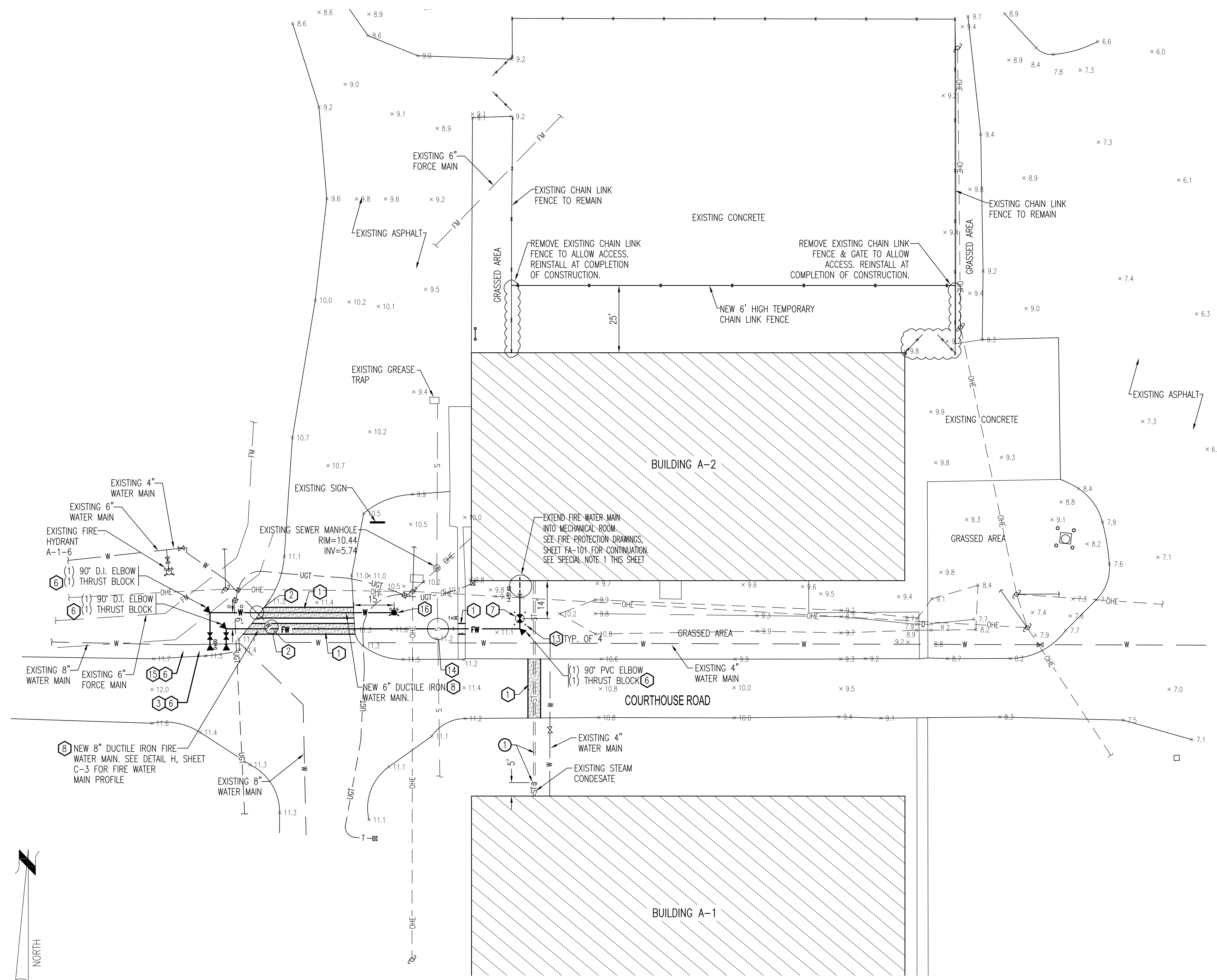
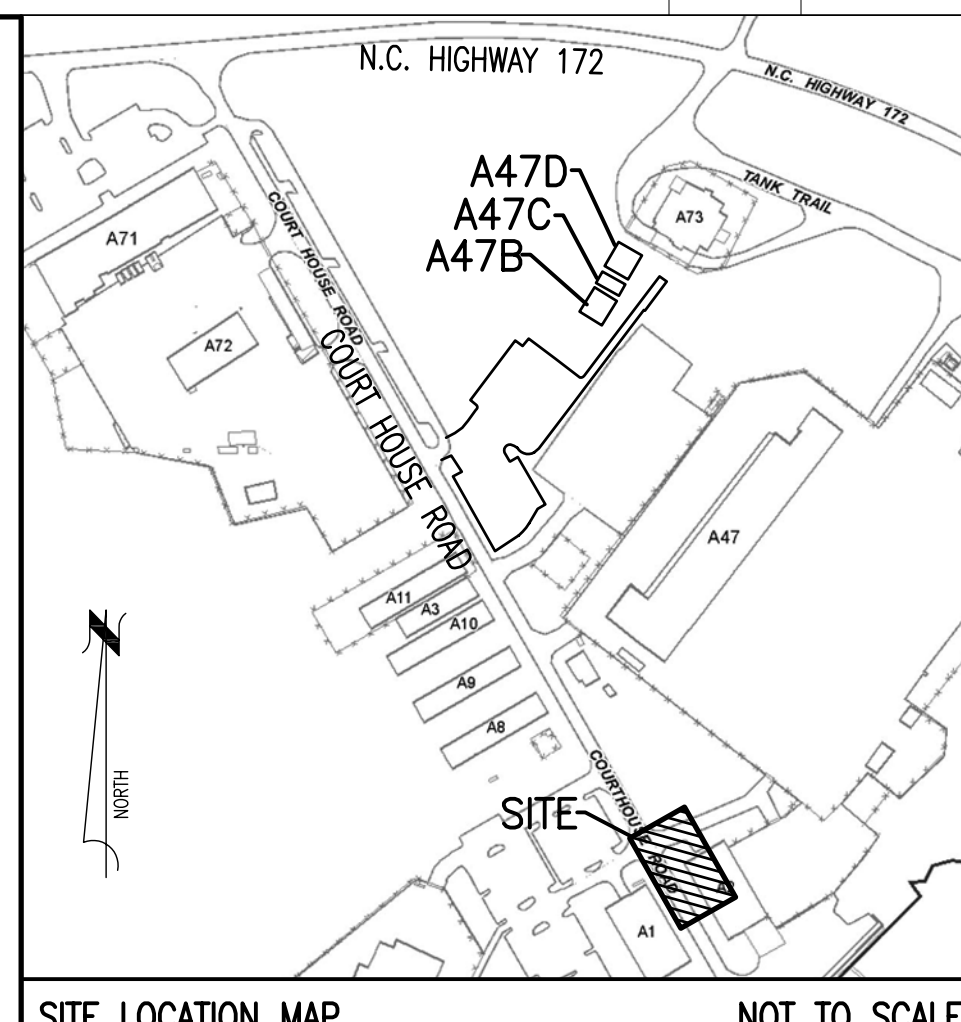


REVISIONS			
SYM	DATE	APPROVED	
1	ADD HYDRANT	9/14/11	JKA



CIVIL LEGEND		
EXISTING	DESCRIPTION	NEW
	WATER VALVE	
	POST INDICATOR VALVE	
	THRUST BLOCK	
	FIRE HYDRANT	
	FIRE DEPT CONNECTION	
	SANITARY SEWER MANHOLE	
	SANITARY SEWER CLEANOUT	
	STORM SEWER MANHOLE	
	STORM DRAIN	
	PEDESTAL	
	POWER POLE	
	LIGHT POLE	
	GUY WIRE	
	SANITARY SEWER (GRAVITY)	
	SANITARY SEWER (FORCE MAIN)	
	STORM SEWER	
	DOMESTIC WATER	
	FIRE WATER	
	UNDERGROUND STEAM	
	OVERHEAD ELECTRICAL	
	UNDERGROUND ELECTRICAL	
	UNDERGROUND COMMUNICATIONS	
	CONCRETE	
	ASPHALT	
	TEMPORARY BENCHMARK	
	SPOT ELEVATIONS	
	CONTOUR LINES	
	SURVEY CONTROL POINT	
	SOURCE/DESTINATION UNKNOWN	

ABBREVIATIONS	
C/L	CENTER LINE
CPP	CORRUGATED PLASTIC PIPE
DI	DIAMETER
DI	DROP INLET
EOP	EDGE OF PAVEMENT
ELEV	ELEVATION
EX, EXIST	EXISTING
HOR	HORIZONTAL
INV	INVERT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
OHE	OVERHEAD ELECTRIC
OC	ON CENTER
PSF	POUND SQUARE FOOT
RCP	REINFORCED CONCRETE PIPE
SF	SQUARE FEET
SLT	SILT FENCE
STA	STATION
SSMH	SANITARY SEWER MANHOLE
TBM	TEMPORARY BENCHMARK
TW	TOP OF WALK
TYP	TYPICAL
VERT	VERTICAL
WWF	WELDED WIRE FABRIC
WM	WATER METER
&	AND
±	PLUS OR MINUS
%	PERCENT

- GENERAL CONSTRUCTION NOTES:**
- THE LOCATION AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCANNING THE AREA OF WORK TO IDENTIFY TO HIS OWN SATISFACTION THE EXTENT OF UTILITIES PRESENT INCLUDING THE UTILITIES INDICATED TO BE PRESENT, THOSE NOT SHOWN, AND THOSE SHOWN TO BE IN A DIFFERENT LOCATION.
  - PHYSICAL SITE FEATURES OUTSIDE THE AREA OF WORK OR THOSE FEATURES NOT RELEVANT TO THE WORK BEING PERFORMED ARE NOT SHOWN FOR CLARITY.
  - ALL EXISTING VEGETATED AREAS DISTURBED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PROJECT VEGETATION PLAN, SEE DETAIL B, SHEET C-3.
- NEW WORK ITEMS:**
- EXISTING STEAM CONDENSATE LINES TO BE CAPPED & REMOVED.
  - PAVEMENT CUT & PATCH - SEE DETAIL A, SHEET C-3.
  - ROUTE NEW 8" FIRE WATER MAIN & NEW 6" WATER MAIN BELOW EXISTING WATER MAIN.
  - NEW 8" x 8" TAPPING SADDLE & VALVE - SEE DETAIL C, SHEET C-3 AND SPECIFICATIONS.
  - CONNECT TO EXISTING 3/4" WATER SERVICE. INSTALL 3/4" TEE.
  - NEW 3/4" BALL VALVE & VALVE BOX
  - THRUST BLOCK - SEE DETAIL D, SHEET C-3.
  - NEW 8" POST INDICATOR VALVE - SEE DETAIL E, SHEET C-3 AND SPECIFICATIONS.
  - PROVIDE ALL TRENCHING IN ACCORDANCE WITH DETAIL F, SHEET C-3.
  - CONNECT 4" PVC SEWER TO EXISTING 4" PVC SEWER SERVICE. INSTALL 4" WYE.
  - NEW SEWER CLEAN OUT - SEE DETAIL G, SHEET C-3.
  - NEW BOLLARDS - SEE DETAIL J, SHEET C-3
  - NEW CONCRETE SIDEWALK - SEE DETAIL K, SHEET C-3.
  - NEW 24'x50' TEMPORARY OFFICE. SEE DETAIL A, SHEET C-4.
  - ROUTE NEW FIRE WATER MAIN ABOVE EXISTING SEWER SERVICE. MAINTAIN 18" MINIMUM SEPARATION.
  - NEW 8" x 6" TAPPING SADDLE & VALVE - SEE DETAIL C, SHEET C-3 AND SPECIFICATIONS.
  - NEW FIRE HYDRANT - SEE DETAIL L, SHEET C-3.

**SPECIAL SEEDING NOTE:**

THE ANGLE FOR GRADED SLOPES AND FILL SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 21 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. ADDITIONALLY, WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS FROM THE COMPLETION OF THE PROJECT (WHICHEVER IS SHORTER), PERMANENT GROUND COVER SHALL BE ESTABLISHED.

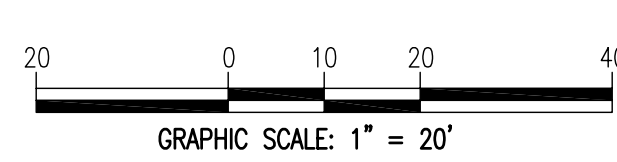
- STORMWATER MANAGEMENT NOTES:**
- ALL TEMPORARY OFFICE FACILITIES (TRAILERS) AND ALL NEW TEMPORARY CONCRETE SIDEWALKS SERVING THE PROJECT SHALL BE REMOVED IN THEIR ENTIRETY AT THE CONCLUSION OF CONSTRUCTION.
  - ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL GRASSED CONDITION AT THE CONCLUSION OF CONSTRUCTION.
  - AT THE CONCLUSION OF ALL CONSTRUCTION, THE CONTRACTING OFFICER WILL PREPARE A LETTER REQUESTING THAT THE LOW DENSITY PERMIT STORMWATER PERMIT FOR ALL OF THE TEMPORARY OFFICE FACILITIES BE RESCINDED.

**SPECIAL NOTE:**

- THE CONTRACTOR SHALL PROVIDE A REDUCED PRESSURE DOUBLE CHECK BACKFLOW ASSEMBLY (RP2) ON THE FIRE MAIN RISER IN THE MECHANICAL ROOM. THE RP2 SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARD AND CARRY THE ASSE SEAL OR APPEAR ON THE UNIVERSITY OF CALIFORNIA APPROVED LIST.

- SPECIAL ENVIRONMENTAL NOTES:**
- THERE IS A RESTRICTION ON AQUIFER USE DUE TO GROUNDWATER CONTAMINATION NEAR THE PROJECT AREA. ANY GROUNDWATER PUMPED FROM THE PROJECT AREA MUST BE PROPERLY CONTAINERIZED AND SAMPLED FOR APPROPRIATE DISPOSAL. THE GROUNDWATER CANNOT BE PUMPED TO NEARBY DRAINAGE AREAS.
  - THERE ARE NO KNOWN MONITORING WELLS IN THE PROJECT AREA BUT IF AN UNMARKED WELL IS DISCOVERED AND INADVERTENTLY DAMAGED, IMMEDIATELY CONTACT THE CONTRACTING OFFICER FOR FURTHER INSTRUCTIONS.
  - IF CONTAMINANTS ARE SUSPECTED THROUGH VISUAL OR OLFACTORY OBSERVATIONS, IMMEDIATELY STOP WORK, CALL 911, AND CONTACT THE CONTRACTING OFFICER FOR FURTHER INSTRUCTIONS.

A SITE PLAN - BUILDING A-2  
C-1 C-1 SCALE: 1"=20'

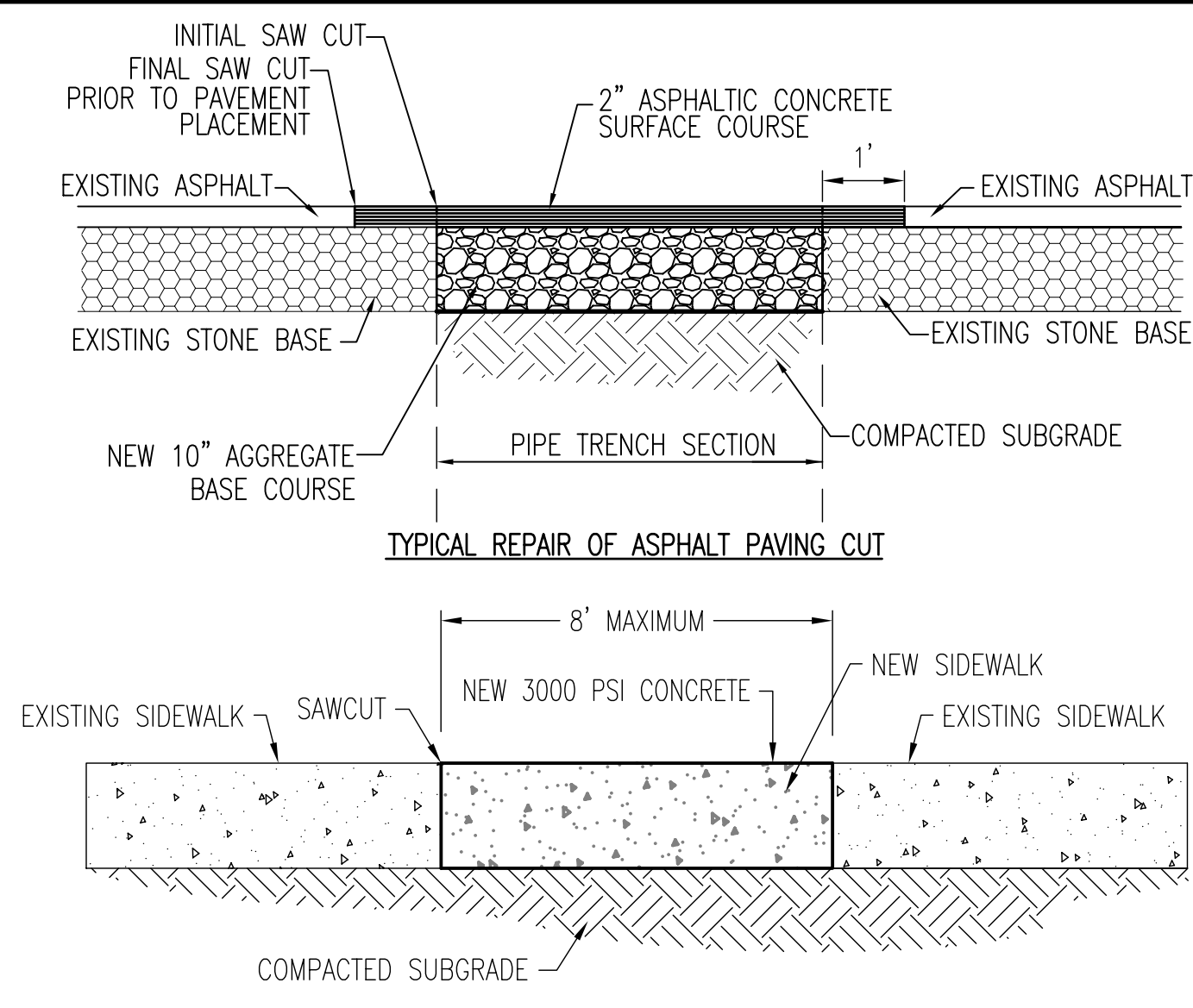


AVOLIS ENGINEERING, P.A.  
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SHEET TITLE: <b>SITE PLAN - BUILDING A-2</b>		<b>C-1</b>	
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY - NAVAL FACILITIES ENGINEERING COMMAND <b>MARINE CORPS BASE</b> CAMP LEJEUNE, NORTH CAROLINA	
DES. J. K. AVOLIS, P.E. DR. MSP / WFF CHK. J. C. AVOLIS, P.E. SUBMITTED BY: DESIGN DIR. BRIAN R. MARSHBURN, P.E.		Repair Vehicle Maintenance Shop, Bldg A-2 MARINE CORPS BASE CAMP LEJEUNE	
APPROVED: PWO OR OICC	DATE	SIZE: <b>F</b>	CODE IDENT. NO: <b>80091</b>
SATISFACTORY TO:	DATE	NAVAC DRAWING NO: <b>60008849</b>	CONSTR. CONTR. NO. <b>N40085-11-B-0116</b>
SCALE: NOTED		SPEC: 05-11-0116	
		SHEET 4 OF 37	

REVISIONS			
SYM	DATE	APPROVED	
1	9/14/11	JKA	



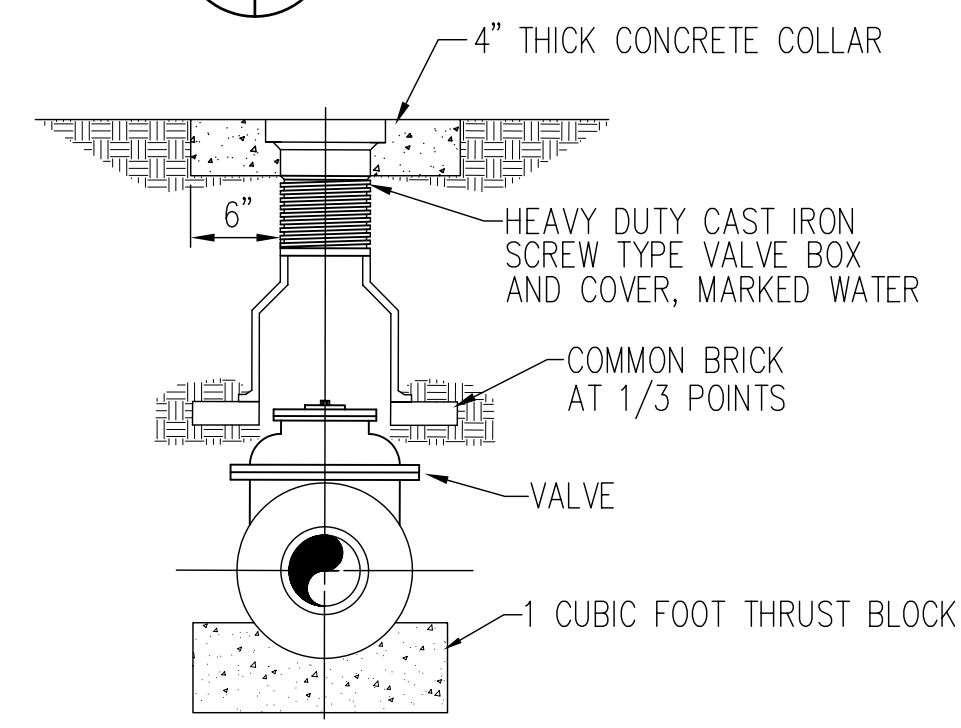
NOTE: REMOVE CONCRETE SIDEWALK AT JOINTS WHEN JOINTS ARE LOCATED WITHIN 5 FEET OF AREA OF WORK. CONCRETE FINISH & JOINT PATTERN SHALL MATCH EXISTING.

A CUT & PATCH  
C-1 C-3 NOT TO SCALE

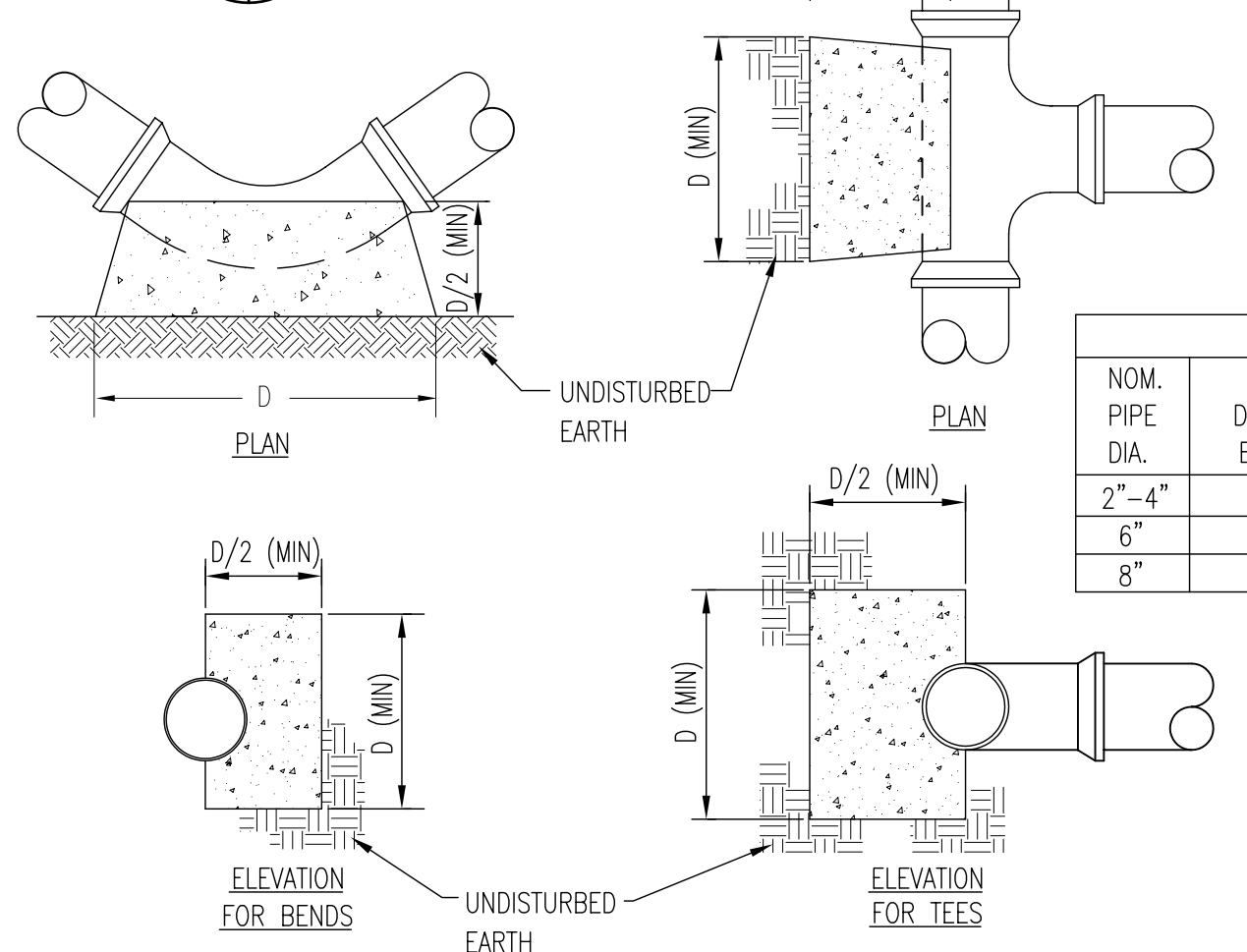
**TEMPORARY VEGETATIVE SEEDING**  
AFTER COMPLETION OF GRADING ACTIVITIES AND THE CONSTRUCTION OF SWALES, ALL EXPOSED AREAS SHALL BE SEED TO THE FOLLOWING SPECIFICATIONS:  
SEED BED  
LIME 1-1/2 TON PER ACRE  
FERTILIZER 1/2-TON PER ACRE  
SEED  
RYE GRAIN 50 LBS PER ACRE  
TALL FESCUE 100 LBS PER ACRE  
MAY THROUGH AUGUST  
CENTIPEDE 5 LBS PER ACRE  
PROCEDURE  
STRAW MULCH SHALL BE APPLIED AT A RATE WHICH WILL INSURE APPROXIMATELY 75% COVERAGE OF THE SEEDED AREA. THE STRAW AND SOWN SEED WILL BE LIGHTLY DISCED INTO THE BED TO GIVE IT FURTHER RESISTANCE TO BLOWING AND WASHING.  
THE CONTRACTOR SHALL GUARANTEE A FULL STAND OF GRASS OVER THE ENTIRE DISTURBED AREA. IF NECESSARY THE CONTRACTOR WILL WET DOWN THE AREAS TO ASSIST IN SEED GERMINATION OR AID IN GROWTH IN TIMES OF EXCESSIVELY DRY WEATHER. A STAND OF GRASS WILL BE CONSIDERED ACCEPTABLE WHEN THE ENTIRE STAND OF GRASS IS AT LEAST FOUR INCHES HIGH AND HAS ACHIEVED AT LEAST 95% COVERAGE OF DISTURBED AREAS. RESEEDING WILL BE REQUIRED AS NECESSARY BY THE CONTRACTOR TO OBTAIN THE SPECIFIED STAND OF GRASS.

**PERMANENT SEEDING VEGETATION**  
ALL DISTURBED AREAS NOT COVERED WITH BUILDINGS, PAVEMENTS, OR OTHER IMPERMEABLE SURFACES SHALL BE SODDED.

B VEGETATION PLAN  
C-1 C-3 NOT TO SCALE

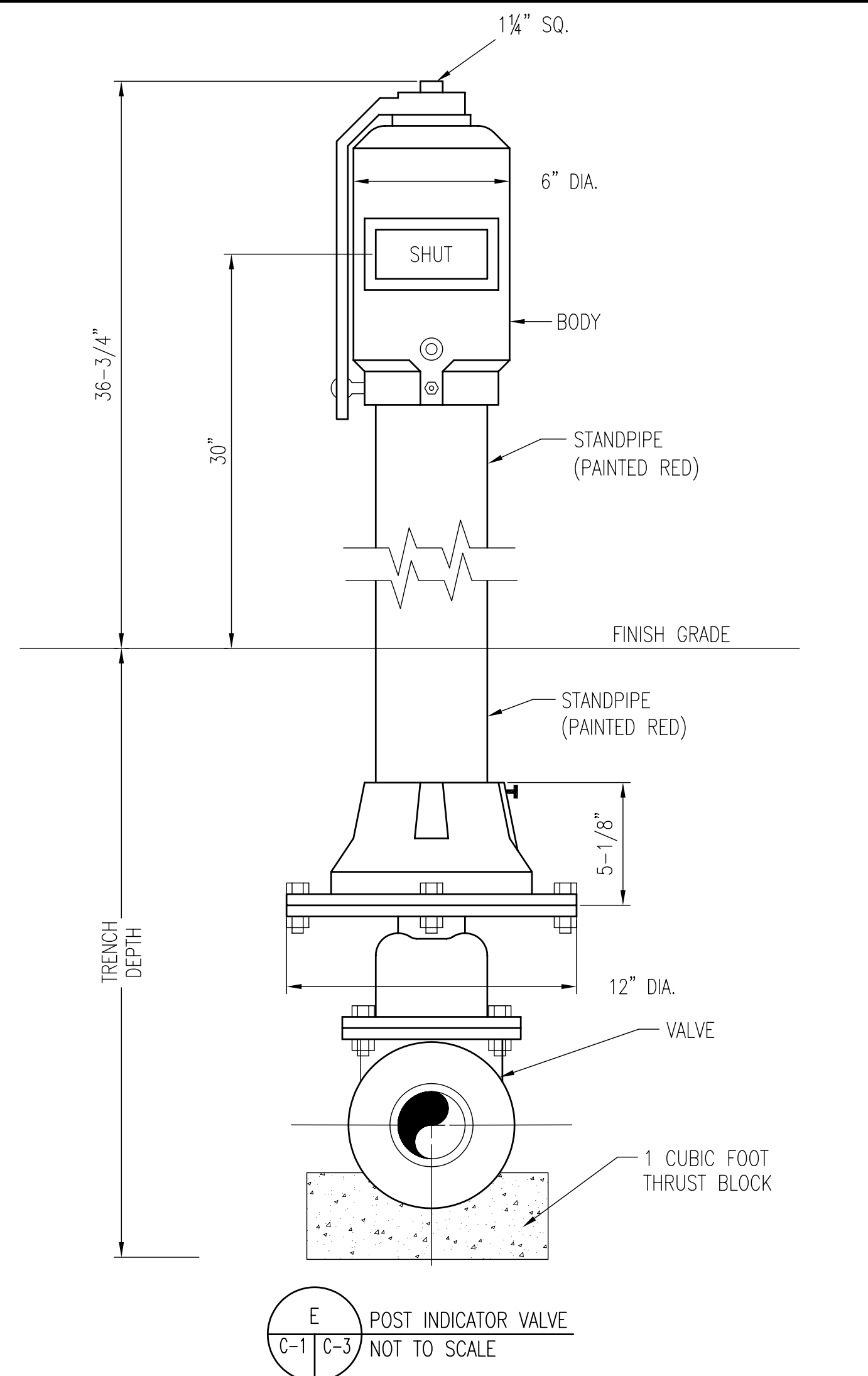


C VALVE AND VALVE BOX  
C-1 C-3 NOT TO SCALE

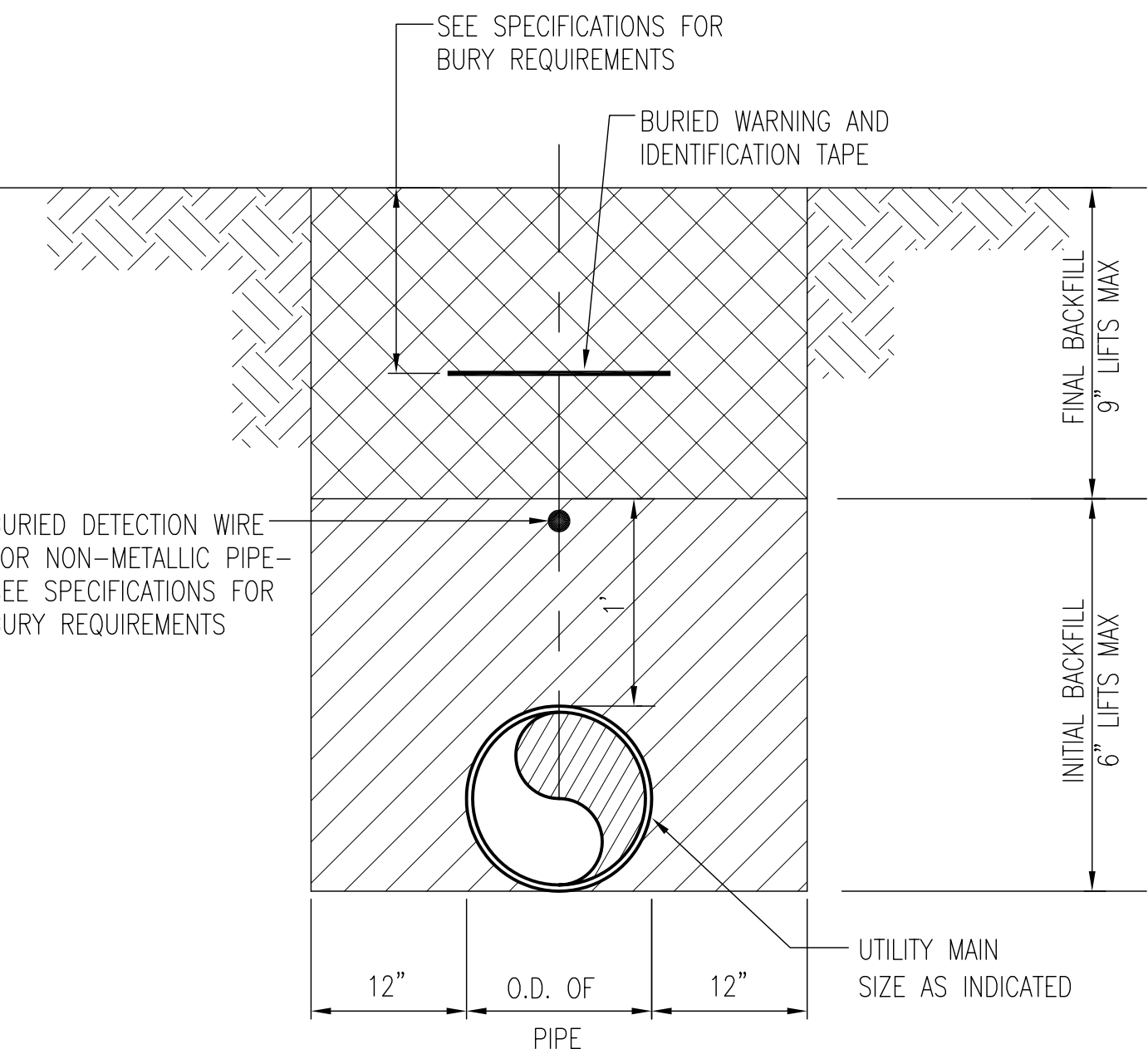


D THRUST BLOCK  
C-1 C-3 NOT TO SCALE

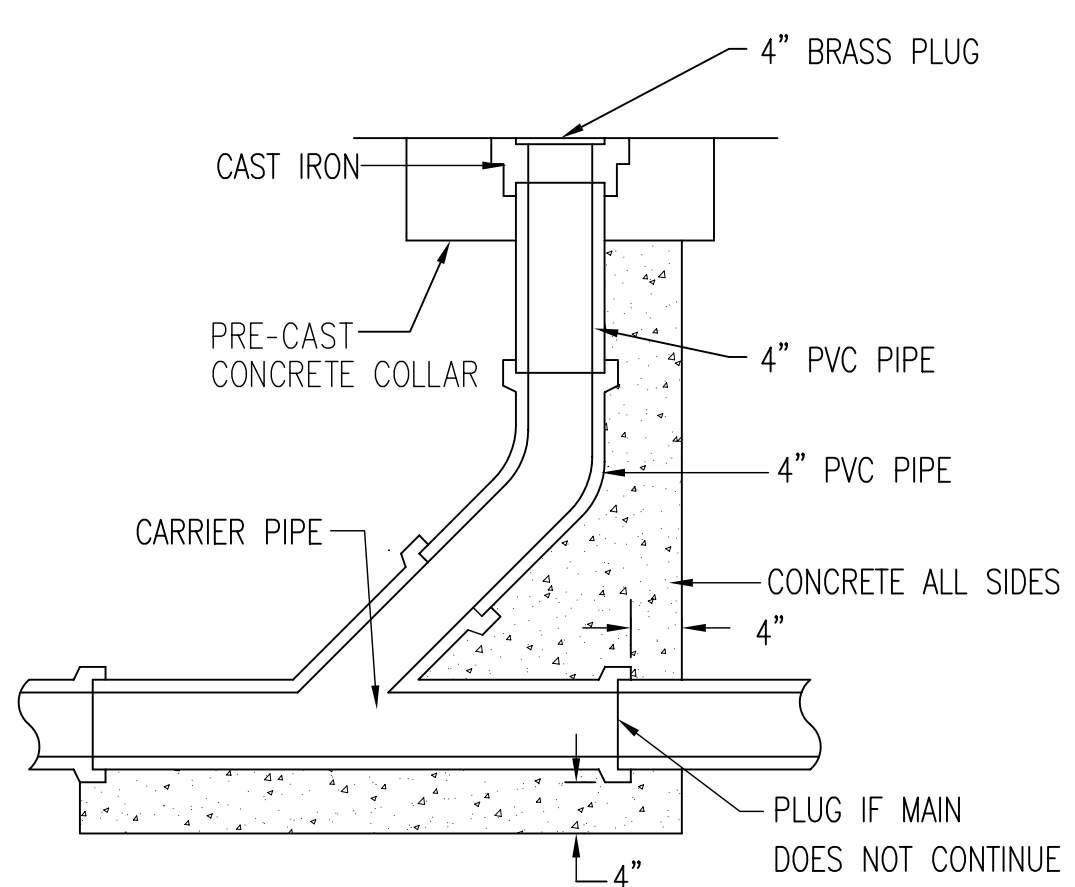
THRUST BLOCK DIMENSION D (IN FEET)					
NOM. PIPE DIA.	DEAD END	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
2"-4"	1.3	1.6	1.2	0.9	0.8
6"	2.1	2.3	1.7	1.2	0.8
8"	2.5	2.8	2.2	1.5	1.0



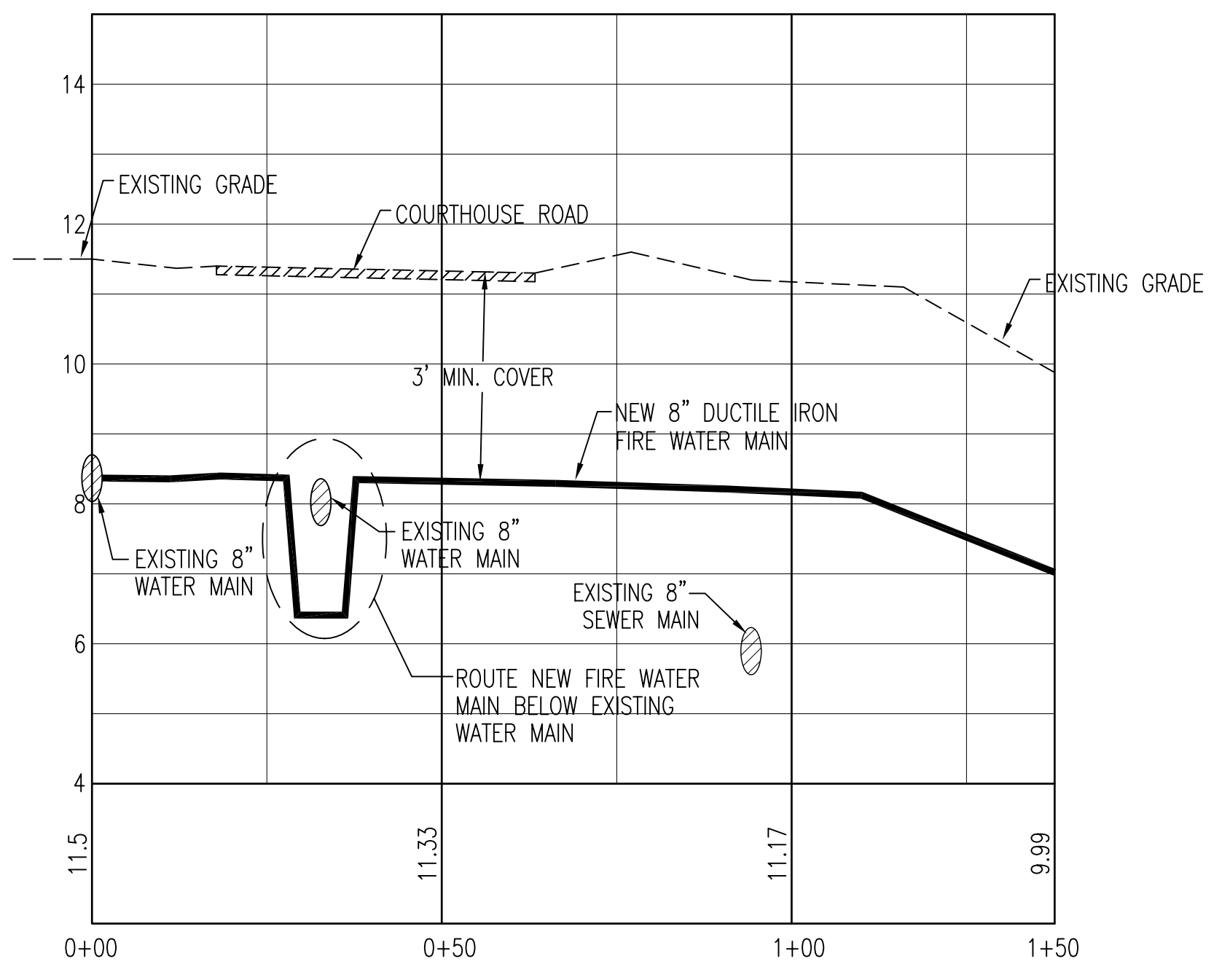
E POST INDICATOR VALVE  
C-1 C-3 NOT TO SCALE



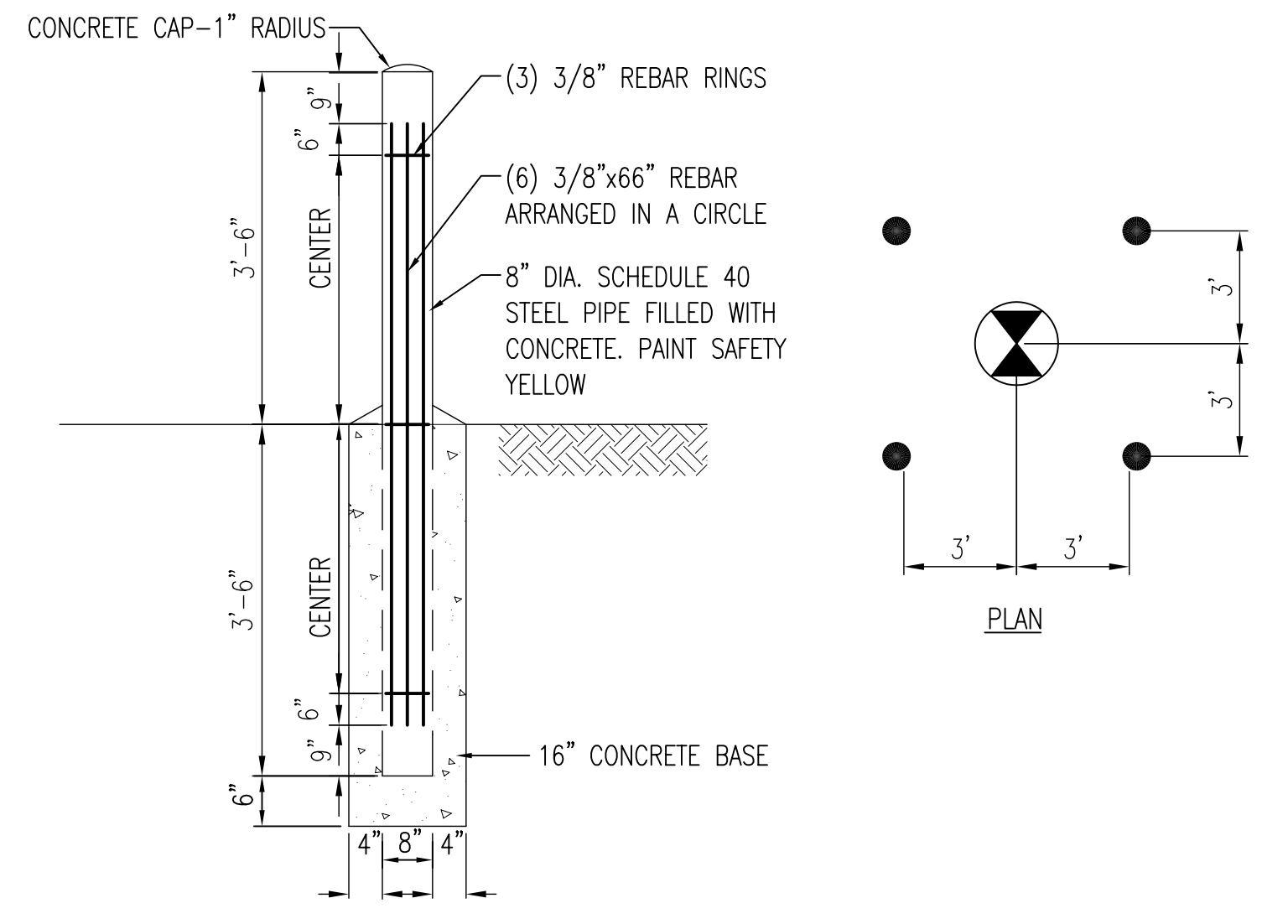
F PIPE TRENCH SECTION  
C-1 C-3 NOT TO SCALE



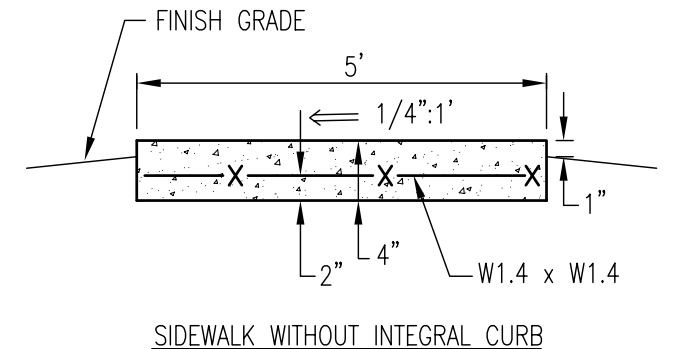
G SEWER CLEANOUT  
C-1 C-3 NOT TO SCALE



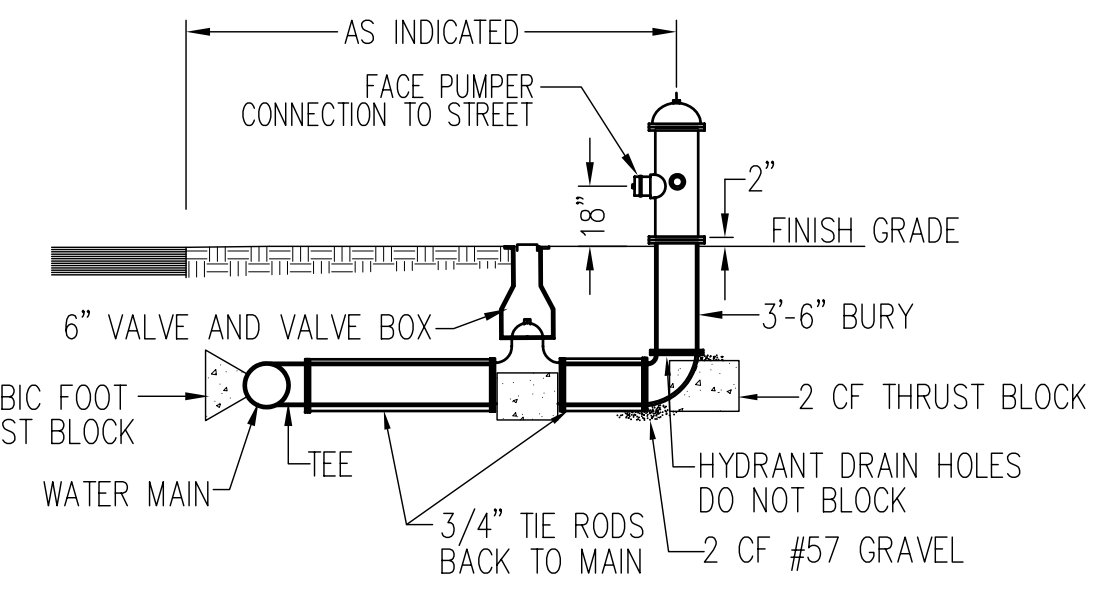
H 8\"/>



J BOLLARD  
C-1 C-3 NOT TO SCALE



K CONCRETE SIDEWALK  
C-2 C-3 NOT TO SCALE



L FIRE HYDRANT ASSEMBLY  
C-1 C-3 NOT TO SCALE

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SHEET TITLE:		<b>DETAILS</b>		<b>C-3</b>
<b>TALLEY &amp; SMITH ARCHITECTURE INC.</b> P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND <b>MARINE CORPS BASE</b> CAMP LEJEUNE, NORTH CAROLINA Repair Vehicle Maintenance Shop, Bldg A-2 MARINE CORPS BASE CAMP LEJEUNE		
DES. J. K. AVOLIS, P.E.	DR. MSP / WFF	CHK. J. C. AVOLIS, P.E.	NAVFAC DRAWING NO. 60008851 CONSTR. CONTR. NO. N40085-11-B-0116	
APPROVED: PWO OR OICC	DATE	SIZE <b>F</b>	CODE IDENT. NO. <b>80091</b>	SCALE: NOTED
SATISFACTORY TO:	DATE	SPEC. 05-11-0116		SHEET 6 OF 37