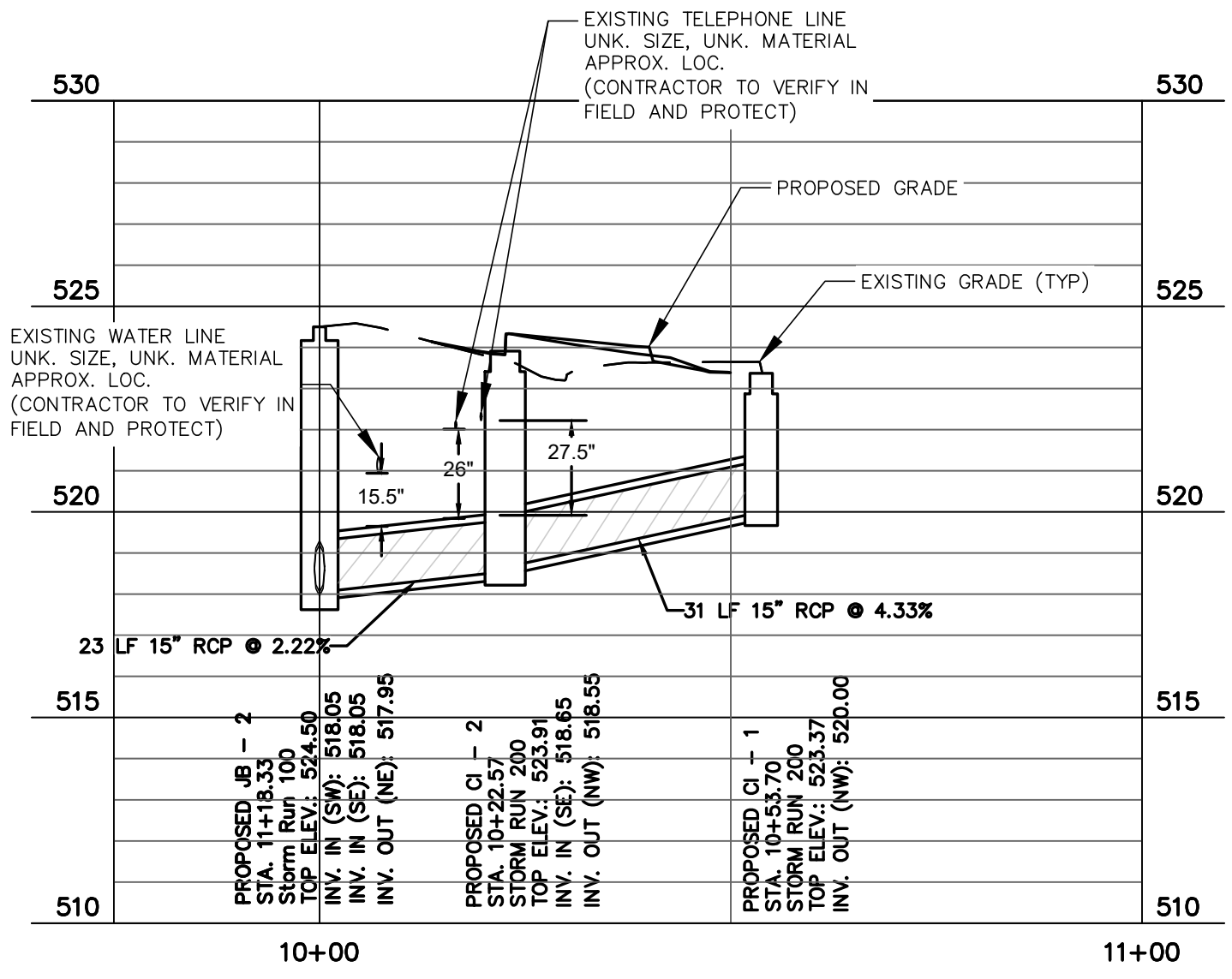


STORM RUN 400 PLAN

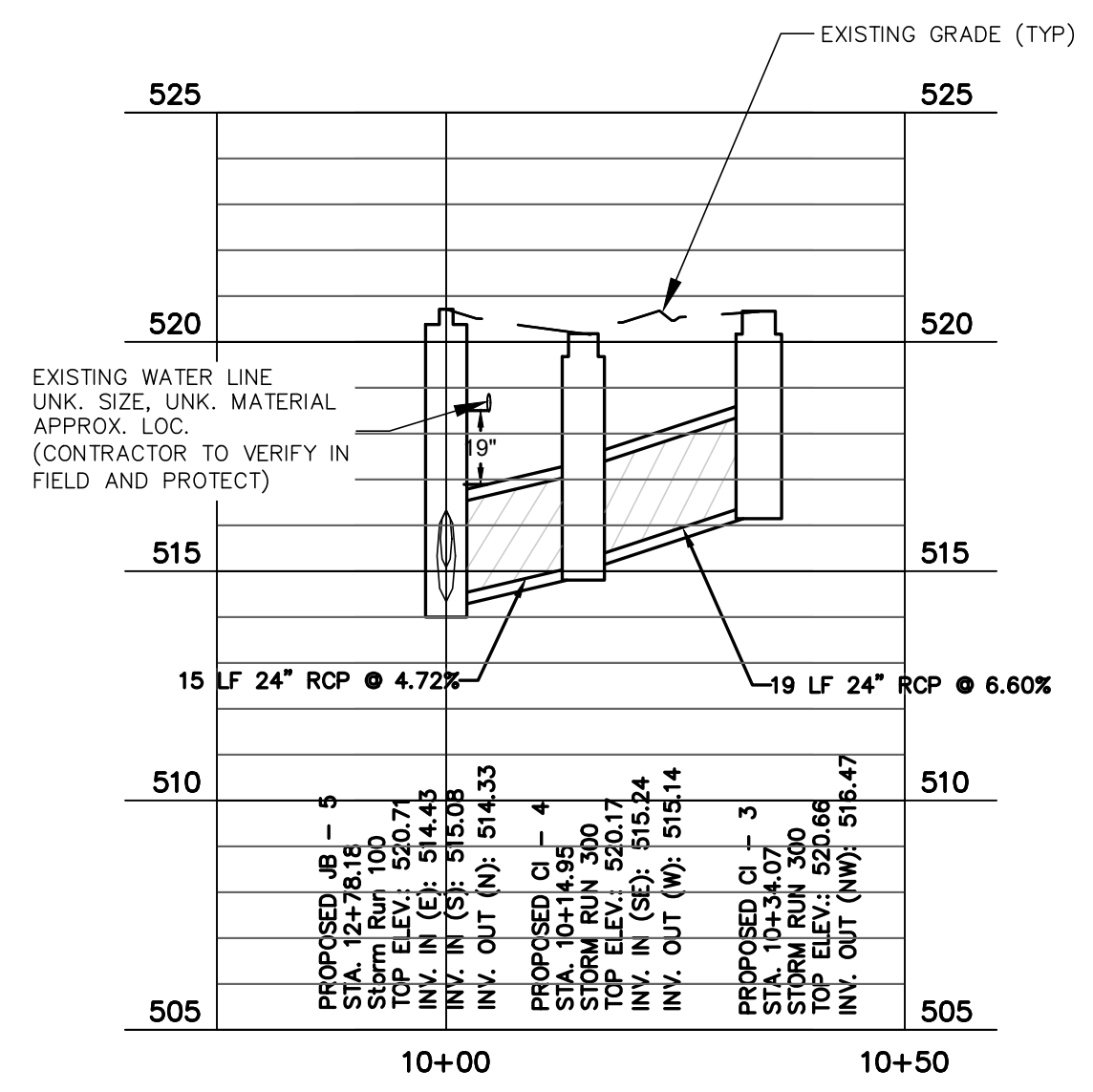


STORM RUN 500 PLAN

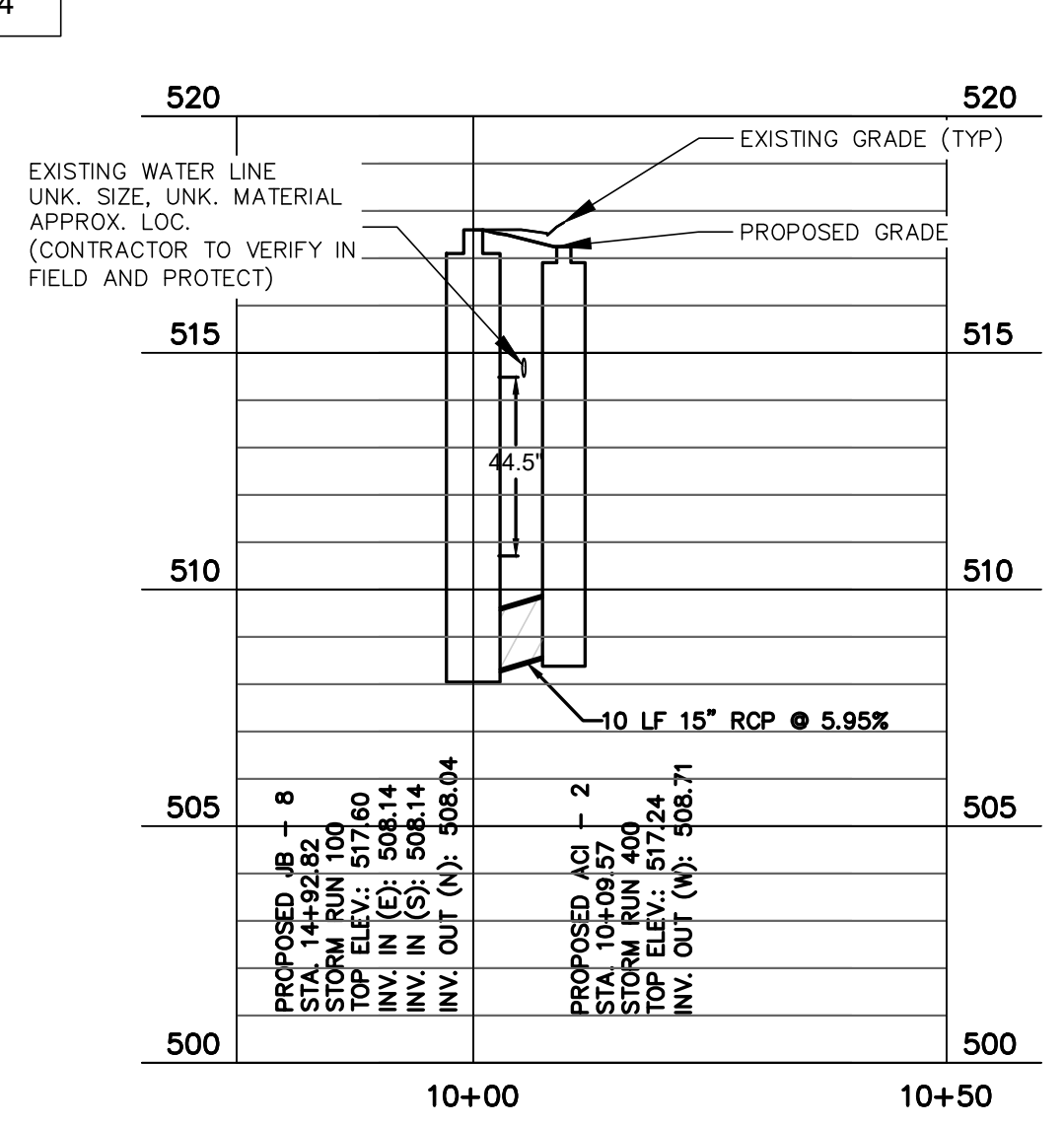
PROFILE
SCALE: HORIZ. 1"= 20'
VERT. 1"= 4'



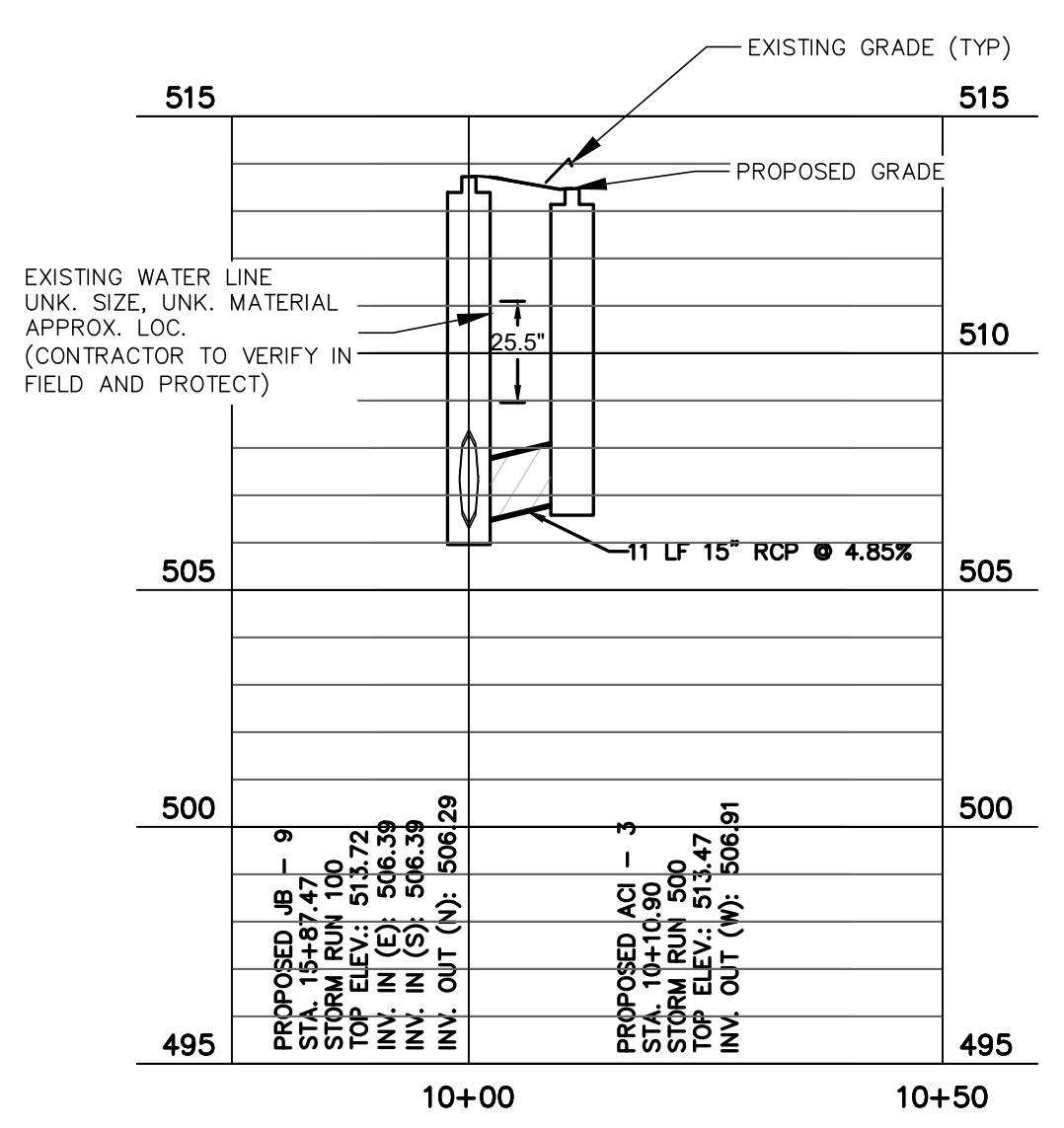
STORM RUN 200 PROFILE



STORM RUN 300 PROFILE



STORM RUN 400 PROFILE



STORM RUN 500 PROFILE

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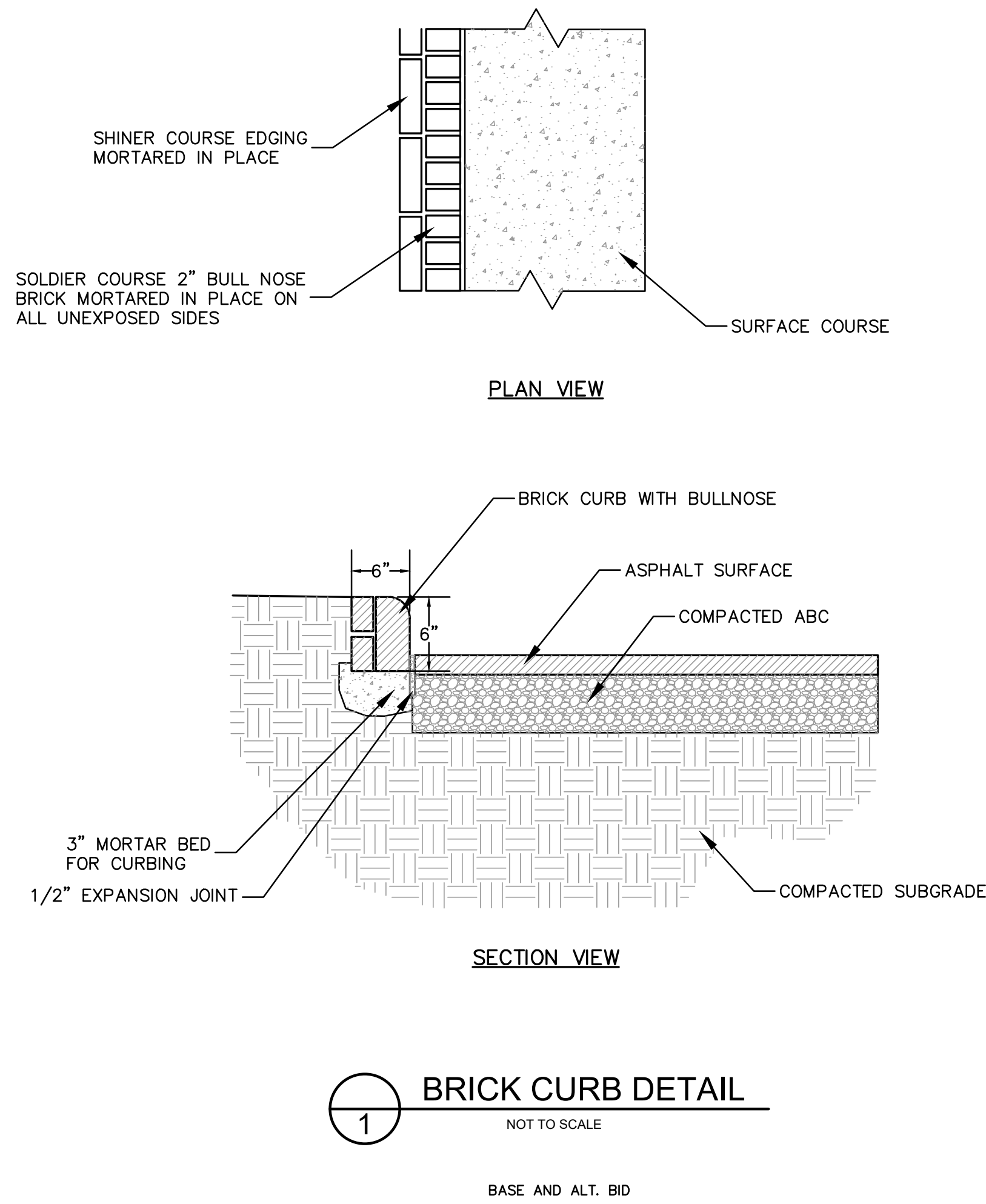
NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

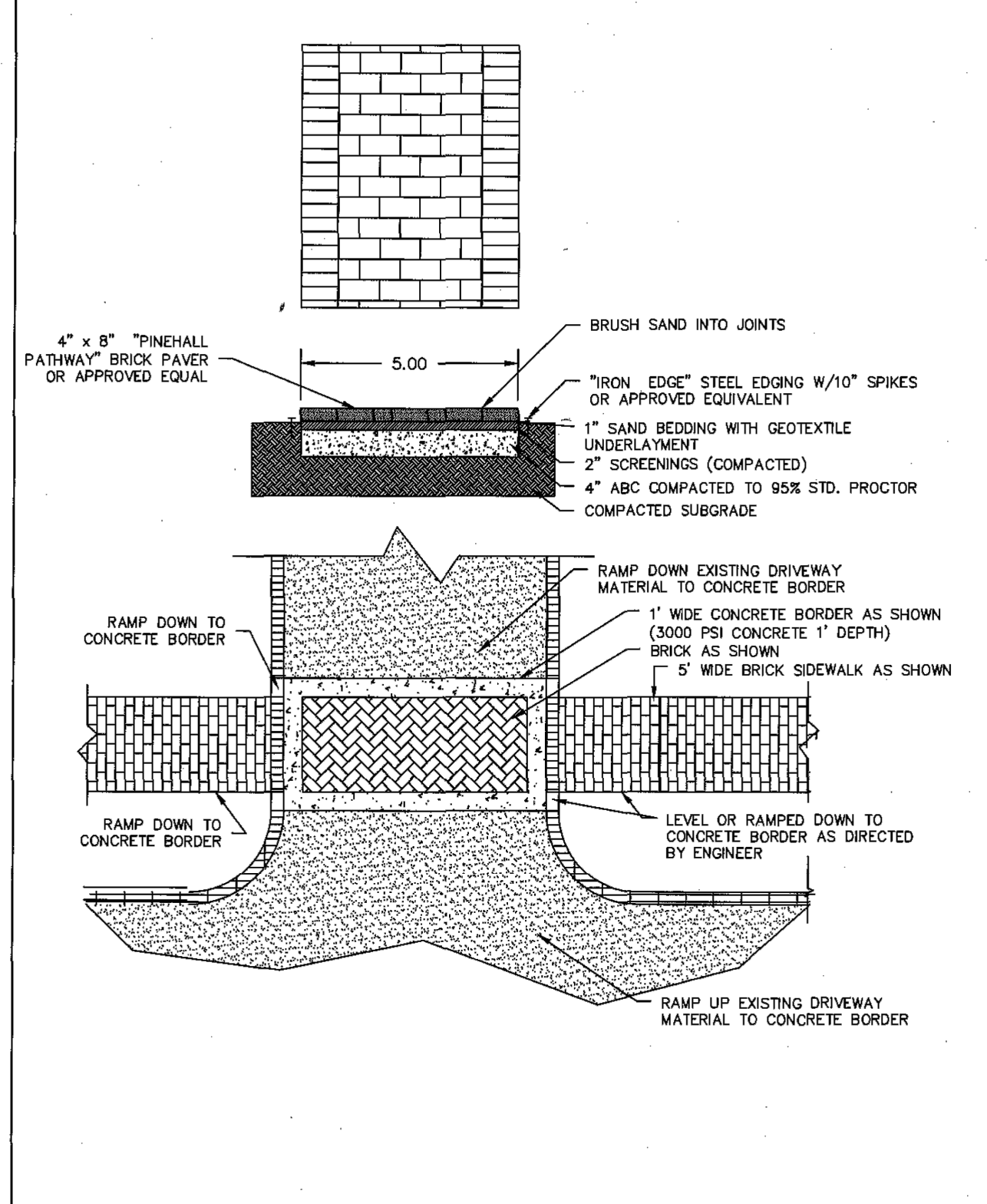
OFFICE MANAGER D. HONEYCUTT	DESIGNER C. WILLIS
PROJECT MANAGER S. BURWELL	REVIEWER N. SAWYER

STORM DRAINAGE PLAN - STORM RUN 200, 300, 400, & 500		
DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A

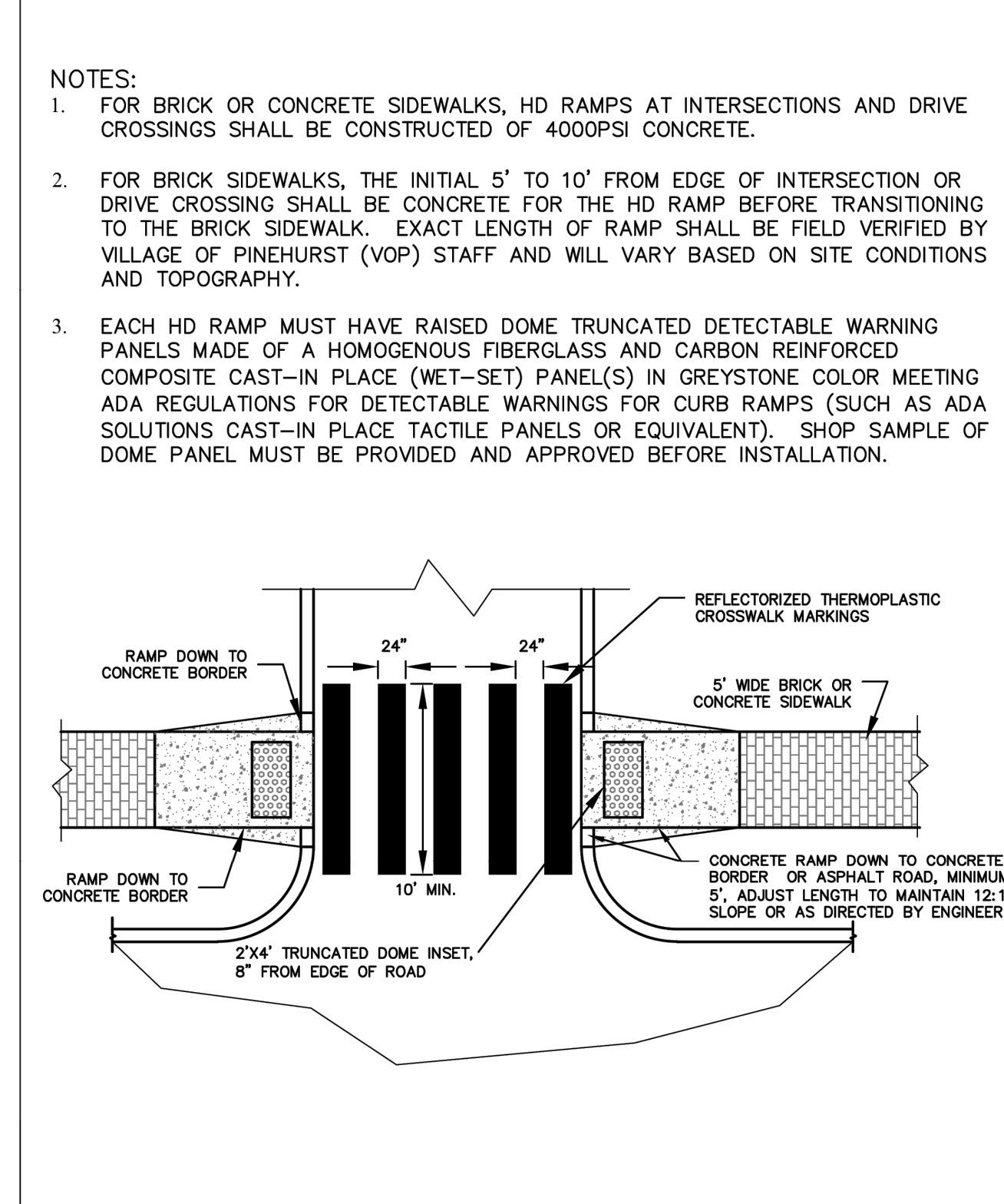
SHEET
C-202A



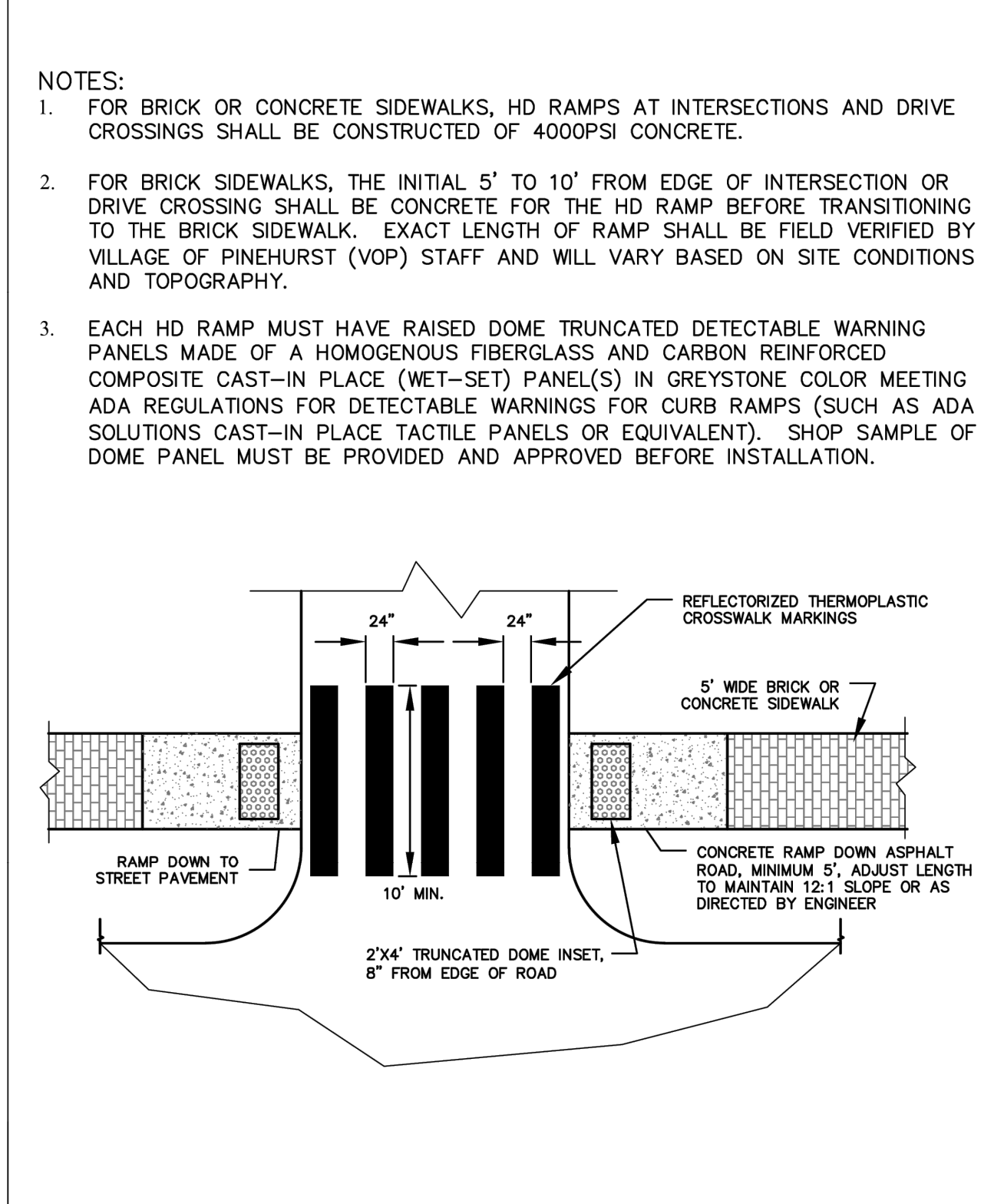
BRICK CURB DETAIL
NOT TO SCALE
BASE AND ALT. BID



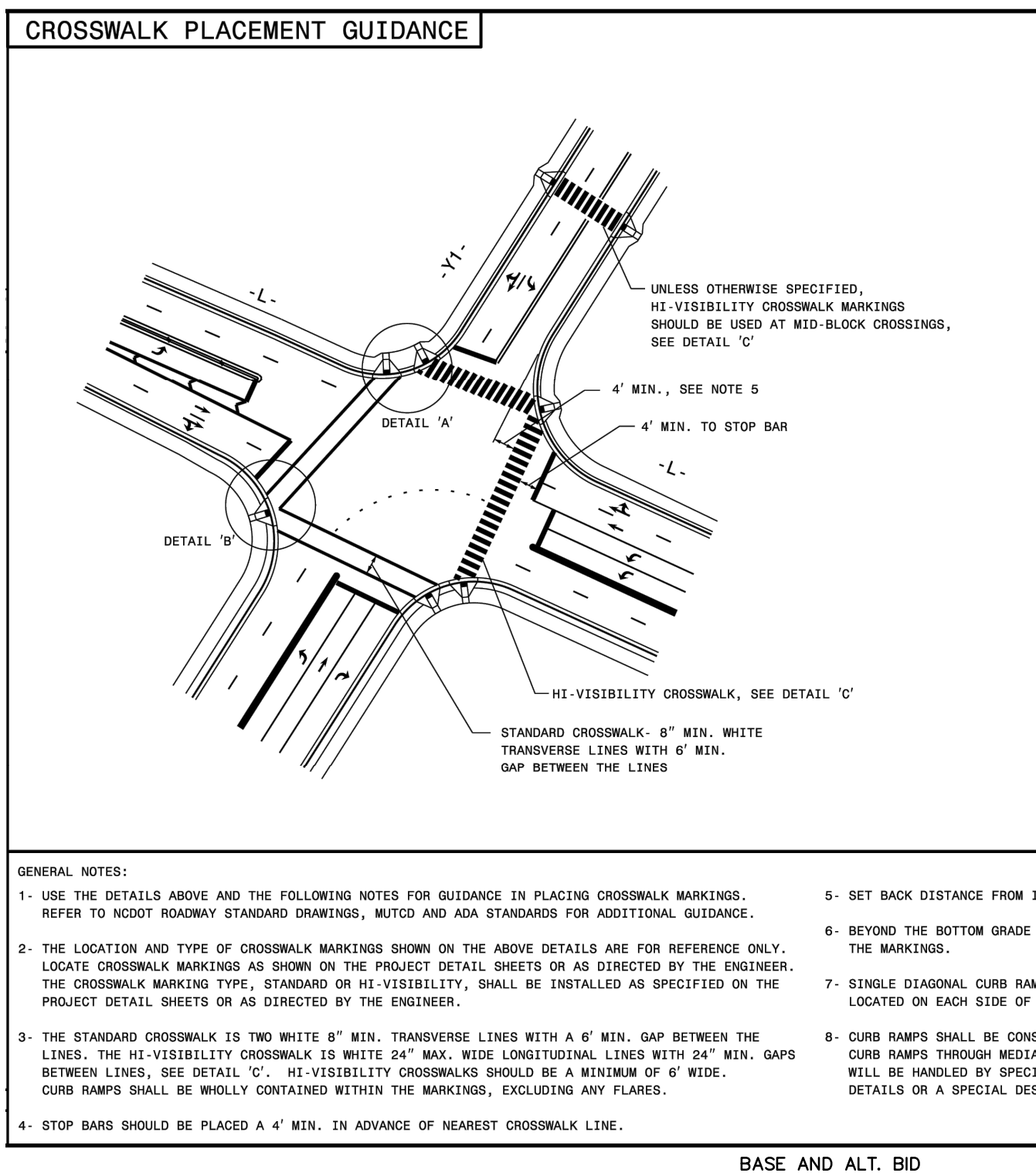
BRICK SIDEWALK
NOT TO SCALE DWG NO. 5.12 SHEET 1 OF 1
BASE AND ALT. BID



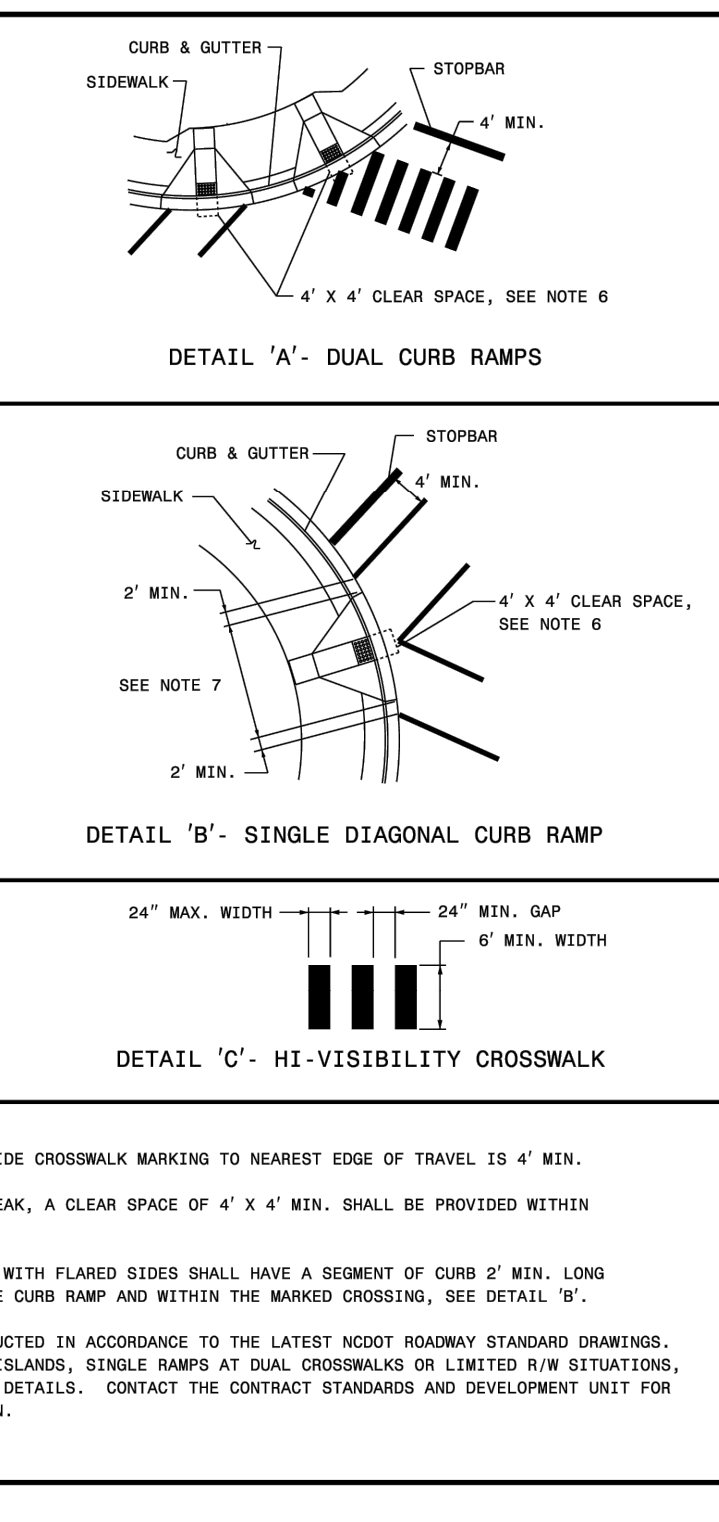
HANDICAP RAMP DETAIL WITH CURB
NOT TO SCALE DWG NO. 5.12A SHEET 1 OF 1
BASE AND ALT. BID



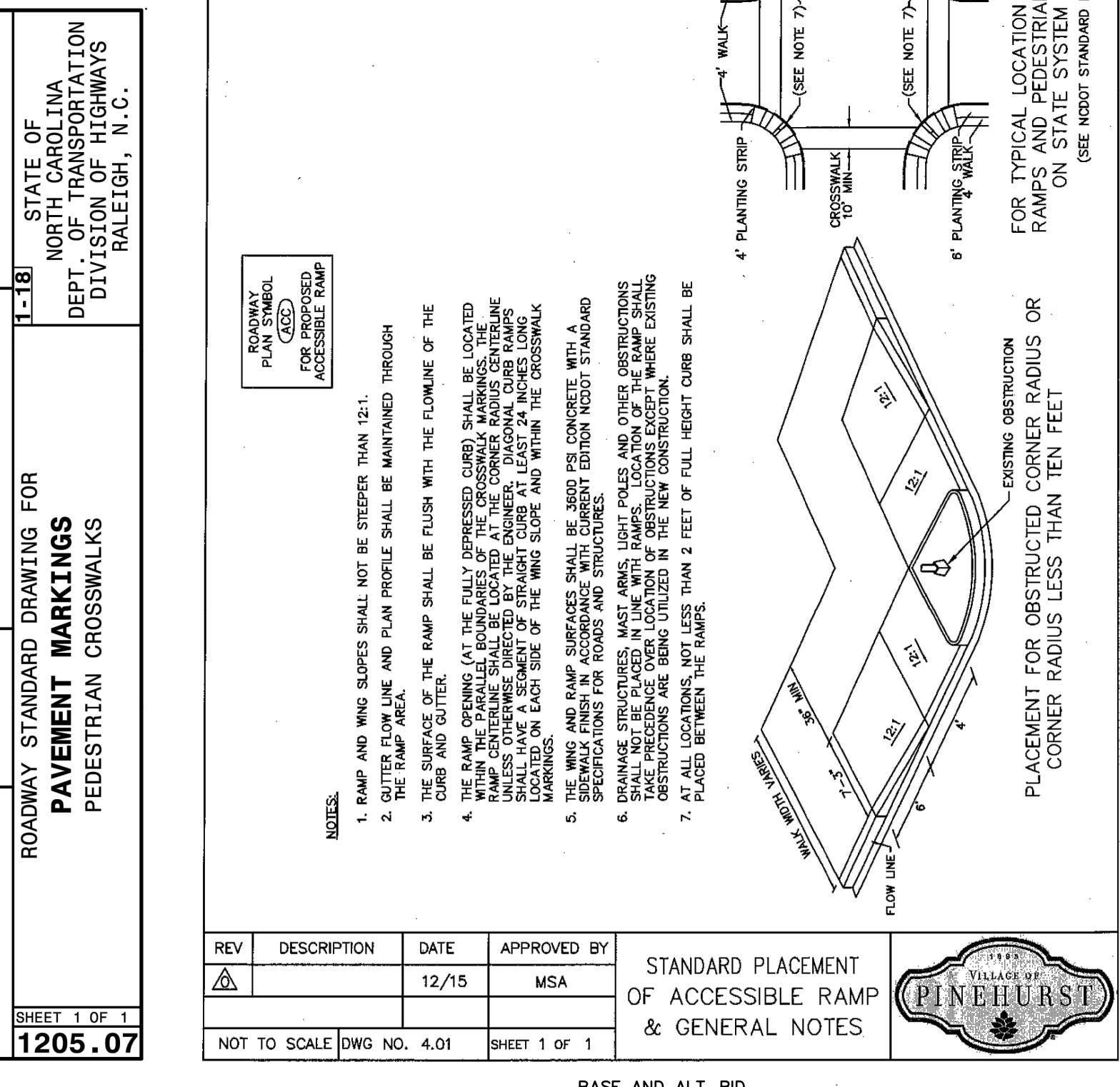
HANDICAP RAMP DETAIL NO CURB
NOT TO SCALE DWG NO. 5.12B SHEET 1 OF 1
BASE AND ALT. BID



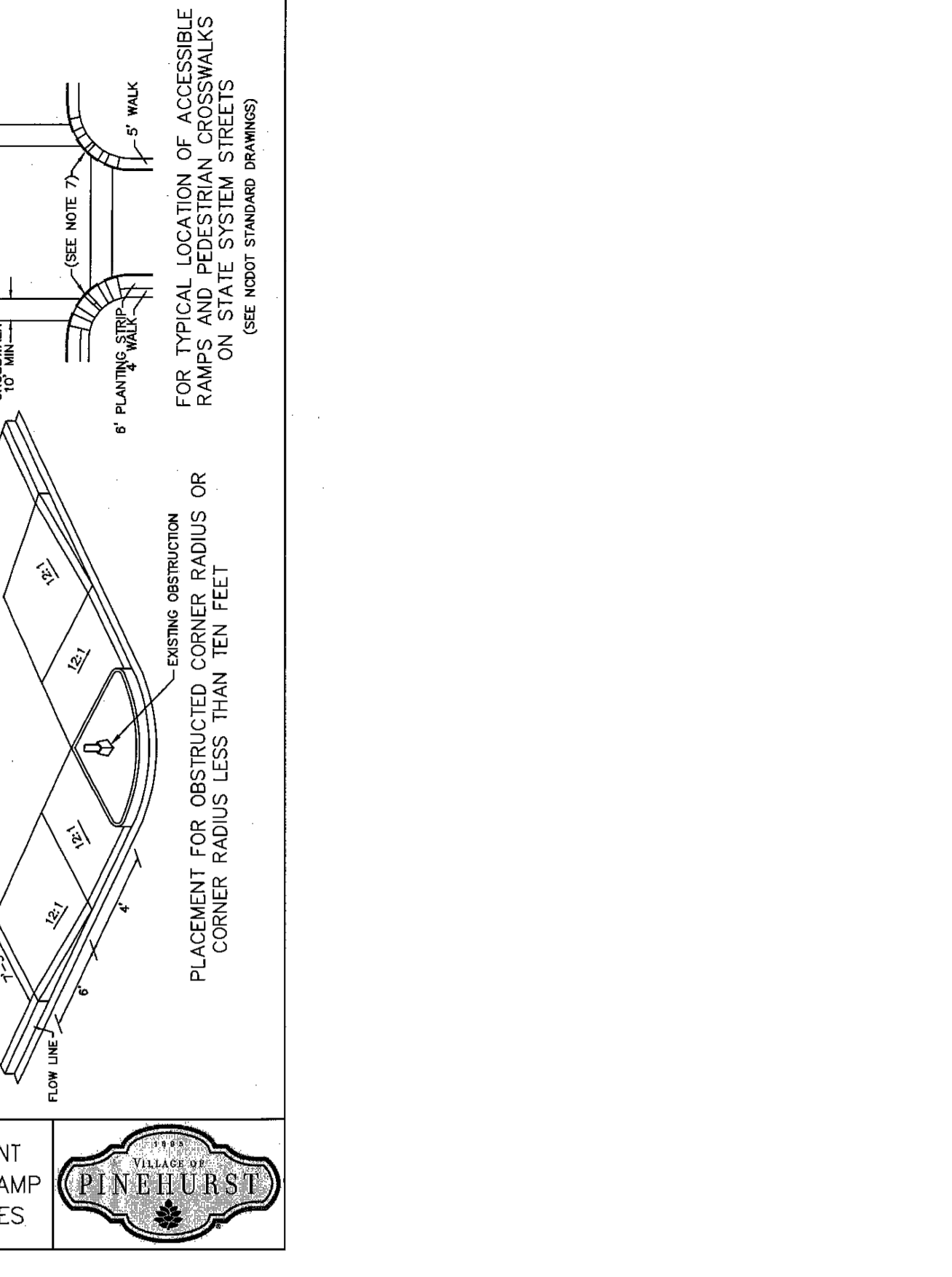
CROSSWALK PLACEMENT GUIDANCE
BASE AND ALT. BID



ROADWAY STANDARD DRAWING FOR PAVEMENT MARKINGS PEDESTRIAN CROSSWALKS
SHEET 1 OF 1
1205.07
BASE AND ALT. BID



STANDARD PLACEMENT OF ACCESSIBLE RAMP & GENERAL NOTES
NOT TO SCALE DWG NO. 4.01 SHEET 1 OF 1
BASE AND ALT. BID



HANDICAP RAMP DETAIL WITH CURB
NOT TO SCALE DWG NO. 5.12A SHEET 1 OF 1
BASE AND ALT. BID



HANDICAP RAMP DETAIL NO CURB
NOT TO SCALE DWG NO. 5.12B SHEET 1 OF 1
BASE AND ALT. BID

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5 Regional Circle
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NC Firm License # C-0459
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811 BEFORE YOU DIG
CALL 811 BEFORE YOU DIG
SAFE DIGGING PARTNER

NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

NOT TO SCALE

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

MISCELLANEOUS DETAILS

DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A
------------------------	-----------------------	------------------

SHEET
C-501

P:\2023\23.01905-PINEHURST-INTERSECTION_DESIGN\DRAWINGS\SHEETS\7_23.01905-DETAILS.DWG PLOT DATE 9/19/2024 1:18 PM KHVA ARMSTRONG

BID DOCUMENTS

P:\2023\23.01905-PINEHURST-INTERSECTION_DESIGN\DRAWINGS\SHEET\23.01905 DETAILS.DWG PLOT DATE: 9/19/2024 1:18 PM KHIVA ARMSTRONG

DEEP TYPE (5'x5')
(OVER 20 FEET IN DEPTH)

INTERMEDIATE TYPE (4'x4')
(5 FEET TO 20 FEET IN DEPTH)

SHALLOW TYPE
(5 FEET OR LESS IN DEPTH)

SLAB DETAIL

STANDARD STEPS 16" ON CENTER
MIN. 6" WASHED STONE BEDDING
FRAME, GRATE, & HOOD PER D.O.T. STD. 840.03C
REINFORCED CONCRETE SLAB
MIN. 6" WASHED STONE BEDDING

SLAB THICKNESS AND REINFORCEMENT FOR TRAFFIC LOADING BY AN ENGINEER

NOTES:
1. CONCRETE SHALL BE 4000 PSI MIN. STRENGTH PRECAST CONCRETE.
2. PRECAST CONCRETE STRUCTURES SHALL BE MANUFACTURED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS. MANUFACTURER'S MARKINGS ARE ACCEPTABLE FOR SHALLOW TYPE CATCH BASINS.

REV	DESCRIPTION	DATE	APPROVED BY
1		12/15	MSA

PRECAST CONCRETE CATCH BASIN

NOT TO SCALE DWG NO. 5.03-A SHEET 1 OF 1

ALT. BID

FRAME, GRATE AND HOOD FOR CATCH BASIN

NOTES:
1. USE TYPE "E", "F" AND "G" GRATES AS PER NCDOT STD. DRAWINGS.

REV	DESCRIPTION	DATE	APPROVED BY
1		12/15	MSA

NOT TO SCALE DWG NO. 5.04 SHEET 1 OF 1

ALT. BID

ASPHALT PAVEMENT PATCH

EXISTING ABC
NEW ABC 12" MINIMUM DEPTH
EXISTING SUBGRADE
COMPACTED FILL
ASPHALT CURB WEDGE

NOTES:
1. THE PAVEMENT SHALL BE DEFINED BY A STRAIGHT EDGE, PREFERABLY A MACHINED SAW CUT; TACKED.
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.
3. THE FINAL 1" OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-180 AS MODIFIED BY NCDOT. BITUMINOUS BASE OR BINDER MAY BE SUBSTITUTED IF APPROVED BY THE VILLAGE ENGINEER.
4. THE ENTIRE THICKNESS/VERTICAL EDGE OF THE CUT SHALL BE TACKED.
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 2" THICK.
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY TO ACHIEVE A SMOOTH LEVEL PATCH.

REV	DESCRIPTION	DATE	APPROVED BY
1		12/15	MSA

ASPHALT PAVEMENT PATCH

NOT TO SCALE DWG NO. 3.06 SHEET 1 OF 1

ALT. BID

ASPHALT CURB & GUTTER

FINISHED GRADE
12"
2" SF9.5 B PAVEMENT
ASPHALT CURB WEDGE
6" ABC STONE BASE UNDER NEW PAVEMENT SECTIONS

NOTE:
1. ALL STRIPING IS THERMO PLASTIC, PER N.C.D.O.T. STANDARD 1087(C).
2. PAVEMENT MARKINGS SHALL CONFORM TO N.C.D.O.T. DIVISION OF HIGHWAYS STANDARD DRAWINGS:
- 1205.01, SHEET 1 OF 2
- 1205.04, SHEET 1 OF 2
- 1205.05, SHEET 1 OF 1
- 1205.06, SHEET 2 OF 2
- 1205.07, SHEET 1 OF 1
- 1205.08, SHEET 1 OF 7

PAVEMENT STRIPING NOTE
UPDATED MARCH, 2017

BASE AND ALT. BID

CONCRETE FLUME DETAIL WITH COVER

TOOLED EDGE (TYP) FINISH GRADE
COVER AND FRAME ASSEMBLY SHALL BE RELIANCE FOUNDRY TRENCH GRATE R-4990-CX OR APPROVED EQUAL. INSTALL ACCORDING TO MANUFACTURER'S STANDARDS. SUBMIT DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
4000 PSI CONCRETE
6" MIN. COMPACTED ABC
COMPACTED SUBGRADE

ST 33
UPDATED MARCH, 2017
NOT TO SCALE

BASE BID

Trench Grate R-4990-CX

General Description:
R-4990-CX
TYPE D.

Specifications:
Length: 24"
Width: 12"
Weight: 80 lbs
Material: Cast Gray Iron
ASTM A-48, Class 35B

Finish:
• Black

RELIANCE FOUNDRY
SINCE 1925
Unit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canada
1-877-789-3245 info@reliance-foundry.com
www.reliance-foundry.com

TITLE: Trench Grate R-4990-CX
SIZE: C DWG NO: 06453124 REV: C1
NOT TO SCALE SHEET 1 OF 1

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BASE BID

BID DOCUMENTS

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mcgillassociates.com

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4-1-24
SCOTT E. BURWELL
ENGINEER

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NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

NOT TO SCALE

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

MISCELLANEOUS DETAILS

DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A
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SHEET
C-502

23.01905 VILLAGE OF PINEHURST C-502 MISCELLANEOUS DETAILS

P:\2023\23.01905-PINEHURST-INTERSECTION_DESIGN\DRAWINGS\SHEET\23.01905-DETAILS.DWG PLOT DATE: 9/19/2024 1:20 PM KHIVA ARMSTRONG

GENERAL NOTES

USE 4000 PSI MINIMUM COMPRESSIVE STRENGTH CONCRETE.
 USE ASTM A615 GRADE 60 REINFORCING STEEL. USE ASTM A1064 WELDED WIRE FABRIC (WWF).
 FABRICATE, ASSEMBLE AND DESIGN PRECAST MANHOLE COMPONENTS ACCORDANCE WITH AASHTO M195.
 ASSEMBLE RISER AND GRADE RINGS WITH THE STEPS SPACED 12" FROM THE TOP TO THE BOTTOM OF THE MANHOLE.
 WHERE THE MANHOLE IS EXPOSED TO ROAD TRAFFIC, CONSTRUCT THE TOP OF THE MANHOLE FLUSH WITH THE GROUND AND A MINIMUM OF 8" ABOVE THE GROUND AT OTHER LOCATIONS.
 LIMIT DEPTH OF FILL TO 30'-0" FROM FINISH GRADE TO TOP OF BOTTOM SLAB.
 THE MIN. SLAB THICKNESS 'T' IS THE DIMENSION OF THE THINNEST PORTION OF THE TOP/BOTTOM SLAB.
 * TOP MAT OF REINFORCEMENT MAY BE NEGLECTED IF TOP SLAB HAS A DISTINGUISHABLE TOP AND BOTTOM.

D	W	T	A ₈
INTERNAL DIAMETER (FT.)	MIN. WALL THICKNESS (IN.)	MIN. TOP/BOTTOM SLAB THICKNESS (IN.)	MIN. CIRCUMFERENTIAL AREA OF STEEL PER VERTICAL FT. (SQ. IN.)
4	4	6	0.12
5	5	8	0.15
6	6	8	0.18

ALTERNATE CONE SECTION

FLAT TOP SLAB

TYPICAL MANHOLE SECTION

MANHOLE OPTION

GRADED INLET OPTION

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

ROADWAY STANDARD DRAWING FOR
PRECAST MANHOLE 4', 5' AND 6' DIAMETER
 12" THRU 48" PIPE

SHEET 1 OF 1
840.52

TRENCH DETAIL FOR STORM DRAIN PIPES

NOTES:

- A MINIMUM OF 24" FROM OUTSIDE DIAMETER OF PIPE TO SIDE OF TRENCH MUST BE ALLOWED FOR COMPACTION OF FILL MATERIAL. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER THE PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE PLACED IN LAYERS NOT TO EXCEED 6". UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE PIPE HAS BEEN PLACED. COMPACTION REQUIREMENTS SHALL BE ATTAINED BY THE USE OF THE MECHANICAL TAMPS ONLY. EACH AND EVERY LAYER OF BACKFILL SHALL BE PLACED LOOSE AND THOROUGHLY COMPACTED INTO PLACE.
- ALL BACKFILL MATERIAL SHALL HAVE AN IN PLACE COMPACTED DENSITY OF 95% OF STANDARD PROCTOR. THE FINAL 2' BELOW FINISHED GRADE SHALL BE 100%.
- ALL TRENCHING OPERATIONS SHALL MEET OSHA STANDARDS.
- BACKFILL MATERIAL BENEATH ROADWAY SHALL BE SELECT BACKFILL MATERIAL.
- HAUNCHING SHALL BE WITH #57 OR #67 WASHED STONE UNLESS OTHERWISE APPROVED BY THE VILLAGE ENGINEER.

REV	DESCRIPTION	DATE	APPROVED BY
1		12/15	MSA

NOT TO SCALE (DWG NO. 5, OR) SHEET 1 OF 1

ALTERNATE BID

STATE OF NORTH CAROLINA
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

PLAN OF COVER

PLAN OF FRAME

SECTION A-A

SECTION B-B

MINIMUM WEIGHTS - LBS.

FRAME - 180
 COVER - 120
 TOTAL - 300

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

ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

ALTERNATE BID

STATE OF NORTH CAROLINA
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

STATE OF NORTH CAROLINA
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ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

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ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

CATCH BASIN TOP DETAILS

NOT TO SCALE

JUNCTION BOX TOP
 CATCH BASIN SCHEDULE SYMBOL-(JB)
 RIM=TOP OF COVER

CURB INLET TOP
 CATCH BASIN SCHEDULE SYMBOL-(CI, AG)
 RIM=TOP OF GRATE DIRECTLY UNDER HOOD OPENING

OPEN THROAT INLET TOP
 CATCH BASIN SCHEDULE SYMBOL-(OT)
 RIM=BOTTOM OF THROAT OPENING

ASPHALT CURB INLET TOP
 CATCH BASIN SCHEDULE SYMBOL-(AG)
 RIM=TOP OF COVER

NOTES:

STRUCTURES SPECIFIED TO HAVE FLAT JUNCTION BOX (JB) TOP WILL BE THE SAME TOP AS YARD INLET WITHOUT THE OPEN THROAT OF THE YARD INLET

UNLESS NOTED OTHERWISE MANHOLE RING AND COVER TO BE EXTENDED SO THAT ITS TOP IS FLUSH WITH PROPOSED GRADE AND/OR PAVING

YARD INLET SHALL RECEIVE FLAT TOP WITH MANHOLE RING AND COVER CAST IN FLUSH

USE PRE CAST BOX, 4" AND 2" CONCRETE BLOCK, OR BRICK TO ELEVATE TOP TO ACHIEVE THE DESIRED THROAT OPENING

6"-8" THROAT OPENING ALL FOUR SIDES UNLESS NOTED OTHERWISE

HEAVY DUTY GRATE AND FRAME WITH HOOD

UNLESS NOTED OTHERWISE GRATE AND FRAME ASSEMBLY FOR THIS TOP SHALL BE 24"x36" ("NEENAH R32330") OR ("U.S. FOUNDRY 5181-6420") OR APPROVED EQUAL CONFORMING TO N.C.D.O.T. ROADWAY STANDARDS 840.03

STATE OF NORTH CAROLINA
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ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

STATE OF NORTH CAROLINA
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ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

SHEET 1 OF 1
840.54

NOT TO SCALE

OFFICE MANAGER: D. HONEYCUTT
 DESIGNER: N. SAWYER
 PROJECT MANAGER: S. BURWELL
 REVIEWER: B. CATHEY

DATE: SEPTEMBER 2024
 PROJECT #: 23.01905
 FUNDING #: N/A

MISCELLANEOUS DETAILS

SHEET **C-503**

mcgill

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 mcgillassociates.com

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 ENGINEER
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NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
 DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
 MOORE COUNTY, NORTH CAROLINA

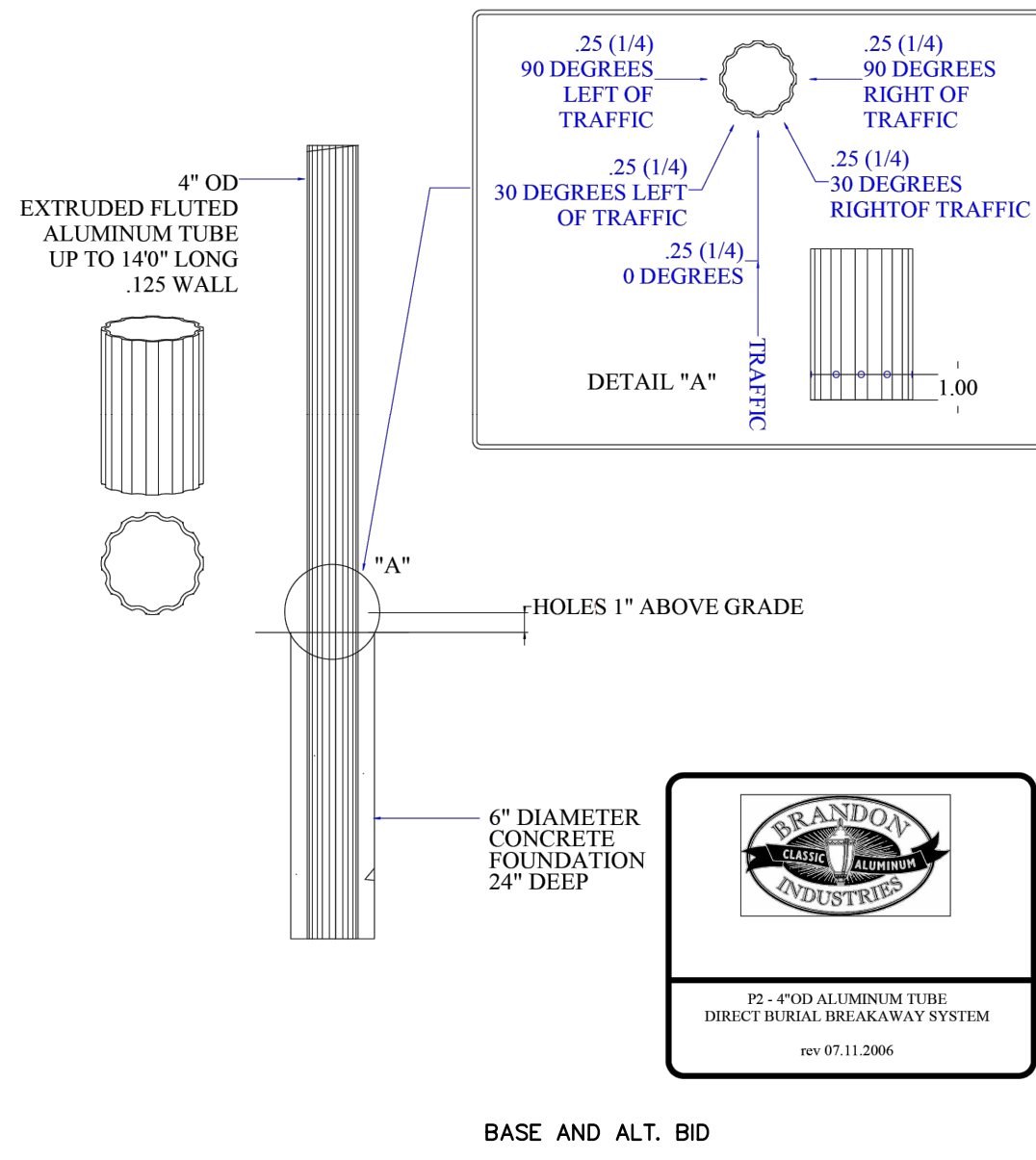
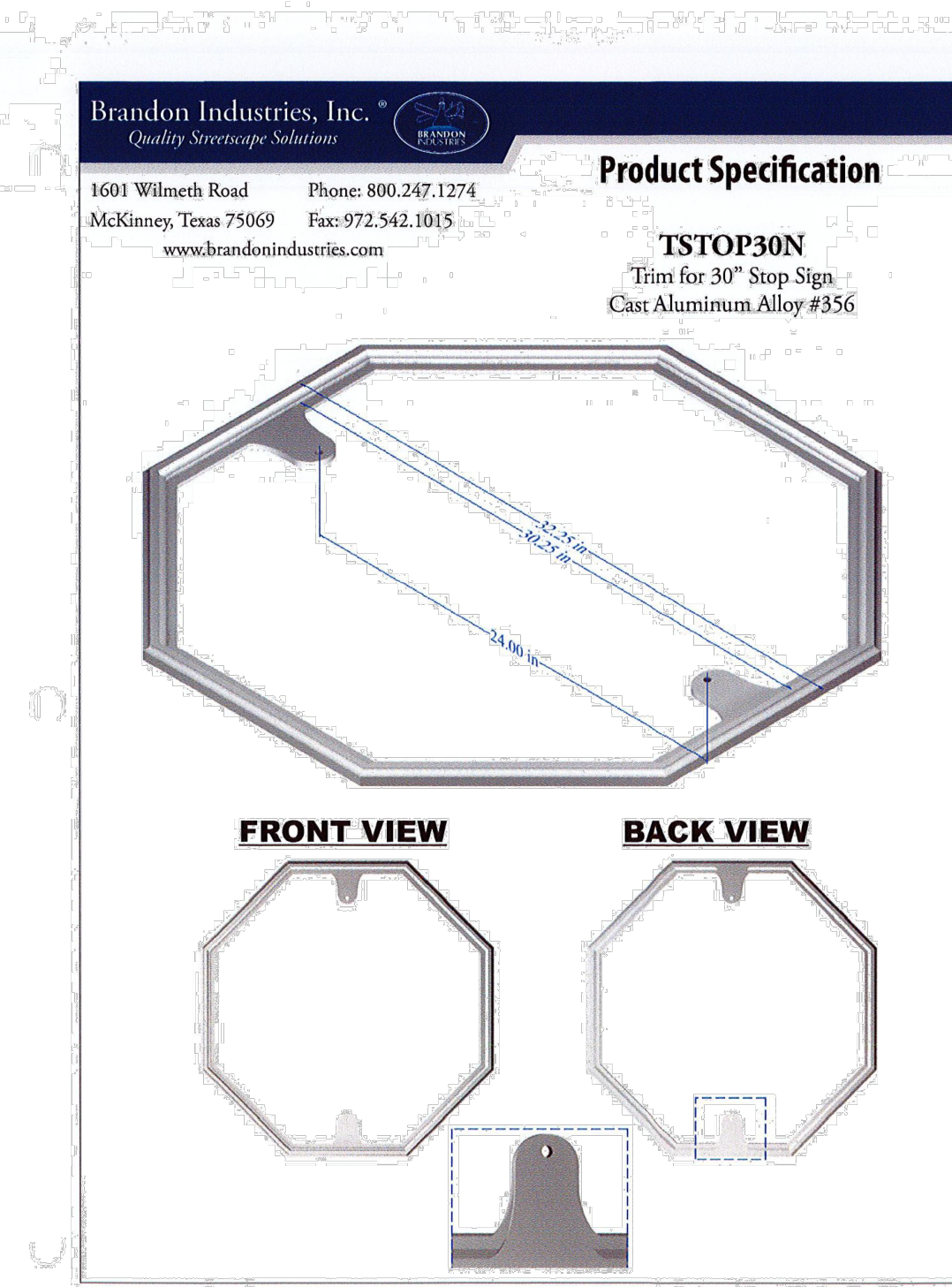
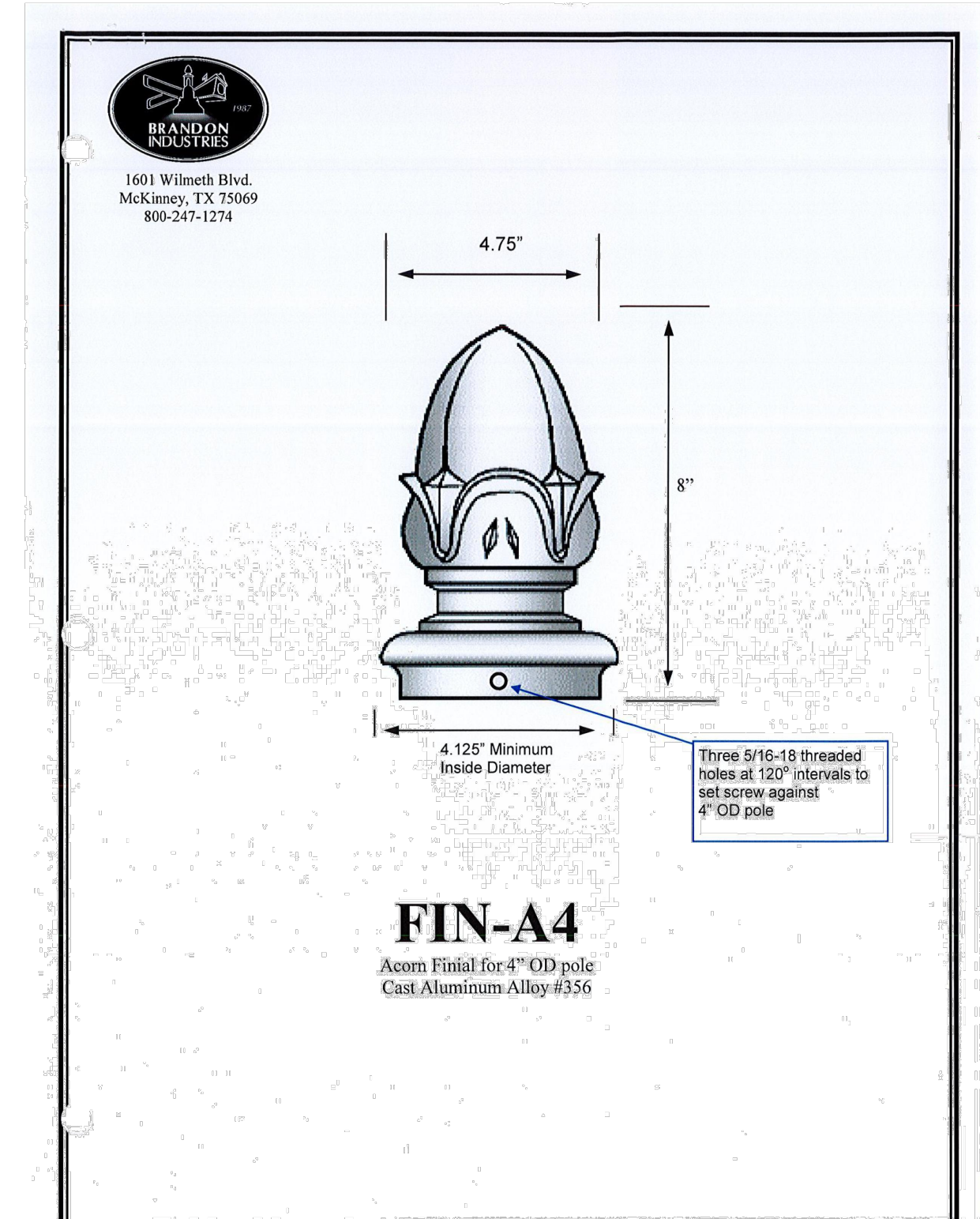
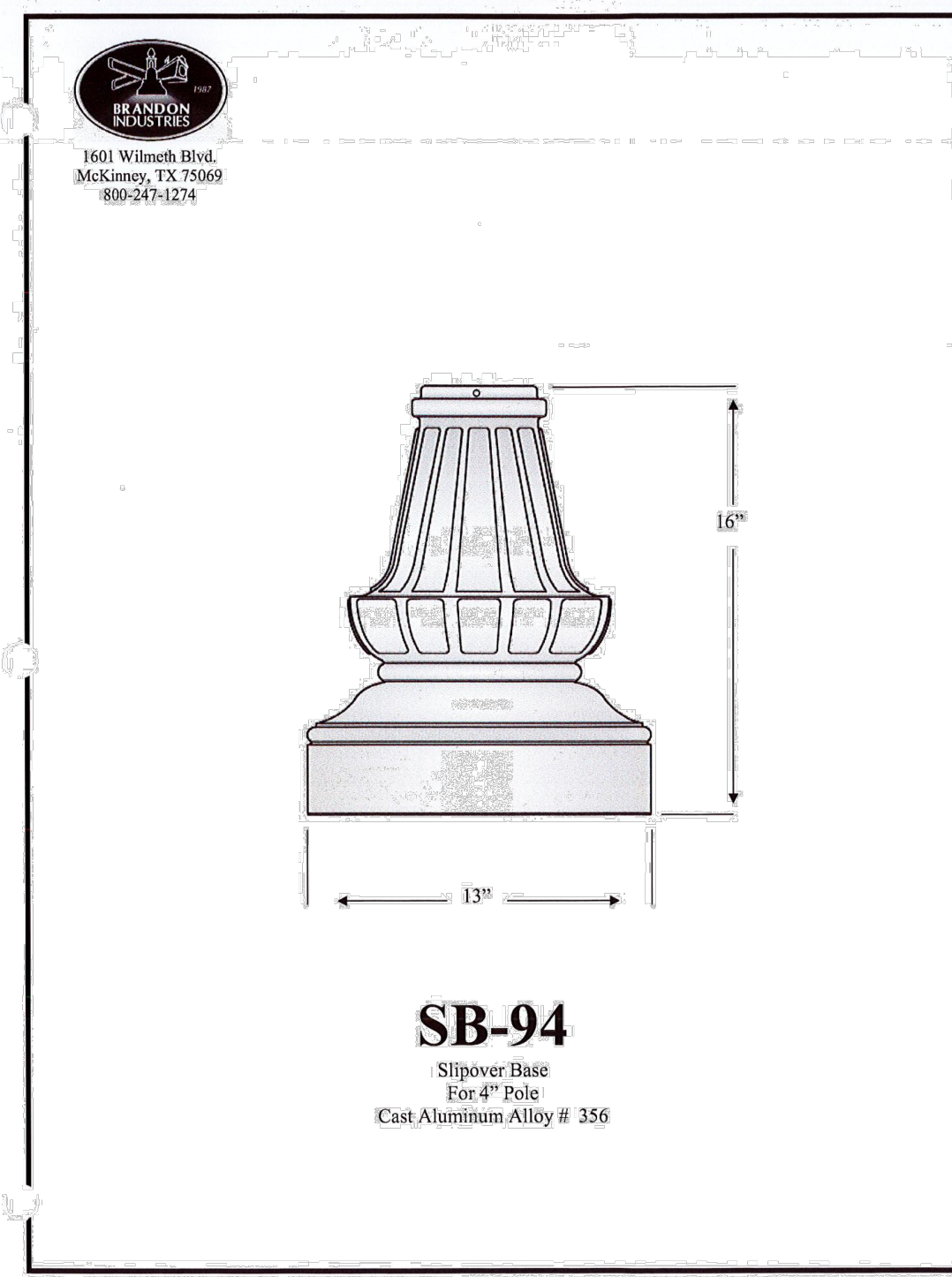
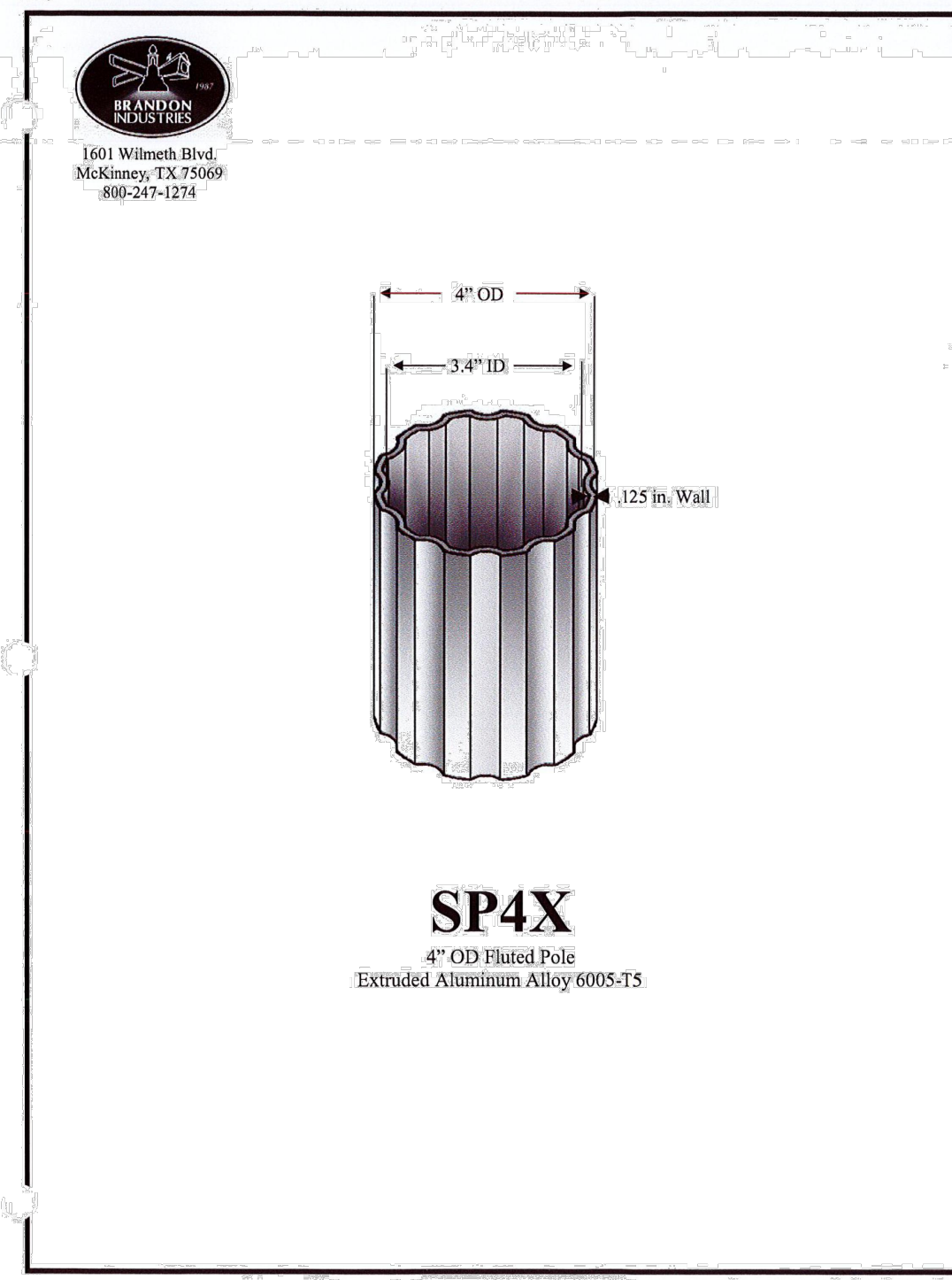
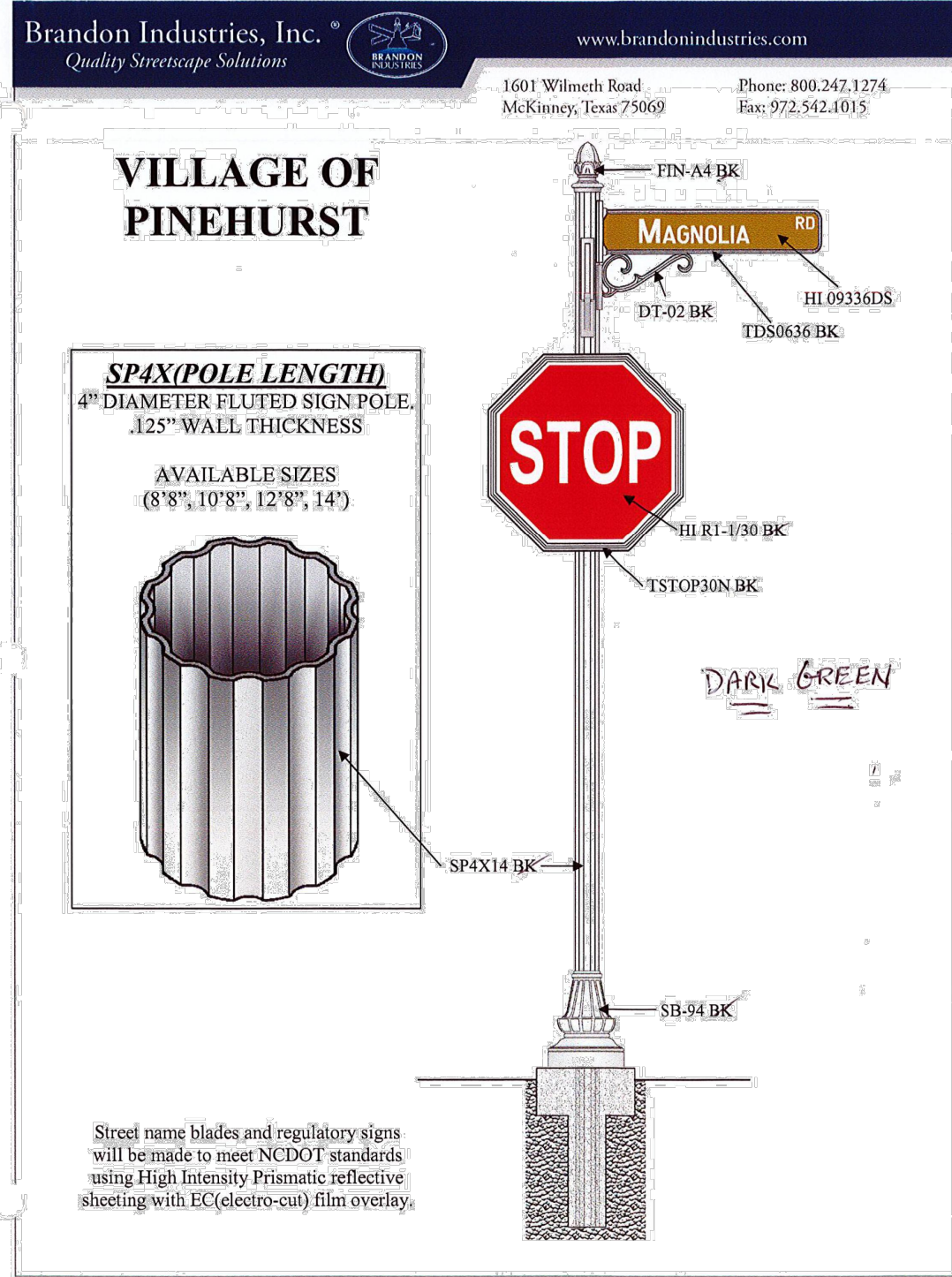
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MISCELLANEOUS DETAILS

SHEET **C-503**

BID DOCUMENTS

23.01905_VILLAGE OF PINEHURST_C-503_MISC DETAILS



NOTES:
1. VILLAGE OF PINEHURST SHALL BE RESPONSIBLE FOR PROCURING STOP SIGNS. CONTRACTOR SHALL COORDINATE WITH THE VILLAGE OF PINEHURST PRIOR TO INSTALLATION.

BID DOCUMENTS

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NO.	DATE	BY	DESCRIPTION

MAGNOLIA AND CHINQUAPIN INTERSECTION
DESIGN AND STORMWATER IMPROVEMENTS
VILLAGE OF PINEHURST
MOORE COUNTY, NORTH CAROLINA

NOT TO SCALE

OFFICE MANAGER D. HONEYCUTT	DESIGNER N. SAWYER
PROJECT MANAGER S. BURWELL	REVIEWER B. CATHEY

MISCELLANEOUS DETAILS

DATE SEPTEMBER 2024	PROJECT # 23.01905	FUNDING # N/A
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SHEET
C-504

23.01905 VILLAGE OF PINEHURST MISCELLANEOUS DETAILS