

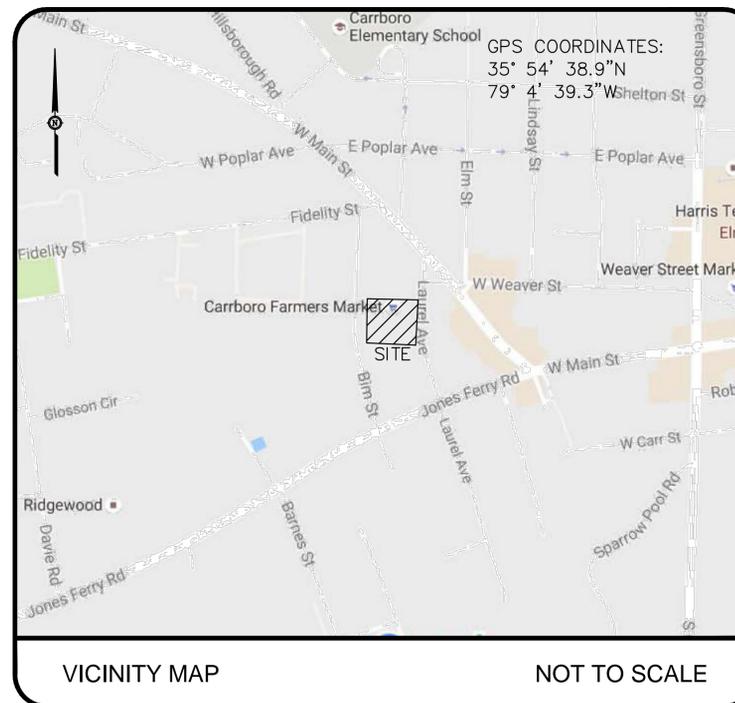
# TOWN COMMONS IMPROVEMENTS FOR TOWN OF CARRBORO

---

## ORANGE COUNTY, NORTH CAROLINA

### SCHEDULE OF DRAWINGS

G-001 . . . . .	COVER SHEET
G-002 . . . . .	GENERAL NOTES
CE-101 . . . . .	EXISTING CONDITIONS
CD-101 . . . . .	DEMOLITION PLAN
C-101 . . . . .	LAYOUT PLAN
C-102 . . . . .	GRADING PLAN
C-103 . . . . .	GRADING PLAN
C-104 . . . . .	UTILITY PLAN
C-105 . . . . .	EROSION CONTROL PLAN
E-001 . . . . .	ELECTRICAL LEGEND, NOTES, SCHEDULES, AND ABBREVIATIONS
E-101 . . . . .	OVERALL SITE PLAN
E-102 . . . . .	OVERALL LIGHTING PLAN
E-103 . . . . .	COMMONS AREA LIGHTING PLAN
E-501 . . . . .	ELECTRICAL DETAILS
E-601 . . . . .	ONE-LINES AND SCHEDULES
LA-1 . . . . .	PLANTING PLAN
C-501 . . . . .	EROSION CONTROL DETAILS
C-502 . . . . .	DETAILS
C-503 . . . . .	DETAILS
C-504 . . . . .	DETAILS
C-505 . . . . .	DETAILS
C-506 . . . . .	RESTROOM DETAILS



REVISED:  
OCTOBER 12, 2016

P:\2016\1601908\TOWN OF CARRBORO - Town Commons\02\_Design Phase\Drawings\_Drain\Drawings\Construction\Drawings\1601908 - Carrboro Town Commons.dwg 10/12/2016 11:07 PM MARK HAMLETT

### GENERAL CONSTRUCTION NOTES

- 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., MAY 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 INSTALL NECESSARY UNDER DRAINS AND STONE AS DIRECTED BY THE ENGINEER. ALL WORK SHALL BE PAID BASED UPON 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 1", EQUIPMENT TRACKS, DIRT CLOUDS, 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. DISTURBED AREAS SHOULD THEN BE MATTED WITH SHORT-TERM PHOTODEGRADABLE EROSION CONTROL MATTING.
- WHERE SPECIFIED, STORM DRAIN PIPE SHALL BE CORRUGATED METAL PIPE (CMP) CONFORMING TO AASHTO M-36, WITH REROLLED ENDS TO ACCOMMODATE CORRUGATED COUPLING BANDS. 18" PIPE SHALL BE 16 GAUGE, 24" AND 30" PIPE SHALL BE 14 GAUGE AND 36" PIPE AND OVER SHALL BE 12 GAUGE AS SPECIFIED ON THE PLANS, PIPE AND COUPLING BANDS SHALL CONFORM TO NCDOT 1032-3 FOR PLAIN PIPE OR 1032-4 (A) FOR BITUMINOUS COATED AND PARTIALLY PAVED PIPE. DIMPLE BANDS SHALL NOT BE USED.  
 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 ADS N12 WT OR APPROVED EQUAL.  
 WHERE SPECIFIED, 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 REROLLED 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 ROADS 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 - REFER TO NC DOT STD. DETAILS
- LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. EXACT LOCATIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR. AT LEAST THREE DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST NOTIFY EXISTING UTILITY OWNERS. CALL BEFORE YOU DIG, NORTH CAROLINA ONE CALL (1-800-632-4949).
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES IN THE VICINITY OF PROPOSED STORM DRAINS AND NOTIFY THE ENGINEER OF POTENTIAL CONFLICTS PRIOR TO ORDERING MATERIALS.
- CONTRACTOR SHALL ADJUST CLEAN OUTS, METER BOXES, VALVE BOXES, ETC. WITHIN THE DISTURBED AREA, TO MATCH FINISHED GRADE. MAIL BOXES IN CONFLICT WITH THE WORK ZONE SHALL BE RELOCATED BY THE CONTRACTOR.
- ALL PROPERTY CORNER MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A NC LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

#### GROUND STABILIZATION\*

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEP THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

\* "EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE" (SECTION 11.B(2)(b))

NOTE:  
PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE ESTABLISHED WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION.

SURVEY BY: MCGILL ASSOCIATES, P.A.  
55 BROAD STREET  
ASHEVILLE, NC 28801



BEFORE YOU DIG!  
CALL 1-800-632-4949  
N.C. ONE-CALL CENTER  
IT'S THE LAW!

### EXISTING CONDITIONS LEGEND

- |        |                                    |   |  |
|--------|------------------------------------|---|--|
| TEL    | TELEPHONE PEDESTAL                 | △ | CALCULATED POINT                           |
| ELEC   | ELECTRIC PEDESTAL                  | ■ | 1/2" REBAR SET WITH CAP                    |
| CON    | CONCRETE PEDESTAL                  | ■ | CONCRETE MONUMENT                          |
| SIGN   | SIGN                               | ■ | RIGHT-OF-WAY MONUMENT                      |
| CATV   | UNDERGROUND CABLE TV SIGN          | ■ | D.O.T. CONTROL POINT                       |
| FOC    | UNDERGROUND FIBER OPTIC CABLE SIGN | ● | REBAR FOUND                                |
| TCS    | UNDERGROUND TELEPHONE CABLE SIGN   | ● | RAILROAD SPIKE                             |
| GAS    | UNDERGROUND GAS LINE SIGN          | ● | PK NAIL FOUND / SET                        |
| ELEC   | UNDERGROUND ELECTRIC LINE SIGN     | ● | SPINDLE FOUND / SET                        |
| LP     | LIGHT POLE                         | ● | HUB & TACK SET                             |
| UP     | UTILITY POLE                       | ● | CONTROL POINT NAIL SET / FOUND             |
| WIRE   | GUY WIRE ANCHOR                    | ● | CONTROL POINT/NAIL SET OPS                 |
| TRAF   | TRAFFIC SIGNAL POLE                | ● | CONTROL POINT TEMPORARY MARK               |
| RCS    | RAILROAD CROSSING SIGNAL           | ● | NATIONAL GEODETIC SURVEY METAL ROD         |
| MH     | MANHOLE                            | ■ | NATIONAL GEODETIC SURVEY CONCRETE MONUMENT |
| SMH    | SANITARY SEWER MANHOLE             | ■ | TEMPORARY CONTROL POINT SET                |
| SDMH   | STORM DRAIN MANHOLE                | ■ | NETWORK TRIANGULATION POINT                |
| DMH    | COMMUNICATION MANHOLE              | ▲ | STAKE FOUND                                |
| ELMH   | ELECTRICAL MANHOLE                 | ▲ | INTERSTATE HIGHWAY                         |
| JBOX   | JUNCTION BOX                       | ▲ | U.S. HIGHWAY                               |
| SPIGOT | SPIGOT/YARD HYDRANT                | ▲ | FINISHED FLOOR ELEVATION                   |
| C.O.   | SEWER CLEAN-OUT                    | ▲ | MONITORING WELL                            |
| E.S.   | ELECTRIC SERVICE STUB-OUT          | ▲ | PIEZOMETER                                 |
| G.S.S. | GAS SERVICE STUB-OUT               | ▲ | LANDFILL GAS MONITORING PROBE              |
| CB     | CATCH BASIN                        | ▲ | SURFACE WATER SAMPLING LOCATION            |
| CI     | CURB INLET                         | ▲ | LANDFILL GAS VENT                          |
| WM     | WATER METER                        | ▲ | LANDFILL GAS COLLECTION WELLHEAD           |
| WH     | FIRE HYDRANT                       | ▲ | POTABLE WATER WELL                         |
| WV     | WATER VALVE                        | ▲ | MAILBOX OR PAPER BOX                       |
| BOV    | BLOW OFF VALVE                     | ▲ | SATELLITE DISH                             |
| G.M.   | GAS METER                          | ▲ | STATUE, BIRD BATHS, ETC.                   |
| G.V.   | GAS VALVE                          | ▲ | TREES                                      |
| ICV    | IRRIGATION CONTROL VALVE           | ▲ | SHRUBS / BUSHES                            |
| PIV    | POST INDICATOR VALVE               | ▲ |  |
| E.JBOX | ELECTRIC JUNCTION BOX OR OUTLET    | ▲ |  |
| TRAF   | TRAFFIC SIGNAL BOX                 | ▲ |  |

- |              |  |
|--------------|--|
| =====        | CULVERT  |
| -----X-----  | FENCE  |
| -----S-----  | SILT FENCE   |
| -----S-----  | GUARD RAIL   |
| -----S-----  | APPROXIMATE LOCATION OF EXISTING SEWER LINES               |
| -----S-----  | APPROXIMATE LOCATION OF EXISTING WATER LINES               |
| -----S-----  | APPROXIMATE LOCATION OF EXISTING GAS LINES                 |
| -----S-----  | TOP & TOE LINES  |
| -----DL----- | DITCH LINES  |
| -----DL----- | APPROXIMATE LOCATION OF UNDERGROUND CABLE TV LINE          |
| -----DL----- | APPROXIMATE LOCATION OF OVERHEAD CABLE TV LINE             |
| -----DL----- | APPROXIMATE LOCATION OF UNDERGROUND FIBER OPTIC CABLE LINE |
| -----DL----- | APPROXIMATE LOCATION OF UNDERGROUND ELECTRIC LINE          |
| -----DL----- | APPROXIMATE LOCATION OF OVERHEAD ELECTRIC LINE             |
| -----DL----- | APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE LINES        |
| -----DL----- | APPROXIMATE LOCATION OF OVERHEAD TELEPHONE LINES           |
| -----DL----- | RIGHT-OF-WAY   |
| -----DL----- | TREELINE   |
| -----DL----- | SHRUBLINE  |
| -----DL----- | PROPERTY LINE NOT SURVEYED                                 |
| -----DL----- | ROCKLINE   |
| -----DL----- | STREAM LINE  |
| -----DL----- | CENTERLINE ROADS   |
| -----DL----- | CENTERLINE OTHER THAN ROADS                                |
| -----DL----- | SWAMPLINE/WETLANDS   |
| -----DL----- | APPROXIMATE LOCATION OF OVERHEAD UTILITY LINE              |

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

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS



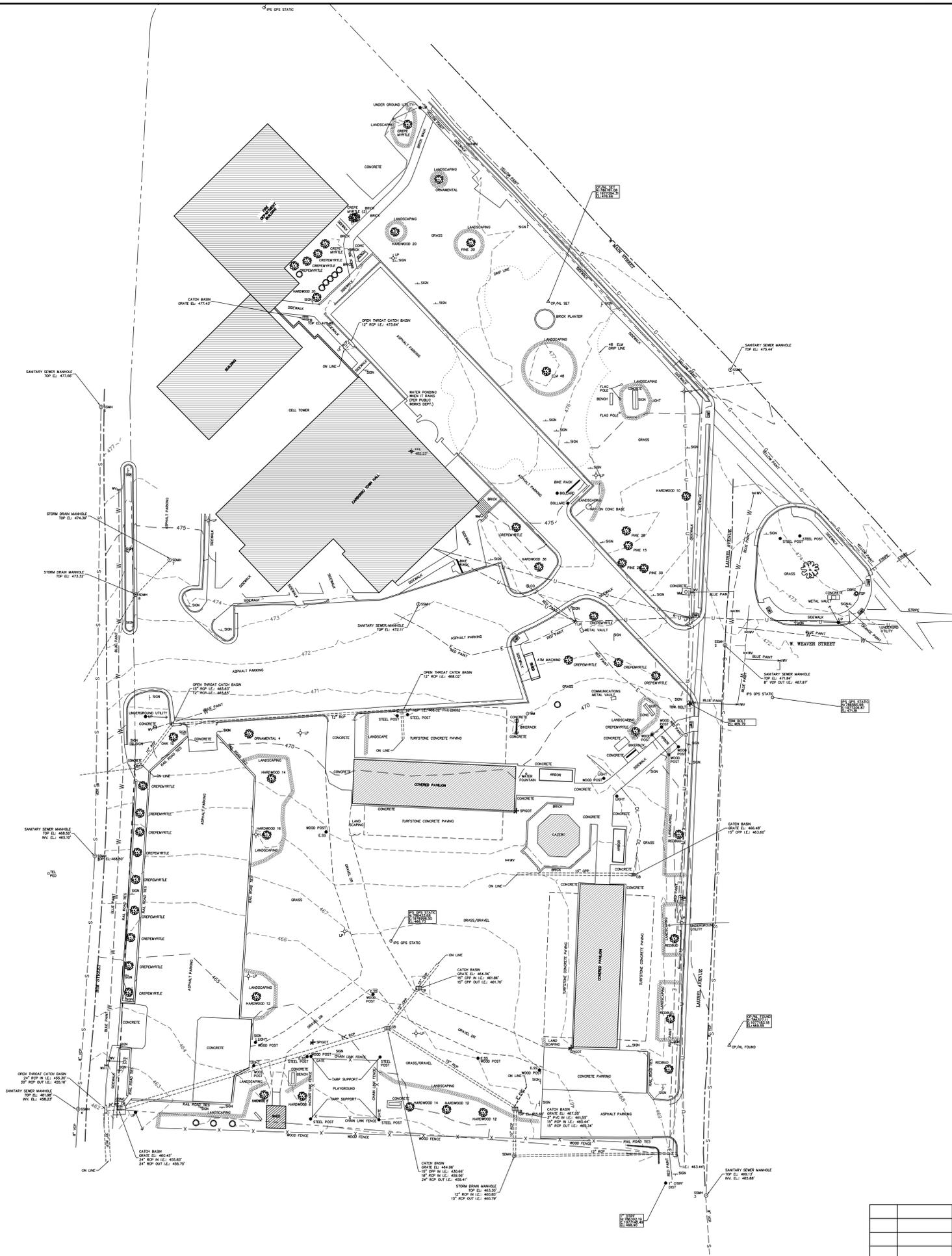
PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

JOB NO.: 1601908  
DATE: SEPT. 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
CONST. REVIEW: \_\_\_\_\_  
1601908 - Carrboro Town Commons.dwg

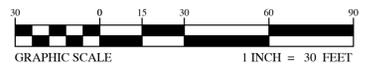
GENERAL NOTES

SHEET  
**G-002**

R:\Jobs\2016\16-173 Camboro Town Hall\DWG\1601908 - CE-101 - EXISTING CONDITIONS - SURVEY.dwg 10/13/2016 9:27 AM GORDON WILSON



PLAN



This document originally issued and sealed by Christopher F. Jordan, PLS NC No. L-4956, on October 13, 2016. This medium shall not be considered a certified document. See survey report and certification originally issued and sealed by Christopher F. Jordan, PLS, NC No. L-4956, on October 13, 2016.

NO.	DATE	BY	REVISION DESCRIPTION



PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

JOB NO.: 16.01908  
DATE: OCTOBER 13, 2016  
DESIGNED BY: CFJ  
CADD BY: GHV  
DESIGN REVIEW: \_\_\_\_\_  
CONST. REVIEW: \_\_\_\_\_  
1601908 - CE-101 - EXISTING  
CONDITIONS - SURVEY.dwg

EXISTING  
CONDITIONS

SHEET  
**CE-101**

**DEMOLITION NOTES**

1. ENSURE ALL EROSION CONTROL MEASURES ARE IN PLACE AND IN WORKING ORDER PRIOR TO THE START OF ANY DEMOLITION AND CONSTRUCTION.
2. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES FOR LOCATION, REMOVAL AND RELOCATION OF ANY UTILITIES. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXTENT AND LOCATION OF UTILITIES, WHICH INCLUDES CONTACTING NC ONE-CALL FOR LOCATION SERVICES.
3. CONTRACTOR TO ADJUST ALL MANHOLES, VALVES, JUNCTION BOXES, CATCH BASINS, CLEAN-OUTS, ETC. AS NECESSARY TO ACCOMMODATE NEW LAYOUT AND GRADES.
4. ANY DAMAGED INFRASTRUCTURE IN THE RIGHT OF WAY CAUSED BY CONSTRUCTION ACTIVITIES MUST BE REPAIRED TO TOWN OF CARRBORO, OWASA OR NCDOT STANDARDS AS APPLICABLE AT NO ADDITIONAL EXPENSE TO THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO UTILITIES, SIDEWALKS, CURB AND GUTTER AND ASPHALT.
5. ALL PAVEMENT REPAIRS SHALL BE PERFORMED PER NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
6. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES TO SITE FEATURES AND UTILITIES NOT SHOWN TO BE REMOVED. ANY DAMAGE SHALL BE REPAIRED TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
7. EXISTING TURFSTONE BEING REMOVED SHALL BE LOADED ONTO PALLETS FOR REMOVAL BY TOWN OF CARRBORO.
8. CONTRACTOR SHALL REPAIR ANY WATER LINES SERVING EXISTING SPIGOTS TO REMAIN, OR TIE SPIGOTS TO PROPOSED WATER SERVICE.

SEE ELECTRICAL RELOCATION INSET SHEET C-104 FOR DETAIL

CONCRETE PAD TO BE REMOVED

DIRT/ GRAVEL DRIVE TO BE REMOVED

ASPHALT PARKING TO BE REMOVED

TREE TO REMAIN (TYP.)

RAILROAD TIES TO BE REMOVED

LIGHT POLE TO BE REMOVED

SPIGOT TO BE REMOVED

CONCRETE PAD TO BE REMOVED

WOOD POSTS, LIGHTS AND ELECTRIC SERVICE TO BE REMOVED

CONCRETE SIDEWALK TO BE REMOVED

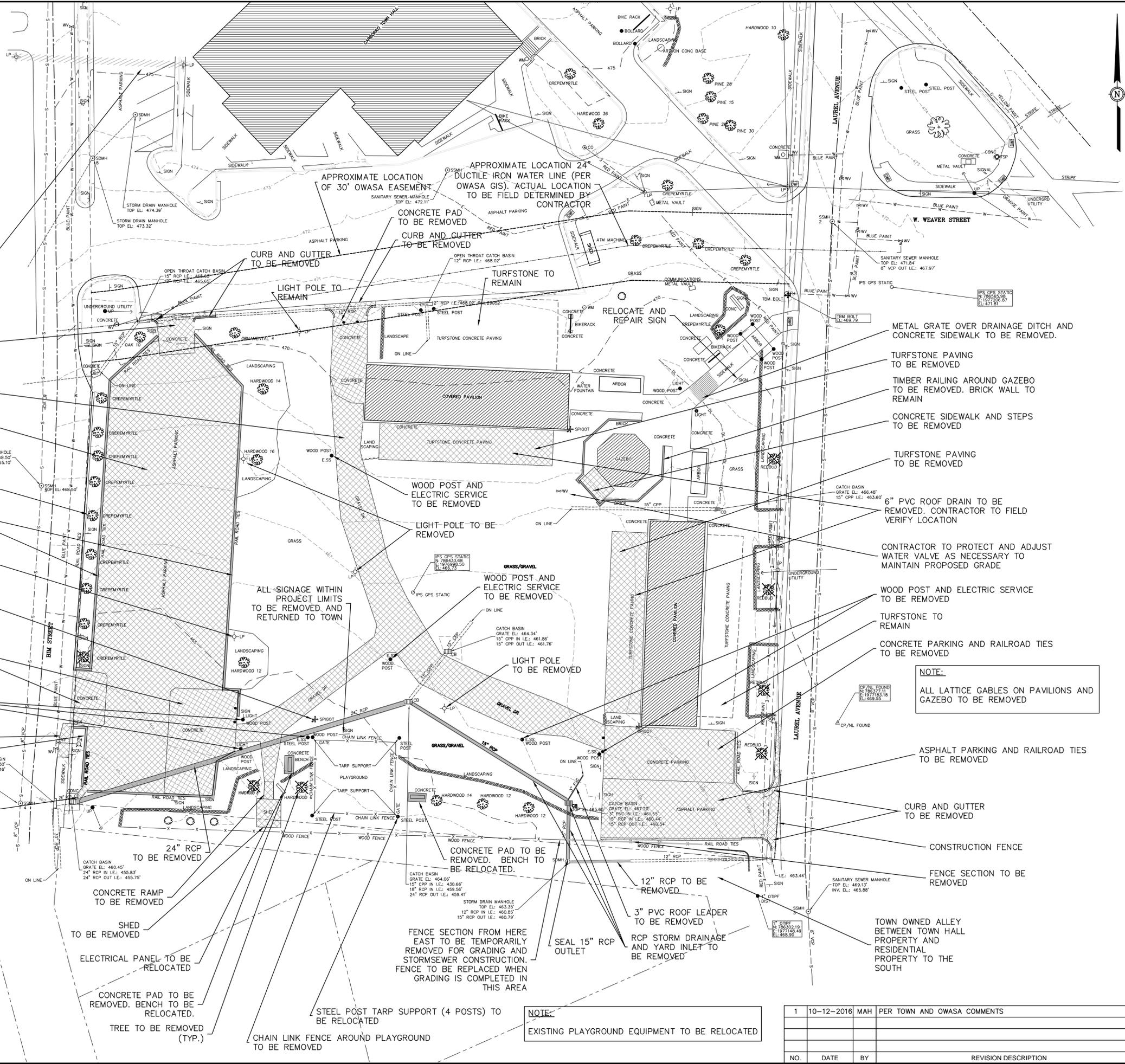
RAILROAD TIES TO BE REMOVED

CONCRETE FLUME TO BE REMOVED

PROPERTY LINES SOUTH OF PROJECT SITE ARE FROM GIS



**PLAN**



**NOTE:**  
ALL LATTICE GABLES ON PAVILIONS AND GAZEBO TO BE REMOVED

**NOTE:**  
EXISTING PLAYGROUND EQUIPMENT TO BE RELOCATED



PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

JOB NO.: 1601908  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW: MAH  
CONST. REVIEW: MAH  
1601908 - Carrboro Town Commons.dwg

DEMOLITION PLAN

SHEET  
**CD-101**

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS

**SITE LAYOUT NOTES**

- DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL ANGLES ARE 90 DEGREES UNLESS OTHERSIDE NOTED.
- CONTRACTOR SHALL STAKE OUT SITE IMPROVEMENTS FOR THE ENGINEER'S REVIEW PRIOR TO BEGINNING CONSTRUCTION.
- REFERENCE DEMOLITION PLAN CD-101 FOR EXTENTS OF DEMOLITION AND REMOVAL OF CONCRETE, PAVEMENT, UTILITIES AND VEGETATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF CARRBORO STANDARDS AND SPECIFICATIONS.
- TWO EXISTING BENCHES SHALL BE RELOCATED PER PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES MADE TO THE BENCHES DURING THE INSTALLATION.
- FOUR POSTS SUPPORTING SHADE OVER PLAYGROUND TO BE RELOCATED. INSTALLATION OF POSTS AND SHADE SHALL MATCH OR EXCEED THE EXISTING CONDITION.

**PARKING CALCULATIONS**

EXISTING CONDITIONS:	
ADA	5 SPACES
STANDARD	27 SPACES
PROPOSED CONDITIONS:	
ADA	3 SPACES
STANDARD	34 SPACES

**IMPERVIOUS CALCULATIONS**

EXISTING CONDITIONS:	
TURFSTONE	5,719 SF
50% IMP. CREDIT	2,858 SF
IMPERVIOUS SURFACE	
	27,419 SF
TOTAL IMPERVIOUS	30,277 SF
PROPOSED CONDITIONS:	
PERMEABLE PAVEMENT	10,088 SF
50% IMP. CREDIT	5,044 SF
PERMEABLE GRID	5,227 SF
50% IMP. CREDIT	2,614 SF
TURFSTONE	3,298 SF
50% IMP. CREDIT	1,649 SF
IMPERVIOUS SURFACE	
	17,931 SF
TOTAL IMPERVIOUS	27,238 SF
TOTAL IMPERVIOUS REDUCTION	
	3,039 SF

**BOLLARD NOTES**

- BOLLARD TO BE INNOPLAST PCRB4 - 4.5" REMOVABLE POWER COATED BOLLARD, OR EQUIVALENT.
- BOLLARD TO HAVE YELLOW FINISH.
- BOLLARDS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

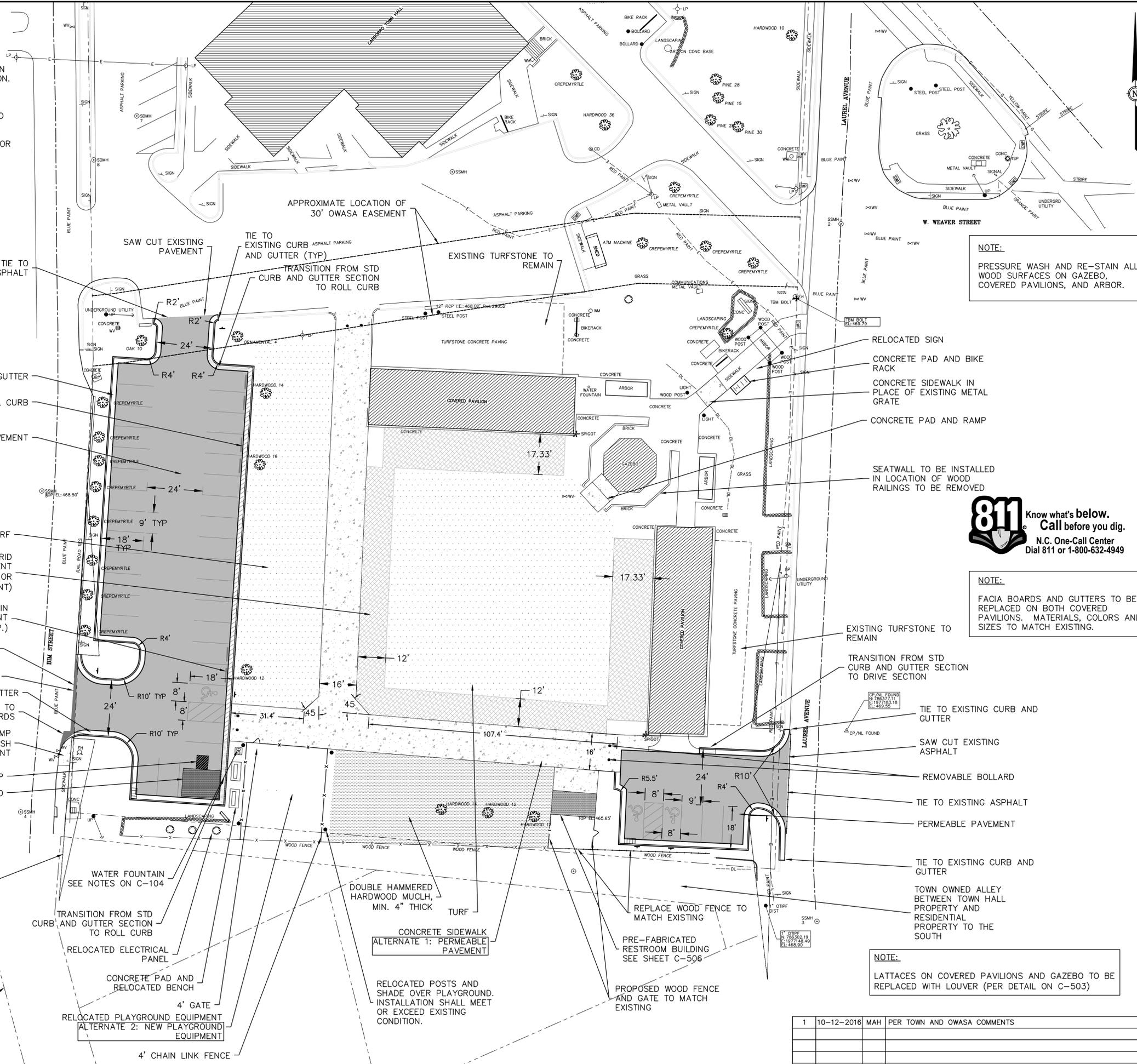
**PLAYGROUND NOTES**

- FLOOR OF PLAYGROUND TO BE BLACK PLAYSFAFER RUBBER MULCH OR EQUIVALENT.
- RUBBER MULCH TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- BASE BID OF PROJECT INCLUDES RELOCATING EXISTING PLAYGROUND EQUIPMENT.
- ALTERNATE BID #2 INCLUDES NEW PLAYGROUND EQUIPMENT. SEE DETAIL ON SHEET C-505.

**STORAGE SHED NOTES**

- STORAGE SHED TO BE CAROLINA YARD BARN, LLC HERITAGE WITH 10/12 ROOF PITCH.
- SHED TO HAVE TIN ROOF.
- SHED TO BE 12'X16' WITH 8" SIDEWALL AND SMARTSIDE PANEL SIDING.
- SHED TO HAVE DOUBLE DOOR OPENING ON 16' SIDE OF STRUCTURE.
- SHED SHALL HAVE STRAP HINGES ON WOODEN DOORS.
- SHED TO HAVE 12'X4' UPPER LOFT ON BOTH ENDS OF INTERIOR OF STRUCTURE.
- 12' WORKBENCH ON BOTH ENDS OF INTERIOR OR STRUCTURE.
- SHED SHALL HAVE TRANSOM WINDOW, NO OTHER WINDOWS SHALL BE INCLUDED.
- SHED TO HAVE 5'X6' TREATED LUMBER RAMP WITH DIAMOND PLATE THRESHOLD. ANCHORING PACKAGE TO BE INCLUDED IF NECESSARY.

**PLAN**



**NOTE:**  
PRESSURE WASH AND RE-STAIN ALL WOOD SURFACES ON GAZEBO, COVERED PAVILIONS, AND ARBOR.

**811** Know what's below.  
Call before you dig.  
N.C. One-Call Center  
Dial 811 or 1-800-632-4949

**NOTE:**  
FACIA BOARDS AND GUTTERS TO BE REPLACED ON BOTH COVERED PAVILIONS. MATERIALS, COLORS AND SIZES TO MATCH EXISTING.

**NOTE:**  
LATTICES ON COVERED PAVILIONS AND GAZEBO TO BE REPLACED WITH LOUVER (PER DETAIL ON C-503)

**McGill**  
AS SOCIATES  
ENGINEERING · PLANNING · FINANCE  
1917 EVANS ROAD, CARY, NC 27513 PH: (919) 378-9111 FIRM LICENSE # C-0459



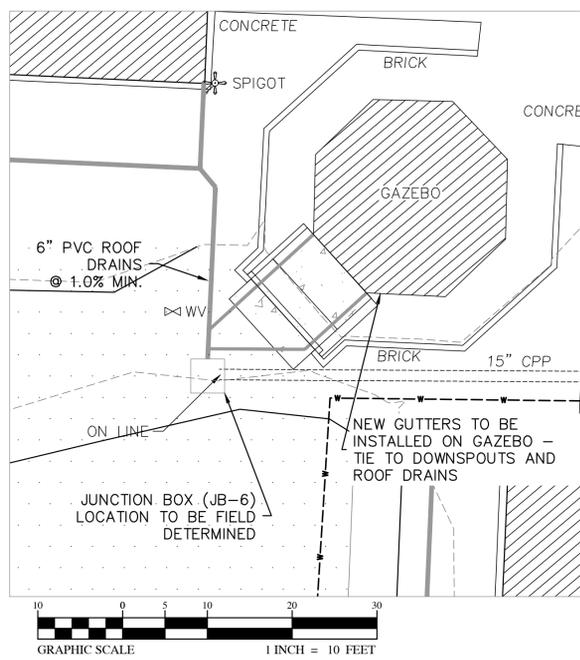
PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

JOB NO.: 16.01908  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW:  
CONST. REVIEW:  
1601908 - Carrboro Town Commons.dwg

LAYOUT PLAN

SHEET  
**C-101**

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS



**STORM DRAINAGE NOTES**

1. ALL STORM RCP DRAINAGE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED. ALL HDPE SHALL BE SMOOTH INTERIOR AND DOUBLE WALLED.
2. ALL CONCRETE USED TO CONSTRUCT STORM DRAINAGE STRUCTURES SHALL MEET A MINIMUM 3,000 PSI COMPRESSIVE STRENGTH. ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH INSIDE WALL.
3. ALL BACKFILL SHALL BE NON-PLASTIC, FREE FROM ROOTS, VEGETATIVE MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER INSUFFICIENT MATERIAL. BACKFILL MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING FLOWS OR PROOF ROLLING.
4. MATERIALS DEEMED BY THE ENGINEER OR TESTING COMPANY AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
5. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID.
6. UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.

**GRADING NOTES**

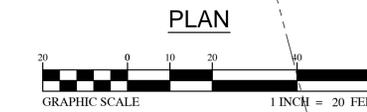
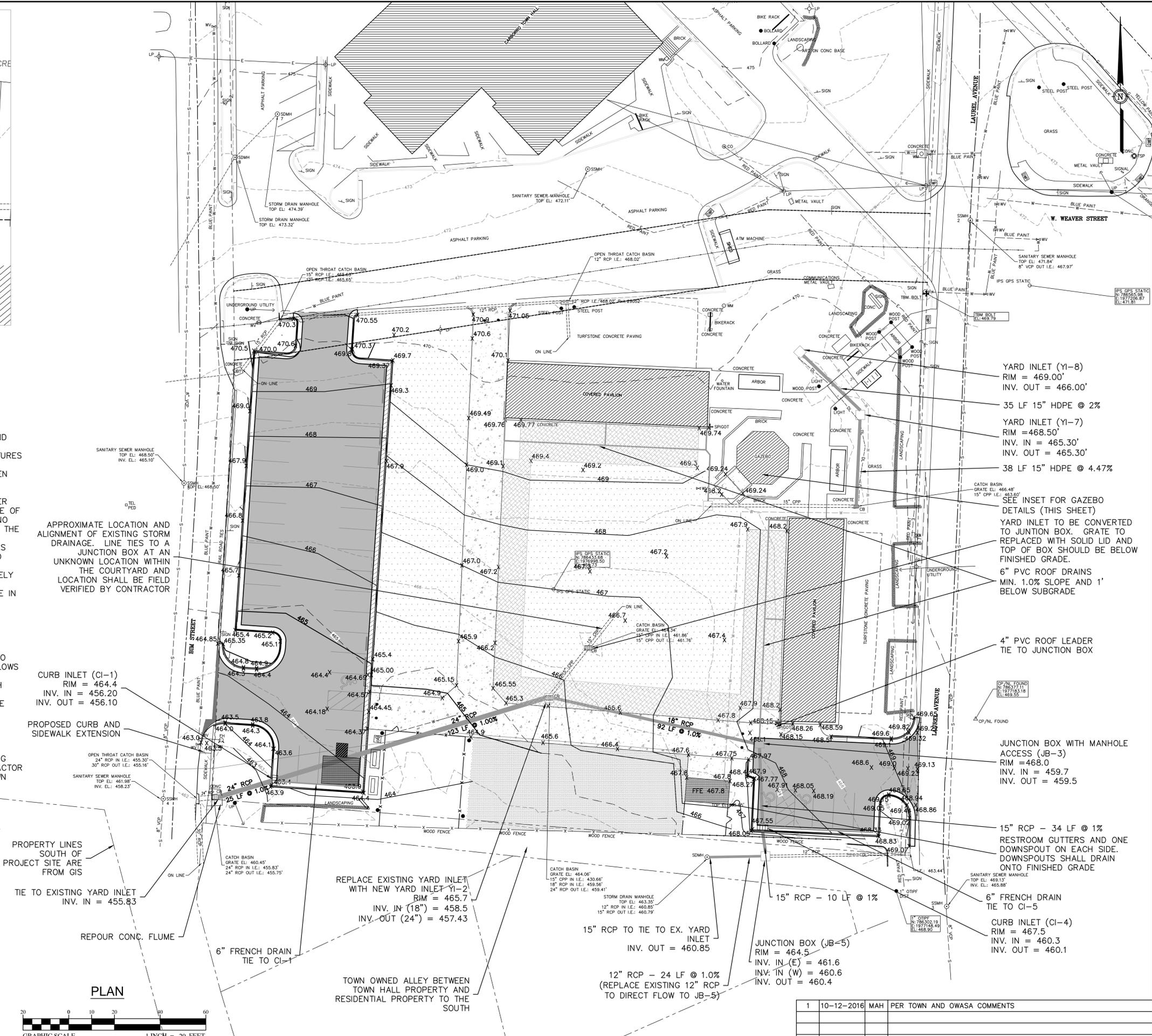
1. INITIATE CONSTRUCTION SEQUENCE FOR EROSION CONTROL.
2. ALL GRADING MUST PRODUCE SURFACE DRAINAGE ADEQUATE TO PREVENT STANDING WATER AND ENSURE THAT STORMWATER FLOWS TO INLETS OR OTHER POINTS OF DISCHARGE.
3. ALL NEW GRADING SHALL MEET EXISTING GRADES WITH SMOOTH TRANSITIONS.
4. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER OR ENGINEER IF ANY DISCREPANCIES EXIST.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF CARRBORO SPECIFICATIONS WHERE APPLICABLE.
6. CONTRACTOR SHALL NOTIFY NC ONE-CALL PRIOR TO BEGINNING CONSTRUCTION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES.

**ADA NOTES**

1. ADA PARKING LOTS TO BE A MAXIMUM OF 2.0% SLOPE IN ANY DIRECTION (PARKING SPACES AND AISLES).
2. SIDEWALK SLOPES TO BE A MAXIMUM OF 5.0%.
3. SIDEWALK CROSS SLOPES TO TO A MAXIMUM OF 2.0%.

**PROPOSED SITE WORK LEGEND**

- 1960 5' CONTOUR
- 1962 1' CONTOUR
- PERMEABLE PAVEMENT
- CONCRETE SIDEWALK/PAD/RAMP



**PLAN**

- YARD INLET (YI-8)  
RIM = 469.00'  
INV. OUT = 466.00'
- 35 LF 15" HDPE @ 2%
- YARD INLET (YI-7)  
RIM = 468.50'  
INV. IN = 465.30'  
INV. OUT = 465.30'
- 38 LF 15" HDPE @ 4.47%
- SEE INSET FOR GAZEBO DETAILS (THIS SHEET)
- YARD INLET TO BE CONVERTED TO JUNCTION BOX. GRATE TO BE REPLACED WITH SOLID LID AND TOP OF BOX SHOULD BE BELOW FINISHED GRADE.
- 6" PVC ROOF DRAINS  
MIN. 1.0% SLOPE AND 1' BELOW SUBGRADE
- 4" PVC ROOF LEADER  
TIE TO JUNCTION BOX
- JUNCTION BOX WITH MANHOLE ACCESS (JB-3)  
RIM = 468.0'  
INV. IN = 459.7'  
INV. OUT = 459.5'
- 15" RCP - 34 LF @ 1%  
RESTROOM GUTTERS AND ONE DOWNSPOUT ON EACH SIDE. DOWNSPOUTS SHALL DRAIN ON TO FINISHED GRADE
- 6" FRENCH DRAIN  
TIE TO CI-5
- CURB INLET (CI-4)  
RIM = 467.5'  
INV. IN = 460.3'  
INV. OUT = 460.1'

CURB INLET (CI-1)  
RIM = 464.4  
INV. IN = 456.20  
INV. OUT = 456.10

PROPOSED CURB AND SIDEWALK EXTENSION

PROPERTY LINES SOUTH OF PROJECT SITE ARE FROM GIS

TIE TO EXISTING YARD INLET  
INV. IN = 455.83

REPOUR CONC. FLUME

6" FRENCH DRAIN TIE TO CI-1

REPLACE EXISTING YARD INLET WITH NEW YARD INLET YI-2  
RIM = 465.7  
INV. IN (18") = 458.5  
INV. OUT (24") = 457.43

TOWN OWNED ALLEY BETWEEN TOWN HALL PROPERTY AND RESIDENTIAL PROPERTY TO THE SOUTH

15" RCP TO TIE TO EX. YARD INLET  
INV. OUT = 460.85

JUNCTION BOX (JB-5)  
RIM = 464.5  
INV. IN (E) = 461.6  
INV. IN (W) = 460.6  
INV. OUT = 460.4

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS



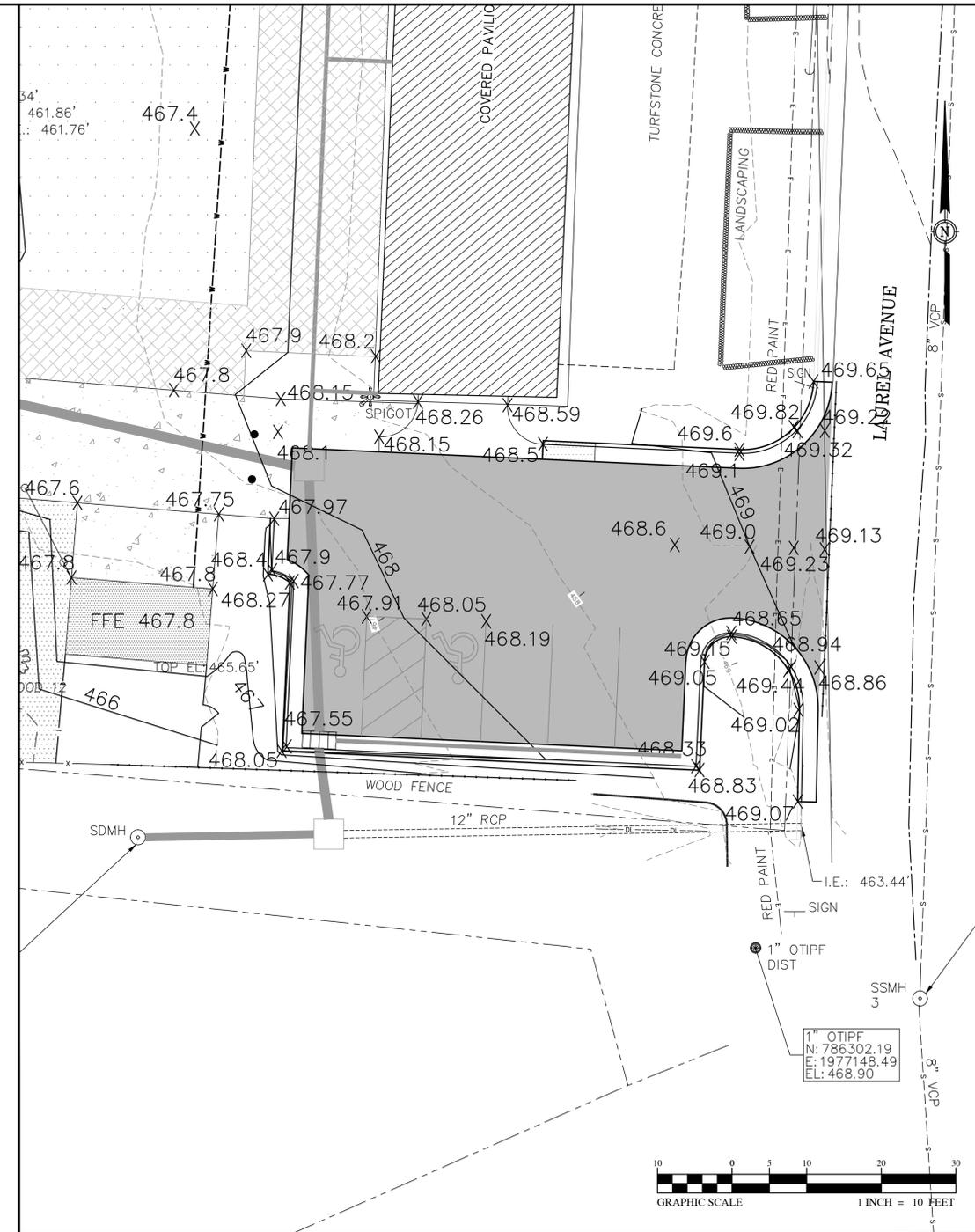
JOB NO.: 1601908  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW: \_\_\_\_\_  
CONST. REVIEW: \_\_\_\_\_  
1601908 - Carrboro Town Commons.dwg

P:\2016\1601908\TOWN OF CARRBORO - Design Phase\Drawings - Drain\Drawings\Grading\Construction\Drawings\1601908 - Carrboro Town Commons.dwg 10/12/2016 3:49 PM MARK HAMLETT

P:\2016\1601908 TOWN OF CARRBORO - Town Commons\02\_Design Phase\Drawings\_Drain\Drawings\Plan\Site\Construction Drawings\1601908 - Carrboro Town Commons.dwg 10/12/2016 3:49 PM MARK HAMLETT



VISITOR PARKING LOT



ADA PARKING LOT

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS



PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

JOB NO.: 1601908  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW: —  
CONST. REVIEW: —  
1601908 - Carrboro Town Commons.dwg

GRADING PLAN

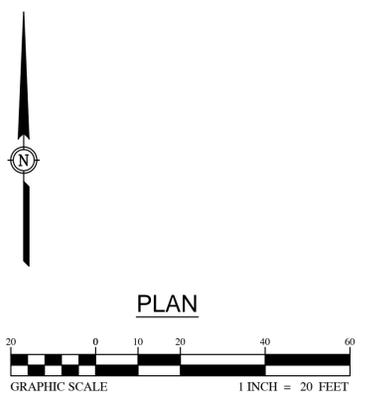
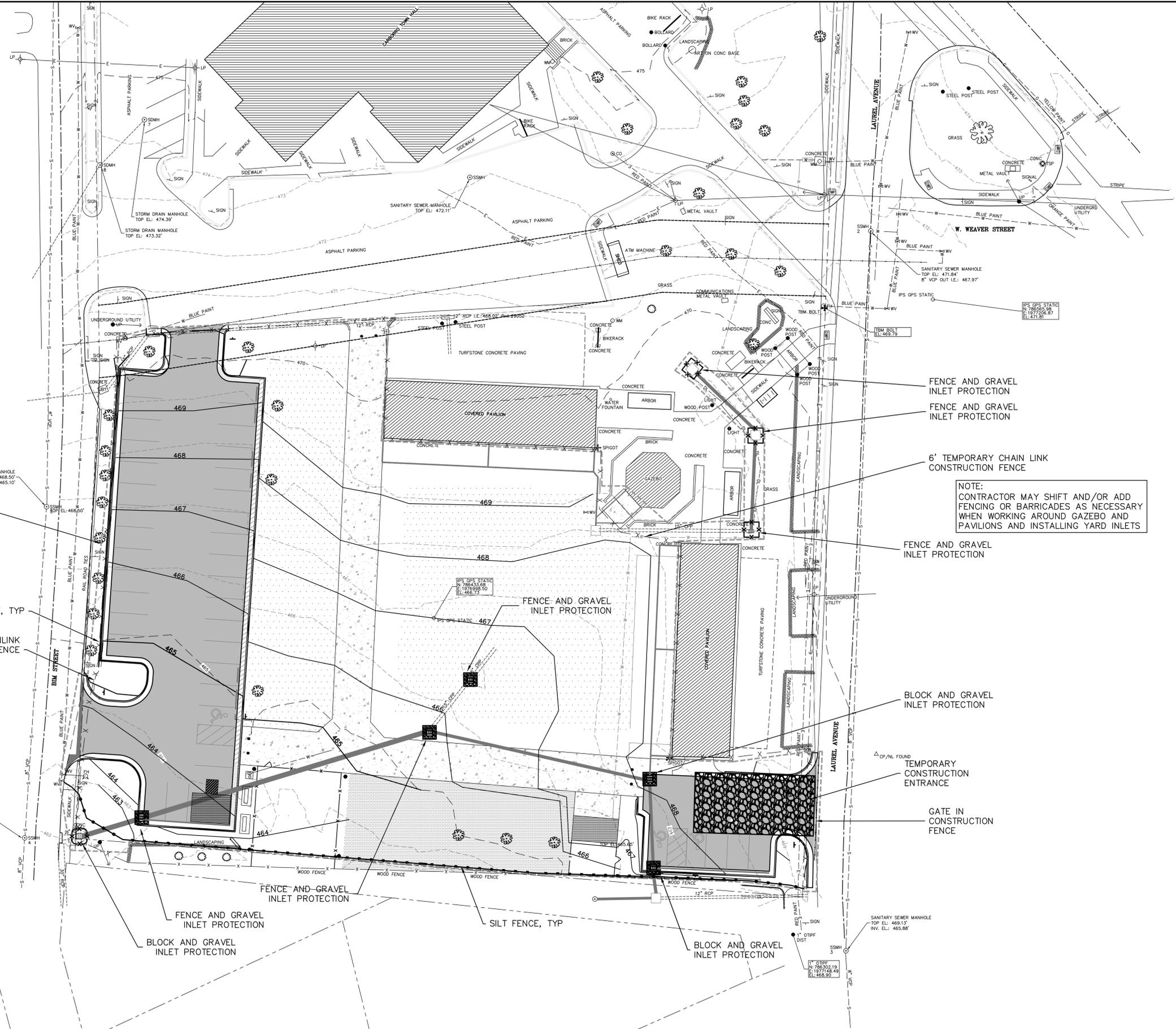
SHEET  
**C-103**



PROPOSED EROSION CONTROL AND STORM DRAINAGE LEGEND

-  BLOCK AND GRAVEL INLET PROTECTION
-  STABILIZED CONSTRUCTION ENTRANCE
-  LIMITS OF DISTURBED AREA
-  TEMPORARY SILT FENCE
-  PROPOSED STORM PIPE

TOTAL DISTURBED AREA = 51553 SF (1.18 AC)



PLAN

1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS
NO.	DATE	BY	REVISION DESCRIPTION

P:\2016\1601908\TOWN OF CARRBORO - Town Commons\02\_Design Phase\Drawings\_Drain\Drawings\Plans\Set\Construction Drawings\1601908 - Carrboro Town Commons.dwg 10/12/2016 3:49 PM MARK HAMLETT



JOB NO.: 1601908  
 DATE: SEPT 26, 2016  
 DESIGNED BY: MAH  
 CADD BY: MAH  
 DESIGN REVIEW: \_\_\_\_\_  
 CONST. REVIEW: \_\_\_\_\_  
 1601908 - Carrboro Town Commons.dwg

**LIGHTING** MOUNTING AS NOTED

SYMBOL	MOUNTING	DESCRIPTION
		CEILING MOUNTED INCANDESCENT, LED OR H.I.D. FIXTURE
		WALL MOUNTED INCANDESCENT, LED OR H.I.D. FIXTURE
		POLE STANDARD LIGHT FIXTURE UNIT - SINGLE ARM
		POLE STANDARD LIGHT FIXTURE UNIT - DOUBLE ARM
		POLE LANTERN TYPE LIGHT FIXTURE UNIT
		BOLLARD LIGHT FIXTURE
		EXIT SIGN
		EXIT SIGN (DOUBLE FACE)
		EXIT SIGN WITH DIRECTIONAL ARROW
		EMERGENCY BATTERY PACK UNIT
		REMOTE HEAD FOR EMERGENCY BATTERY PACK UNIT

**SWITCHING**

SYMBOL	MOUNTING	DESCRIPTION
S	48" AFF	SWITCH, SINGLE POLE
S <sub>2</sub>	48" AFF	SWITCH, DOUBLE POLE
S <sub>3</sub>	48" AFF	SWITCH, 3-WAY
S <sub>4</sub>	48" AFF	SWITCH, 4-WAY
S <sub>DM</sub>	48" AFF	SWITCH, DIMMER
S <sub>P</sub>	48" AFF	SWITCH WITH PILOT LIGHT
S <sub>M</sub>	48" AFF	SWITCH, MANUAL MOTOR STARTER, RATING AND THERMAL OVERLOADS TO MATCH MOTOR NAME PLATE DATA
S <sub>MI</sub>	48" AFF	SWITCH, MANUAL MOTOR STARTER WITH IVORY, ILLUMINATED HANDLE
S <sub>MP</sub>	48" AFF	SWITCH, MANUAL MOTOR STARTER WITH PILOT LIGHT
S <sub>F</sub>	48" AFF	MANUAL MOTOR STARTER SWITCH FRACTIONAL HORSEPOWER
	AS NOTED	PHOTOELECTRIC CONTROL
	48" AFF	LIGHTING CONTACTOR
		LIGHTING CONTACTOR REMOTE PUSH-BUTTON "ON-OFF" CONTROL
		REPRESENTS LIGHTING CONTACTOR BEING CONTROLLED
	AS NOTED	DOOR SWITCH
	AS NOTED	MOTION CONTROL
		CEILING MOTION SENSOR
		CEILING OCCUPATION SENSOR

**PANELBOARDS**

SYMBOL	MOUNTING	DESCRIPTION
	TOP BREAKER 6"-0" AFF	NEW PANELBOARD - SURFACE MOUNTED
	TOP BREAKER 6"-0" AFF	NEW PANELBOARD - FLUSH MOUNTED
	---	EXISTING PANELBOARD - SURFACE MOUNTED
	---	EXISTING PANELBOARD - FLUSH MOUNTED

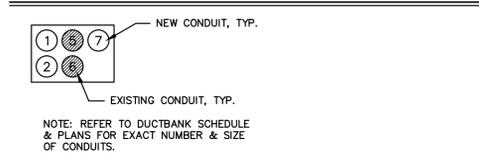
**POWER**

SYMBOL	MOUNTING	DESCRIPTION
	36" AFF	DUPLEX RECEPTACLE, 20A RATED FOOTNOTE DELINEATES SPECIFIC DEVICE
		DENOTES MOUNTED 6" ABOVE COUNTERTOP REQUIREMENT - SEE ABBREVIATIONS
	36" AFF	SPECIAL PURPOSE OUTLET (SIZE INDICATED ON PLANS)
	36" AFF	SINGLE DUPLEX RECEPTACLE, 20A RATED
	36" AFF	DUPLEX RECEPTACLE-FLUSH-WITH GROUND FAULT CIRCUIT INTERRUPTER
	36" AFF	DOUBLE DUPLEX RECEPTACLE, 20A RATED
	18" AFF	DUPLEX RECEPTACLE-FLUSH - SURGE-PROTECTIVE DEVICE (SPD)
	FLOOR	DUPLEX RECEPTACLE- FLOOR BOX-FLUSH
	FLOOR	DUPLEX RECEPTACLE- FLOOR BOX-FLUSH - SURGE-PROTECTIVE DEVICE (SPD)
	FLOOR	COMBINATION DUPLEX RECEPTACLE (SPD)/VOICE OUTLET PORT- (# DESIGNATES NUMBER OF VOICE PORTS) - FLOOR BOX-FLUSH
	48" AFF	COMBINATION DISCONNECT SWITCH/MOTOR STARTER
	AS NOTED	MOTOR (HORSEPOWER INDICATED ON PLANS)
	AS NOTED	JUNCTION BOX
		HANDHOLE
	T-1	TRANSFORMER DESIGNATION
	AS NOTED	CIRCUIT MONITOR
	AS NOTED	VOLTAGE REGULATOR
	AS NOTED	SURGE-PROTECTIVE DEVICE
	48" AFF	EMERGENCY POWER SHUT-OFF SWITCH
	48" AFF	LOCKABLE ON-OFF-AUTO SELECTOR SWITCH W/RED INDICATOR LIGHT
	48" AFF	DISCONNECT SWITCH
	480V 50KVA	TRANSFORMER SIZE
	120V	VOLTAGES
		SHIELDED ISOLATION TYPE TRANSFORMER
		EQUIPMENT CONNECTION

**TYPICAL ANNOTATION**

	DRAWING KEYNOTE
	DEMOLITION KEYNOTE
	REVISION TAG
	REVISION CLOUD
	INSTRUMENTATION TAG
	PROCESS EQUIPMENT TAG
	HVAC EQUIPMENT TAG
	AREA NEMA DESIGNATION TAG

**DUCTBANK SYMBOL KEY**



**CONDUIT FEEDERS AND BRANCH CIRCUITS**

SYMBOL	DESCRIPTION
	OVERHEAD ELECTRIC SERVICE
	OVERHEAD PRIMARY ELECTRIC SERVICE
	OVERHEAD SECONDARY ELECTRIC SERVICE
	OVERHEAD TELEPHONE SERVICE
	OVERHEAD FIBER OPTIC
	OVERHEAD TELEVISION SERVICE
	CONDUIT - EMBEDDED IN FLOOR OR EARTH
	UNDERGROUND ELECTRIC SERVICE
	UNDERGROUND PRIMARY ELECTRIC SERVICE
	UNDERGROUND SECONDARY ELECTRIC SERVICE
	UNDERGROUND TELEPHONE SERVICE
	UNDERGROUND FIBER OPTIC
	UNDERGROUND TELEVISION SERVICE
	CONDUIT - IN WALL, CEILING OR EXPOSED
	CONDUIT WITH IDENTIFIER
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	CONDUIT CAPPED
	BRANCH CIRCUIT WIRING
	CIRCUIT HOME RUN
	IN-LINE HOME RUN
	CIRCUIT NUMBER
	EMERGENCY ONLY CIRCUIT
	NORMAL EMERGENCY CIRCUIT
	DEVICES ON SAME CIRCUIT, SEPARATELY CONTROLLED
	ELECTRIC FEEDER LEGEND INDICATION

**ABBREVIATIONS**

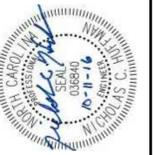
A OR AMP	AMPERE	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	NPT	NOMINAL PIPE THREADS
A.C.	ALTERNATING CURRENT	GND. OR GRD.	GROUND	OE	OVERHEAD ELECTRIC
AF	FRAME AMPERE	H.I.D.	HIGH INTENSITY DISCHARGE	P	# OF POLES IN CIRCUIT BREAKER
A.F.F.	ABOVE FINISHED FLOOR	HP	HORSEPOWER	PH OR #	PHASE
A.F.G.	ABOVE FINISHED GRADE	H.P.S.	HIGH PRESSURE PUMP STATION	PM	POWER MONITOR
A.I.C.	AMPERE INTERRUPTING CURRENT	HSPS	HIGH SERVICE PUMP STATION	PMT	PAD MOUNTED TRANSFORMER
AS	AMMETER SELECTOR SWITCH	HVAC	HEAT-VENT-AIR CONDITIONING	PNL	PANEL
AT	TRIP AMPERE	I.G.	ISOLATED GROUND	PSI	POUNDS PER SQUARE INCH
A.T.S.	AUTOMATIC TRANSFER SWITCH	I.D.	INNER DIAMETER	PT	POTENTIAL TRANSFORMER
AUTO	AUTOMATIC	IMC	INTERMEDIATE METAL CONDUIT	PVC	POLYVINYL CHLORIDE
AWG	AMERICAN WIRE GAUGE	IND.	INDUSTRIAL	QTY.	QUANTITY
B.F.G.	BELOW FINISHED GRADE	JB	JUNCTION BOX	RGS	RIGID GALVANIZED STEEL
BLDG.	BUILDING	J.I.C.	JOINT INDUSTRIAL COUNCIL	RVSS	REDUCED VOLTAGE SOLID STATE
C	COUNTERTOP RECEPTACLE	KA	KILOAMPERE	SC	SURGE CAPACITOR
C OR COND.	CONDUIT	KMIL	1000 CIRCULAR MILS	SCC	SYSTEM CONTROL CENTER
CB	CIRCUIT BREAKER	KV	KILOVOLT	SER	SERVICE ENTRANCE RATED
CKT	CIRCUIT	KVA	KILOVOLT AMPERE	SM	SUB-METER
CP	CONTROL PANEL	KW	KILOWATT	SP	SPARE
CPT	CONTROL PANEL TRANSFORMER	LA	LIGHTNING ARRESTOR	SPD	SURGE-PROTECTIVE DEVICE
CR	CONTROL RELAY	LC	LIGHTING CONTACTOR	S.S.	STAINLESS STEEL
DESIG	DESIGNATION	LTO	LIGHTING	SWBD	SWITCHBOARD
DIA.	DIAMETER	MAX	MAXIMUM	TBA	TO BE ABANDONED
DIV.	DIVISION	MCB	MAIN CIRCUIT BREAKER	TBR	TO BE REMOVED
DDPT	DOUBLE POLE, DOUBLE THROW	mA	MILI-AMP	TCC	TELECOMMUNICATIONS CLOSET
DS	DISCONNECT SWITCH	MC	MANUFACTURER'S CABLE	TDC	TELECOMMUNICATIONS DISTRIBUTION CLOSET
E.C.	ELECTRICAL CONTRACTOR	MCC	MOTOR CONTROL CENTER	TYP.	TYPICAL
EHH	ELECTRIC HANDHOLE	MFR	MANUFACTURER	UE	UNDERGROUND ELECTRIC
EMH	ELECTRIC MANHOLE	MIN.	MINIMUM	UH	UNIT HEATER
EP	EXPLOSION PROOF	M.L.O.	MAIN LUG ONLY	UL	UNDERWRITERS LABORATORY
E.T.R.	EXISTING TO REMAIN	M.O.D.	MOTOR OPERATED DAMPER	U.O.N.	UNLESS OTHERWISE NOTED
EUH	ELECTRIC UNIT HEATER	MS	MOTOR STARTER	UE	UNDERGROUND ELECTRIC
E.W.	EACH WAY	MTD.	MOUNTED	UT	UNDERGROUND TELEPHONE
EX	EXAMPLE	N/A	NOT APPLICABLE	UV	ULTRAVIOLET
EXH	EXHAUST FAN	N.C.	NORMALLY CLOSED	V	VOLT
FU	FUSE	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	VAC	VOLTS ALTERNATING CIRCUIT
FRE	FIBERGLASS REINFORCED EPOXY	NID	NETWORK INTERFACE DEVICE (4 POSITION)	VS	VOLTMETER SELECTOR SWITCH
G.C.	GENERAL CONTRACTOR	N.O.	NORMALLY OPEN	W	WIRE
GEN	GENERATOR	NO.	NUMBER	WP	WEATHERPROOF
				XFMR	TRANSFORMER

**GENERAL NOTES:**

- DRAWINGS ARE DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER DIVISION TRADES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. LOCATE FIXTURES, DEVICES, ETC. IN ORDER TO AVOID INTERFERENCES.
- ALL WORK SHALL BE PERFORMED AS REQUIRED BY APPLICABLE SECTION OF THE NATIONAL ELECTRICAL CODE, LATEST EDITION, AND ALL GOVERNING LOCAL CODES, LAWS, AND/OR REGULATIONS.
- SYSTEM AND EQUIPMENT GROUNDING CONTINUITY SHALL BE ASSURED AS REQUIRED BY APPLICABLE SECTIONS OF THE NATIONAL ELECTRICAL CODE.
- ALL WIRING SHALL BE TYPE "THHN-THWN" U.O.N.; MINIMUM WIRING SHALL BE #12 (POWER WIRE). ALL WIRE SHALL BE COPPER. MINIMUM CONDUIT SIZE FOR METALLIC CONDUIT TO BE 3/4" AND 1" FOR PVC.
- ALL CIRCUIT PROTECTIVE DEVICES SHALL HAVE THE REQUIRED RATING INTERRUPTING CAPACITY EQUAL TO OR GREATER THAN THE AVAILABLE SHORT-CIRCUIT CURRENT AT ITS SUPPLY TERMINAL; MINIMUM INTERRUPTING CAPACITY SHALL BE 10,000 AMPS, SYMMETRICAL A.I.C. FOR 120/208V SYSTEMS AND 14,000 AMPS, SYMMETRICAL A.I.C. FOR 277/480V SYSTEMS. REFER TO PANEL SCHEDULES FOR A.I.C. RATINGS.
- ALL OUTDOOR EXPOSED CONDUIT TO BE RIGID GALVANIZED STEEL. TRANSITION FROM UNDERGROUND TO EXPOSED SHALL BE RIGID GALVANIZED STEEL.
- ALL UNDERGROUND CONDUITS TO BE SCHEDULE 40 PVC UNLESS OTHERWISE INDICATED. ALL CONDUITS SHALL INCLUDE A NYLON PULL CORD.

H:\2016 PROJECTS\16.01.908 Carboro Town Commons\02\_Design Phase\Drawings\_Dual\Drawings\Electrical\Drawings\16.01.908 E-001.dwg 10/12/2016 1:42 PM SONJA ROBERTS

**McGill**  
ASSOCIATES  
ENGINEERING-PLANNING-FINANCE  
1917 EVANS ROAD CARY, NC 27513 PH: (919) 378-9111 FIRM LICENSE # C-0459



PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

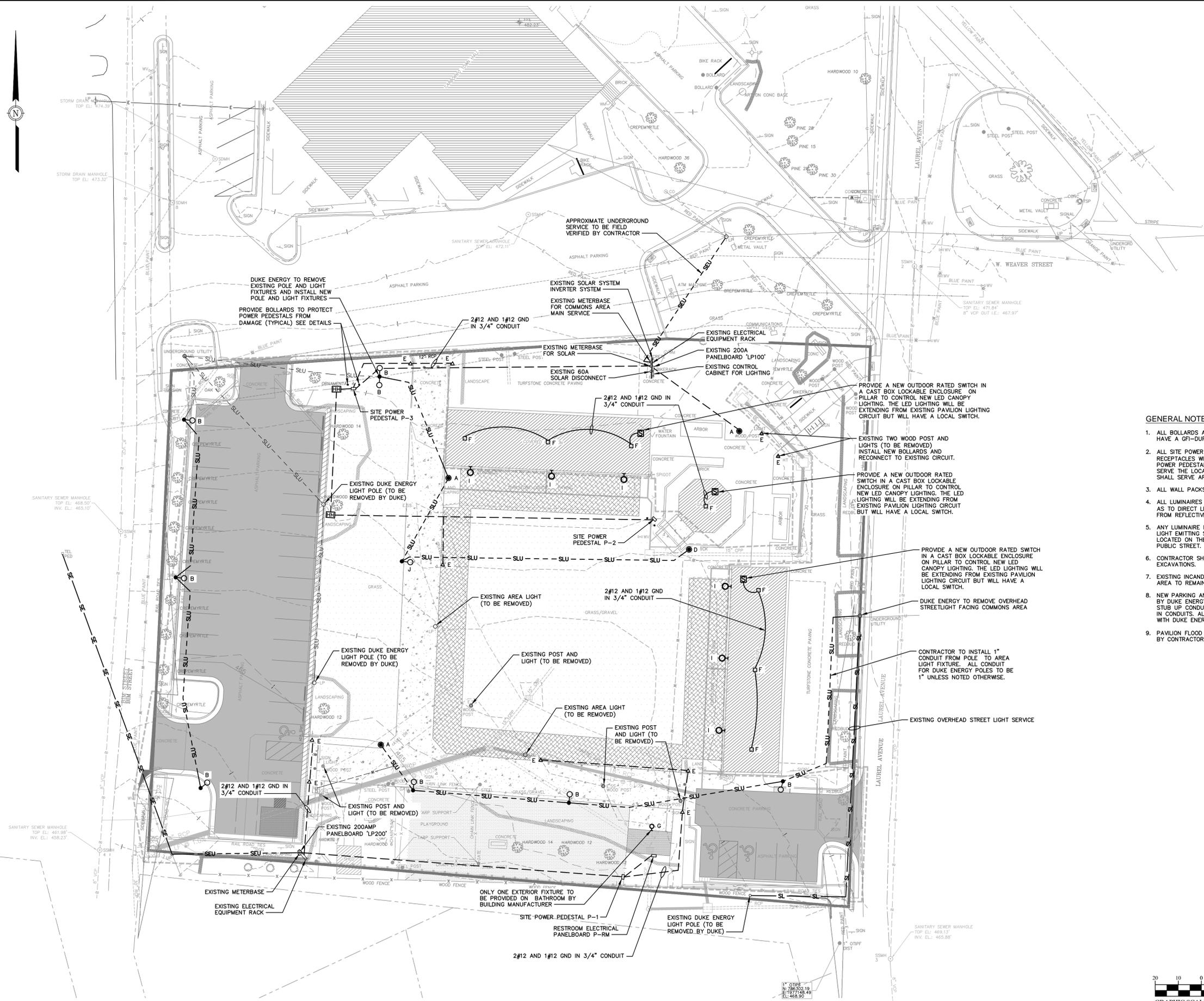
JOB NO.: 16.01.908  
DATE: SEPTEMBER 2016  
DESIGNED BY: NCH  
CADD BY: SAR  
DESIGN REVIEW: \_\_\_\_\_  
CONST. REVIEW: \_\_\_\_\_  
FILE NAME: 16.01.908 E-001.dwg

ELECTRICAL LEGEND,  
NOTES, SCHEDULES,  
AND ABBREVIATIONS

SHEET  
**E-001**

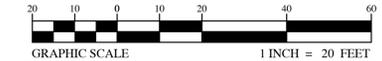
NO.	DATE	BY	REVISION DESCRIPTION

H:\2016 PROJECTS\16.01.908 Carboro Town Commons\02\_Design Phase\Drawings\Plan\Electrical\Drawings\16.01.908 E-101.dwg 10/12/2016 1:46 PM SONJA ROBERTS



**GENERAL NOTES:**

1. ALL BOLLARDS AND AREA LIGHTS INSIDE THE COMMONS AREA SHALL HAVE A GFI-DUPLEX RECEPTACLE FOR USE BY FARMERS MARKET.
2. ALL SITE POWER PEDESTALS SHALL HAVE TWO (2) 120V 20AMP RECEPTACLES WITH ONE (1) 30 AMP 240V RECEPTACLE. EACH SITE POWER PEDESTAL SHALL HAVE FIVE BREAKERS. THREE SHALL SERVE THE LOCAL POWER PEDESTAL RECEPTACLES AND TWO OTHER SHALL SERVE AREA LIGHTS AND BOLLARDS WITH RECEPTACLES.
3. ALL WALL PACKS SHALL BE FULLY SHIELDED.
4. ALL LUMINAIRES SHALL BE SHIELDED OR ORIENTED IN SUCH A WAY AS TO DIRECT LIGHT TOWARD THE EARTH'S SURFACE AND AWAY FROM REFLECTIVE SURFACES.
5. ANY LUMINAIRE MUST BE INSTALLED IN SUCH A MANNER THAT THE LIGHT EMITTING SOURCE IS NOT VISIBLE FROM ANY RESIDENCE NOT LOCATED ON THE SAME LOT AS THE LUMINAIRE OR FROM ANY PUBLIC STREET.
6. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATIONS.
7. EXISTING INCANDESCENT LIGHTS FIXTURES IN PAVILION AND GAZEBO AREA TO REMAIN.
8. NEW PARKING AND AREA LIGHTING AND POLES SHALL BE PROVIDED BY DUKE ENERGY. PROVIDE CONDUITS BETWEEN POLES AS SHOWN. STUB UP CONDUITS AND CAP FOR DUKE POWER TO PROVIDE WIRING IN CONDUITS. ALL CONDUIT INSTALLATION SHALL BE IN ACCORDANCE WITH DUKE ENERGY STANDARDS.
9. PAVILION FLOOD LIGHTS TO BE REPLACED WITH TYPE "I" FIXTURES BY CONTRACTOR.

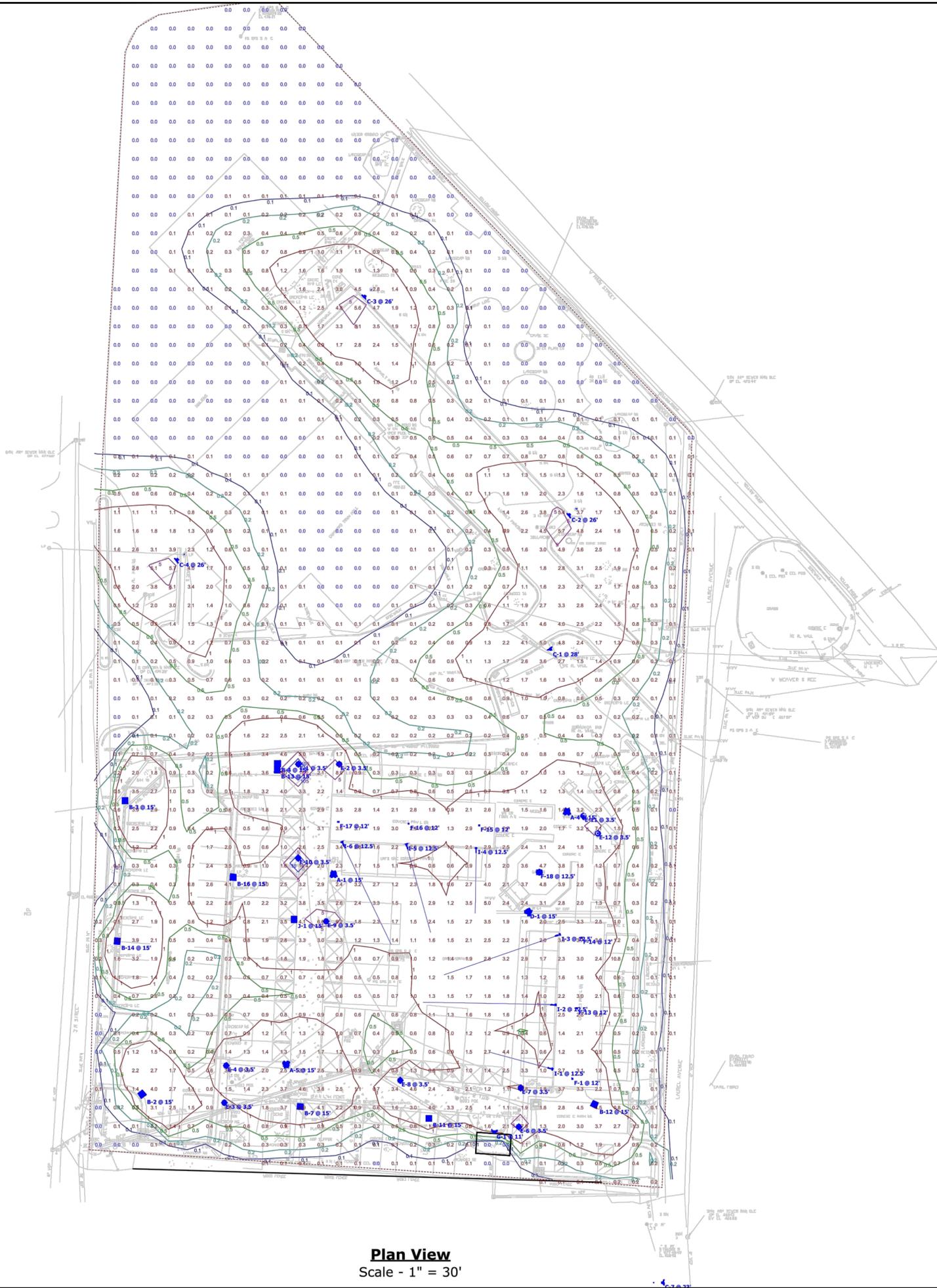


NO.	DATE	BY	REVISION DESCRIPTION



JOB NO.: 16.01.908  
 DATE: SEPTEMBER 2016  
 DESIGNED BY: NCH  
 CADD BY: SAR  
 DESIGN REVIEW: \_\_\_\_\_  
 CONST. REVIEW: \_\_\_\_\_  
 FILE NAME: 16.01.908 E-101.dwg

H:\2016 PROJECTS\16.01.000 Carboro Town Commons\02\_Design\_Phase\Drawings\Electrical\Drawings\16.01.000 E-102\_03.dwg 10/12/2016 9:36 AM SONIA ROBERTS



**Plan View**  
Scale - 1" = 30'

Label	Image	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
A*		3	MRP LED 42C 530 30K SRS MVOLT	MRP POST TOP LIGHT 42 LEDs 530 mA DRIVE CURRENT 30K COLOR TEMP TYPE 5 DISTRIBUTION	HLM LIGHT ENGINE	1	5748	0.85	75
B*		9	KAX1 LED P1 30K R5 MVOLT HS	KAX AREA SERIES SIZE 1, PERFORMANCE PACKAGE 1, 3000 K, TYPE 5, 120-277V, HOUSE-SIDE SHIELD	LED	1	4124	0.85	50
C**		5	125 25S R3 DG	125 SERIES, 250W HPS TYPE 3 MED CUTOFF	ONE 250-WATT CLEAR E18 HIGH PRESSURE SODIUM, HORIZONTAL POS.	1	27500	0.66	295
D*		1	MRP LED 42C 530 40K SRS MVOLT	MRP POST TOP LIGHT 42 LEDs 530 mA DRIVE CURRENT 3K COLOR TEMP TYPE 5 DISTRIBUTION	HLM LIGHT ENGINE	1	6959	0.85	75
E***	SEE BELOW FOR PHOTO	11	XBVR-ID-LED-24-400-NW-UE	LED BOLLARD WITH GFI RECEPTACLE WITH PHOTOCELL	24 LED ARRAY WITH 3K COLOR TEMPERATURE	1	1224	0.85	38
F***	SEE BELOW FOR PHOTO	7	E-CC5L03NZ	Black painted metal housing. One LED array. White metal trim plate. Clear prismatic plastic lens.	One type CKA LED array, 3K COLOR TEMPERATURE	1	3554.462	0.85	34.89
G****	SEE BELOW FOR PHOTO	1	WSR LED 1 10A700/40K SR4 MVOLT	WSR LED WITH 1 MODULE, 10 LED7s, 700mA DRIVER, 3000K COLOR TEMPERATURE, TYPE 4 LENS	Outdoor Wall Pack Luminaire to IES LM-79-08. LUMINAIRE OUTPUT: 1950 Lms.	1	1943	0.9	24.2
I****	SEE BELOW FOR PHOTO	6	NFFLD-S-C70-D-UNV-33-7030	LOW WATTAGE LED FLOODLIGHT	(2) CITIZEN 3000K	2	0	0.92	25.9
J*		1	KAX1 LED P1 30K R5 MVOLT	KAX AREA SERIES SIZE 1, PERFORMANCE PACKAGE 1, 3000 K, TYPE 5, 120-277V	LED	1	6816	0.85	50

\* FIXTURE TO BE PROVIDED BY DUKE ENERGY WITH SIMILAR SPECIFICATIONS AND STYLE.  
 \*\* EXISTING DUKE ENERGY FIXTURES  
 \*\*\* FIXTURES TO BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. FIXTURES SHALL BE OF SIMILAR SPECIFICATION AND STYLE FOR APPROVED EQUALS.  
 \*\*\*\* FIXTURE TO BE PROVIDED BY RESTROOM BUILDING MANUFACTURER. FIXTURES SHALL BE OF SIMILAR SPECIFICATION AND STYLE FOR APPROVED EQUALS.



FIXTURE TYPE 'E'

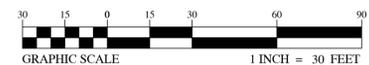


FIXTURE TYPE 'I'

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1 - ENTIRE SITE	+	0.9 fc	18.0 fc	0.0 fc	N/A	N/A

LUMENS PER ACRE CALCULATION FOR COMMONS AREA					
LABEL	QUANTITY	LAMP LUMENS	LLF	WATTS	TOTAL LUMENS
A	2	5748.2	0.85	100	11496
B	8	4124	0.85	132	32992
D	1	6958.74	0.85	75	6959
E	11	1223.807	0.85	38	13462
F	7	3554.462	0.85	34.89	24881
G	1	1943	0.9	24.2	1943
I	6	2632	0.92	25.9	15792
J	1	6816	0.85	50	6816

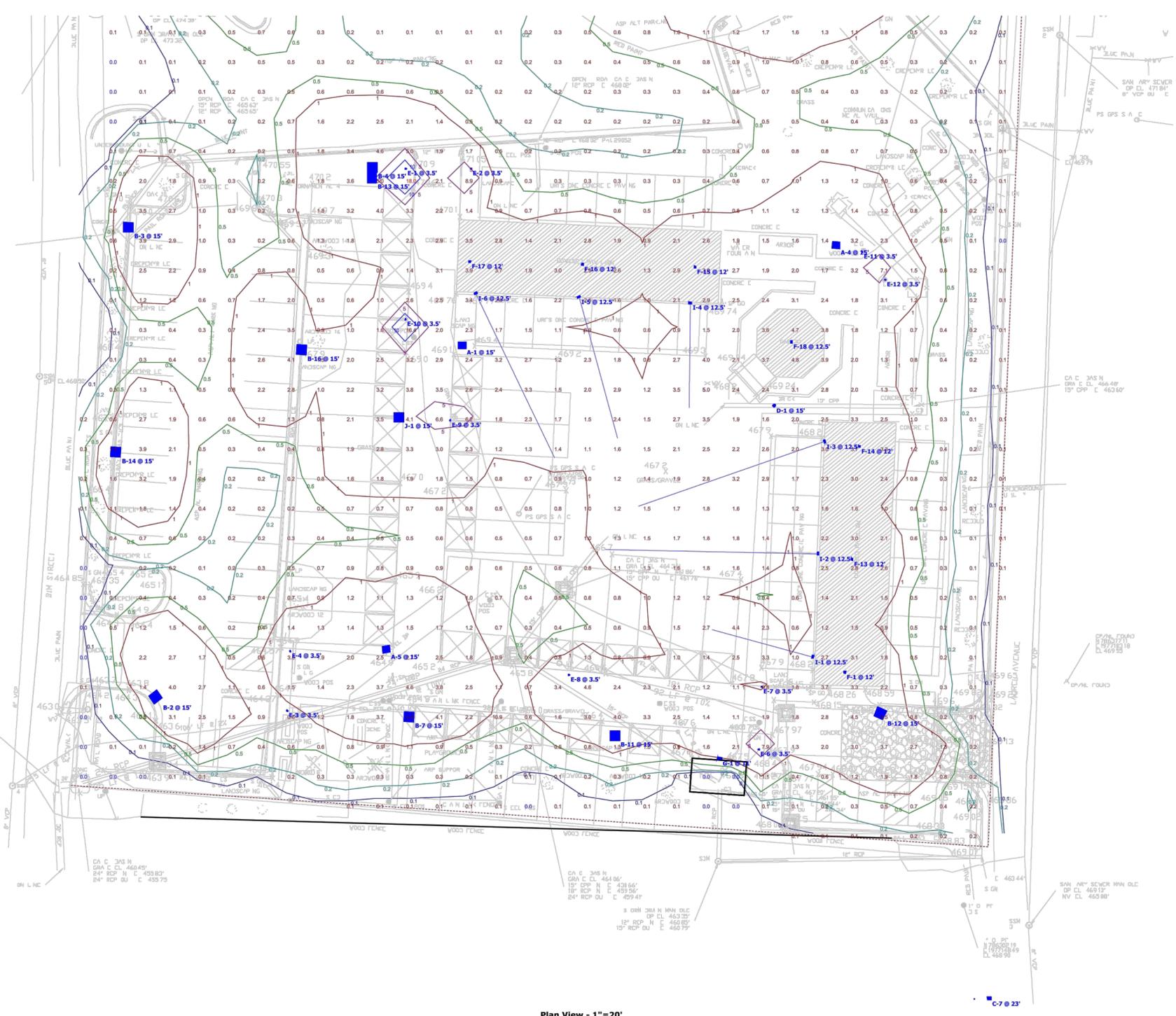
TOTAL LUMENS	114341
COMMON AREA ACRES	1.63
TOTAL LUMENS ALLOWED PER ACRE	70000
COMMONS AREA LUMENS ALLOWED	114100
ALLOWED VERSUS ACTUAL	-241



NO.	DATE	BY	REVISION DESCRIPTION



H:\2016 PROJECTS\16.01.008 Carrboro Town Commons\02\_Design Phase\Drawings\Electrical\Drawings\16.01.008 E-102\_03.dwg 10/12/2016 9:36 AM SOULIA ROBERTS



Plan View - 1"=20'

Label	Image	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
A*		3	MRP LED 42C 530 30K SRS MVOLT	MRP POST TOP LIGHT 42 LEDs 530 mA DRIVE CURRENT 30K COLOR TEMP TYPE 5 DISTRIBUTION	HLM LIGHT ENGINE	1	5748	0.85	75
B*		9	KAX1 LED P1 30K R5 MVOLT HS	KAX AREA SERIES SIZE 1, PERFORMANCE PACKAGE 1, 3000 K, TYPE 5, 120-277V, HOUSE-SIDE SHIELD	LED	1	4124	0.85	50
C**		5	125 25S R3 DG	125 SERIES, 250W HPS TYPE 3 MED CUTOFF	ONE 250-WATT CLEAR E18 HIGH PRESSURE SODIUM, HORIZONTAL POS.	1	27500	0.66	295
D*		1	MRP LED 42C 530 40K SRS MVOLT	MRP POST TOP LIGHT 42 LEDs 530 mA DRIVE CURRENT 3K COLOR TEMP TYPE 5 DISTRIBUTION	HLM LIGHT ENGINE	1	6959	0.85	75
E***	SEE BELOW FOR PHOTO	11	XBVR-ID-LED-24-400-NW-UE	LED BOLLARD WITH GFI RECEPTACLE WITH PHOTOCELL	24 LED ARRAY WITH 3K COLOR TEMPERATURE	1	1224	0.85	38
F***	SEE BELOW FOR PHOTO	7	E-CC5L03NZ	Black painted metal housing. One LED array. White metal trim plate. Clear prismatic plastic lens.	One type CXA LED array, 3K COLOR TEMPERATURE	1	3554.462	0.85	34.89
G****	SEE BELOW FOR PHOTO	1	WSR LED L 10A700/40K SR4 MVOLT	WSR LED WITH 1 MODULE, 10 LEDs, 700mA DRIVER, 3000K COLOR TEMPERATURE, TYPE 4 LENS	Outdoor Wall Pack Luminaire to IES LM-79-08. LUMINAIRE OUTPUT: 1950 Lms.	1	1943	0.9	24.2
I***	SEE BELOW FOR PHOTO	6	NFLD-S-C70-D-UNV-33-7030	LOW WATTAGE LED FLOODLIGHT	(2) CITIZEN 3000K	2	0	0.92	25.9
J*		1	KAX1 LED P1 30K R5 MVOLT	KAX AREA SERIES SIZE 1, PERFORMANCE PACKAGE 1, 3000 K, TYPE 5, 120-277V	LED	1	6816	0.85	50

\* FIXTURE TO BE PROVIDED BY DUKE ENERGY WITH SIMILAR SPECIFICATIONS AND STYLE.  
 \*\* EXISTING DUKE ENERGY FIXTURES  
 \*\*\* FIXTURES TO BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. FIXTURES SHALL BE OF SIMILAR SPECIFICATION AND STYLE FOR APPROVED EQUALS.  
 \*\*\*\* FIXTURE TO BE PROVIDED BY RESTROOM BUILDING MANUFACTURER. FIXTURES SHALL BE OF SIMILAR SPECIFICATION AND STYLE FOR APPROVED EQUALS.

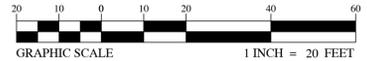


FIXTURE TYPE E



FIXTURE TYPE J

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2 - Parking Area #1		1.1 fc	4.1 fc	0.1 fc	41.0:1	11.0:1
Calc Zone #3 - Parking Area ADA		1.4 fc	5.1 fc	0.1 fc	51.0:1	14.0:1

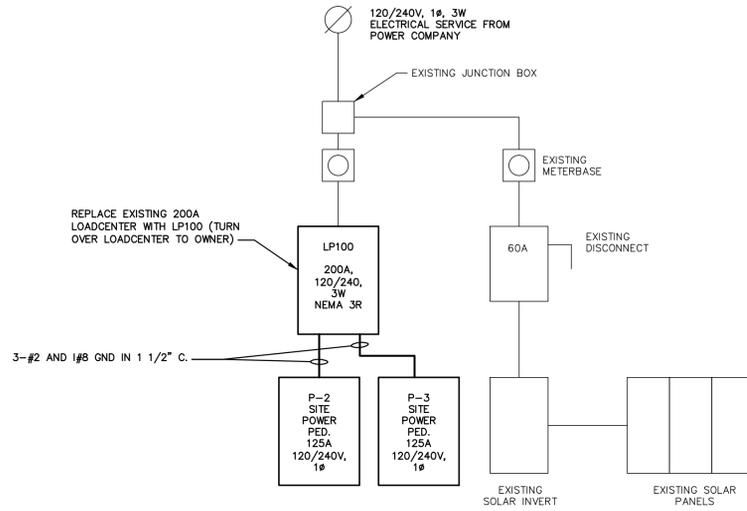


NO.	DATE	BY	REVISION DESCRIPTION



JOB NO.: 16.01.008  
 DATE: SEPTEMBER 2016  
 DESIGNED BY: NCH  
 CADD BY: SAR  
 DESIGN REVIEW: \_\_\_\_\_  
 CONST. REVIEW: \_\_\_\_\_  
 FILE NAME: 16.01.008 E-102\_03.dwg

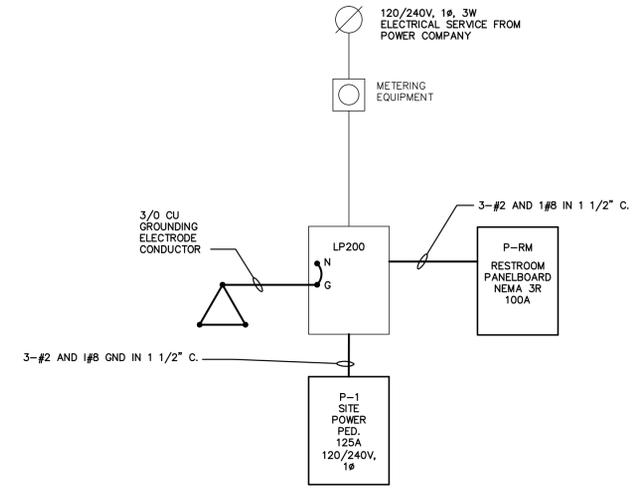




**POWER ONE-LINE (NORTH SERVICE)**

NOT TO SCALE

- NOTE:
1. RECONNECT ALL EXISTING CIRCUITS IN NEW PANELBOARD.
  2. PROVIDE A 30 AMP AND 50 AMP 240V RECEPTACLE MOUNTED IN EQUIPMENT RACK.
  3. RELOCATED 120V RECEPTACLES IN EQUIPMENT RACK IF NECESSARY TO ACCOMMODATE NEW LARGER PANEL.



**POWER ONE-LINE (SOUTH SERVICE)**

NOT TO SCALE

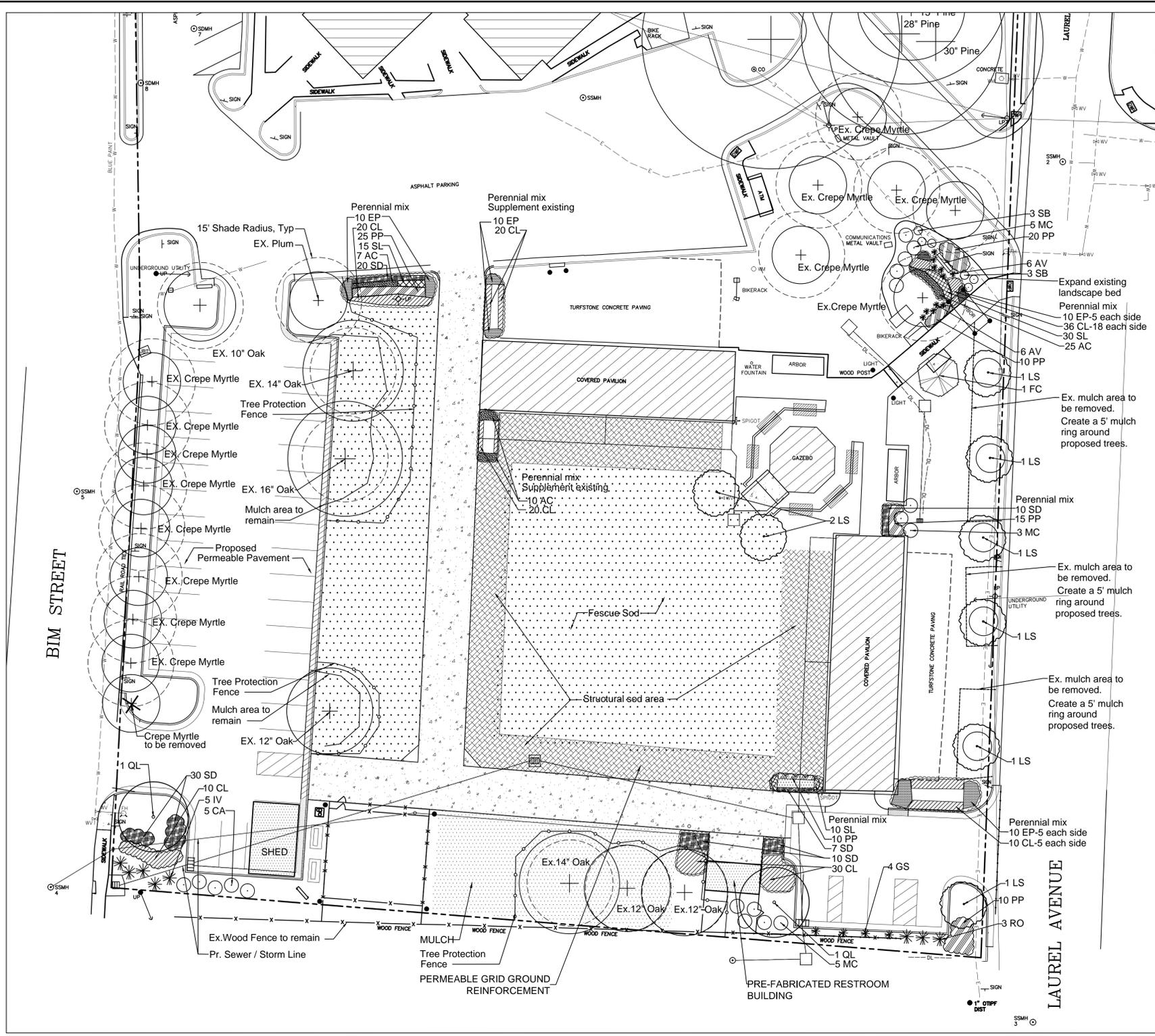
- NOTE:
1. INSTALL ONE (1) 100AMP / 2 POLE BREAKER TO SERVICE PANEL P-RM IN EXISTING PANEL LP200 (GE POWERMARK GOLD LOAD CENTER)
  2. INSTALL ONE (1) 100AMP / 2 POLE BREAKER TO SERVICE PANEL P-1 SITE POWER PEDESTAL IN EXISTING PANEL LP200 (GE POWERMARK GOLD LOAD CENTER)
  3. INSTALL ONE (1) 20AMP / 1 POLE BREAKER TO SERVICE BOLLARDS NEAR SOUTH ENTRANCE TO COMMONS AREA.

PANEL LP100		BUS AMP 400		MIN. A.I.C. 10,000		MAIN BREAKER 200												
MOUNTING SURFACE		PHASE 1		WIRE 3		VOLTAGE 120/240												
LOCATION		NEMA TYPE 3R																
CKT	DESCRIPTION	BREAKER AMP	POLES	LOAD (KW) A	B	WIRE NO	GND. SIZE	COND. SIZE	WIRE NO	LOAD (KW) A	B	BREAKER POLES	AMP	DESCRIPTION	CKT			
1	P-2 (POWER PED)	100	2	7.2		3	1	8	1 1/4	8	1	3	7.2	2	100	P-2 (POWER PED)	2	
3																		4
5	EXISTING CKT 1	20	1	-	-	EX	EX	EX	EX	-	-	2	30					6
7	EXISTING CKT 3	15	1	-	-	EX	EX	EX	EX	-	-							8
9	EXISTING CKT 5	15	2	-	-	EX	EX	EX	EX	-	-	1	20					10
11	EXISTING CKT 7	15	-	-	-	EX	EX	EX	EX	-	-	1	20					12
13	EXISTING CKT 9	20	1	-	-	EX	EX	EX	EX	-	-	1	20					14
15	EXISTING CKT 11	15	1	-	-	EX	EX	EX	EX	-	-	1	20					16
17	EXISTING CKT 13	15	1	-	-	EX	EX	EX	EX	-	-	1	15					18
19	EXISTING CKT 15	20	1	-	-	EX	EX	EX	EX	-	-	1	20					20
21	EXISTING CKT 17	20	1	-	-	EX	EX	EX	EX	-	-	1	20					22
23	EXISTING CKT 19	20	1	-	-	EX	EX	EX	EX	-	-	1	20					24
25	EXISTING CKT 21	20	1	-	-	EX	EX	EX	EX	-	-	1	20					26
27	EXISTING CKT 23	100	2	-	-	EX	EX	EX	EX	-	-	1	20					28
29						EX	EX	EX	EX	-	-	1	20					30
31	EXISTING CKT 27	20	1	-	-	EX	EX	EX	EX	-	-	1	20					32
33	EXISTING CKT 29	20	1	-	-	EX	EX	EX	EX	-	-	1	20					34
35	SPARE	15	1	-	-					-	-	1	20					36
37	SPARE	20	1	-	-					-	-	1	20					38
39	RECEPTACLE IN EQUIPMENT RACK	50	2	-	-	3	6	10	3/4	3	6	2	30					40
41																		42
SUB-TOTAL LOAD KW				7.2	7.2													
TOTAL LOAD KW										7.2	7.2							



NO.	DATE	BY	REVISION DESCRIPTION

H:\2016 PROJECTS\16.01.908 Carrboro Town Commons\02\_Design Phase\Drawings\Plan\Electrical\Drawings\16.01.908 E-601.dwg 10/12/2016 1:51 PM SOLJA ROBERTS



**PLANT SCHEDULE**

QTY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	SPACING
8	LS	LAGERSTROEMIA 'YUMA' / CRAPE MYRTLE	1.5' Cal. / 8' HT.	B&B	As shown
2	QL	QUERCUS LYRATA 'HIGHBEAM' / OVERCUP OAK	3' Cal. / 12' HT.	B&B	As shown

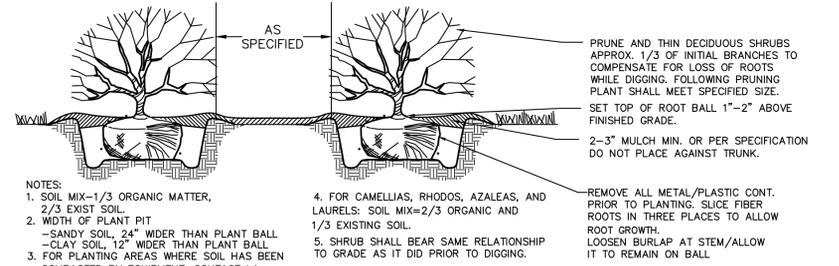
**PERENNIAL MIX**

PERENNIAL MIX	SPACING / COMMENTS
40 EP	ECHINACEA PURPUREA / PURPLE CONEFLOWER 2' O.C. / PURPLE FLOWERS, JUNE TO AUGUST
42 AC	AQUILEGIA CANADENSIS / EASTERN COLUMBINE 2' O.C. / YELLOW/RED FLOWERS, APRIL TO MAY
90 PP	PHLOX PANICULATA 'DAVID' / FALL PHLOX 2.5' O.C. / WHITE FLOWERS, JULY TO SEPT.
77 SD	SEDUM 'DYNOMITE' OR 'AUTUMN JOY' / SEDUM 1' O.C. / RED FLOWERS, SUMMER
146 CL	COREOPSIS LANCEOLATA / TICKSEED 2' O.C. / YELLOW FLOWERS, MAY TO JULY
55 SL	STOKESIA LAEVIS 'BLUE DANUBE' / STOKES'S ASTER 2' O.C. / PURPLE FLOWERS, MAY TO AUGUST

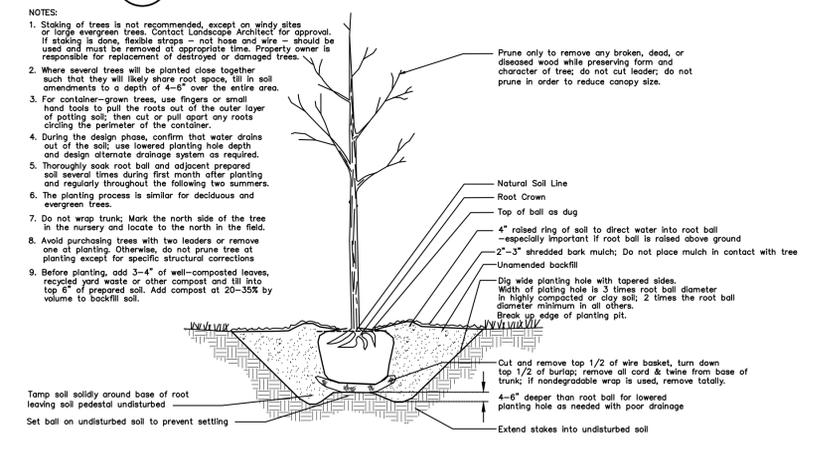
**SHRUBS / VINES / GRASSES**

4 GS	GELSEMIUM SEMPERVIRENS / CAROLINA JESSAMINE	3 GAL.	CONT.	As shown
3 FC	FICUS CARICA 'BROWN TURKEY' / FIG TREE	1.5' Cal. / 8' HT.	B&B	As shown
5 IV	ITEA VIRGINICA 'HENRY'S GARNET' / SWEETSPIRE	5 GAL.	CONT.	5' O.C.
5 CA	CLETHRA ALNIFOLIA / SWEET PEPPERBUSH	5 GAL.	CONT.	5' O.C.
6 SB	SPIREA BUMALDA 'ANTHONY WATERER' / SPIREA	3 GAL.	CONT.	3' O.C.
12 AV	ANDROPOGON VIRGINICUS / BROOMSEDGE	3 GAL.	CONT.	3' O.C.
13 MC	MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS	3 GAL.	CONT.	5' O.C.
3 RO	ROSMARINUS OFFICINALIS 'TUSCAN BLUE' / ROSEMARY	5 GAL.	CONT.	5' O.C.

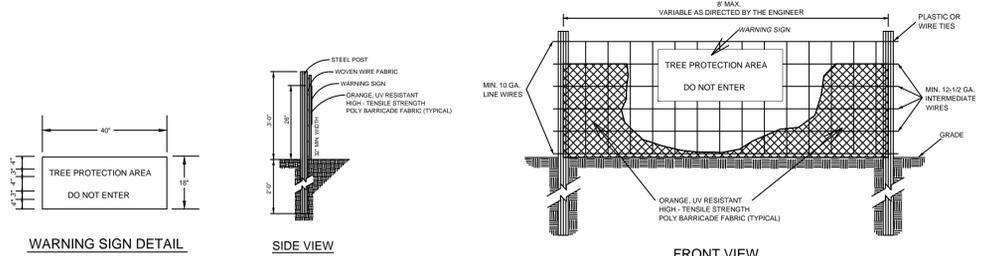
- PLANTING / IRRIGATION NOTES:**
- All plant materials to comply with American Standard for Nursery Stock ANSI.Z60.
  - Plant locations to be approved in field prior to installation.
  - Substitutions of plant materials specified can only occur with prior approval by Landscape Architect.
  - Establish plant bed configurations. Landscape Architect to approve bed layout in field.
  - Install plants and mulch beds with 4" of double shredded hardwood mulch.
  - Areas disturbed by grading to be seeded and strawed.
  - Landscape Contractor to maintain plant materials for a one year period following substantial completion per specifications.
  - Areas damaged from plant relocation or other activities of Landscape Contractor to be re-seeded and established at no additional cost to the owner.
  - All plant material shown is minimum required by the Town Code.
  - The mulch areas under the existing trees to remain and this area to remain undisturbed throughout construction.
  - Ex. trees noted to remain shall have their lower limbs trimmed to accommodate vender's trucks.
  - Irrigation to be provided in structural grass area and landscape beds with shrubs and perennials.
  - Contractor to provide an irrigation design and cost for installation. Irrigation to be supplied by a new well to be dug on the Town Commons site. Contractor is responsible for all well design, permitting and construction.
  - LANDSCAPE ARCHITECT TO APPROVE TREE PROTECTION FENCE PRIOR TO CONTRACTOR COMMENCING CONSTRUCTION. PLEASE CALL 919-539-0012.



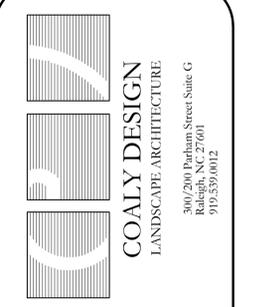
**1 SHRUB PLANTING**  
LA-1 NTS



**2 TREE PLANTING**  
LA-1 NTS



**3 TREE PROTECTION FENCE**  
LA-1 NTS



**TOWN COMMONS IMPROVEMENTS**  
TOWN OF CARBORO

**PLANTING PLAN**

**Consultants**

**Professional Seals**

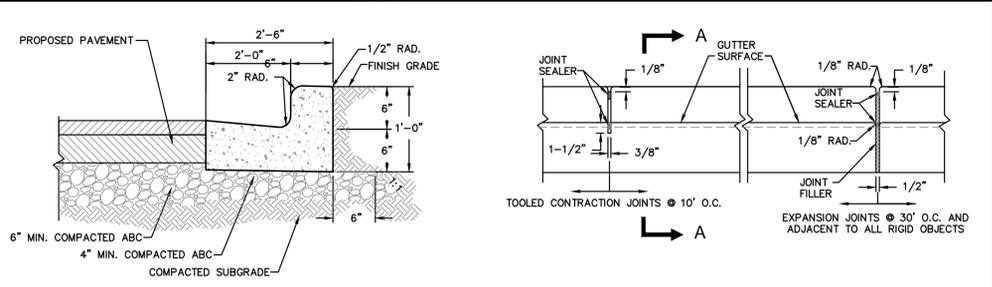
North Carolina Professional Seal for Kimberly J. Wicker, License No. 1010-16, State of North Carolina, Landscape Architect, Seal No. C-262.

Date Issued:	10.5.16
Scale:	1"=20'
Drawn by:	RBS
Checked by:	KJW

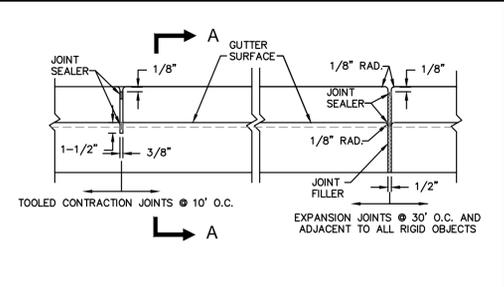
Revisions	No.	Description	Date	By
	1	Per Town Comments	10.7.16	kjw

**LA-1**

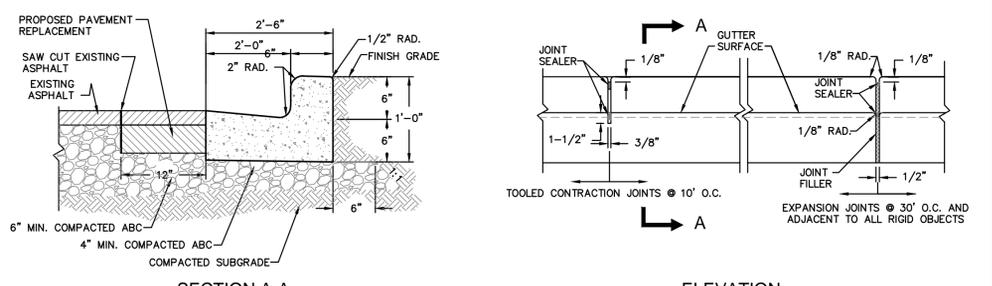




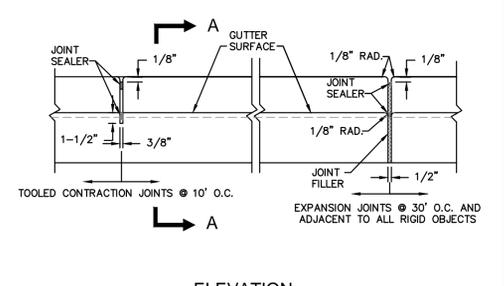
**SECTION A-A**  
**DETAIL WITH PROPOSED PAVEMENT**



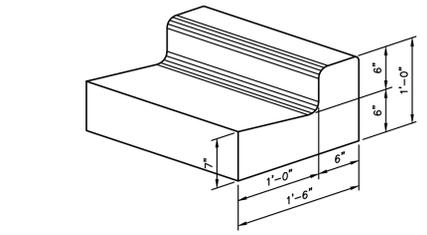
**ELEVATION**



**SECTION A-A**  
**DETAIL WITH EXISTING PAVEMENT**

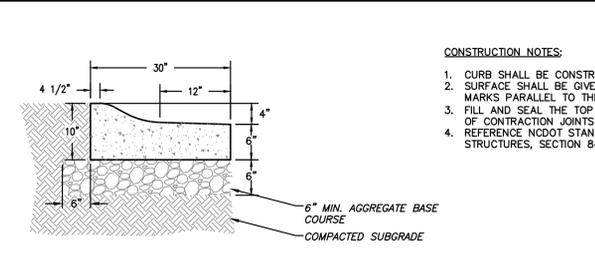


**ELEVATION**



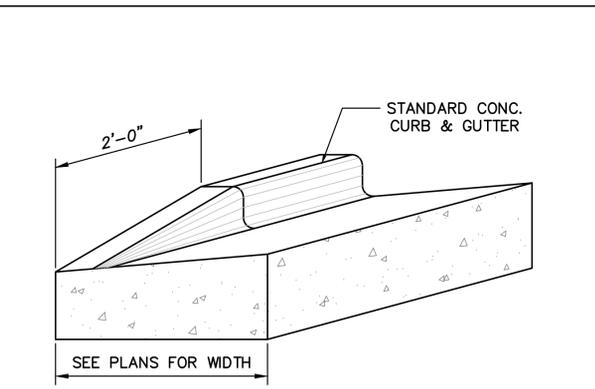
**30" STANDARD CONCRETE CURB & GUTTER**

- CONSTRUCTION NOTES:**
1. CURB SHALL BE CONSTRUCTED WITH 4000 PSI CONCRETE.
  2. SURFACE SHALL BE GIVEN A LIGHT BROOM FINISH WITH THE BRUSH MARKS PARALLEL TO THE CURB.
  3. FILL AND SEAL THE TOP 1/2" OF EXPANSION JOINTS AND TOP 1" OF CONTRACTION JOINTS WITH APPROVED JOINT SEALING COMPOUND.
  4. REFERENCE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, SECTION 846-3.

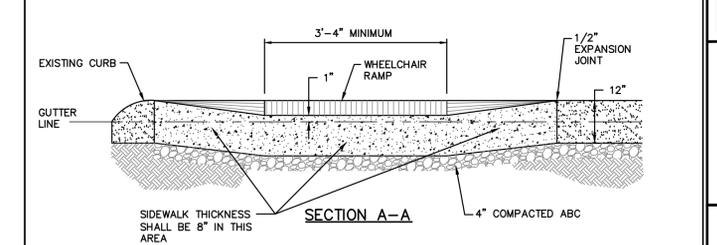
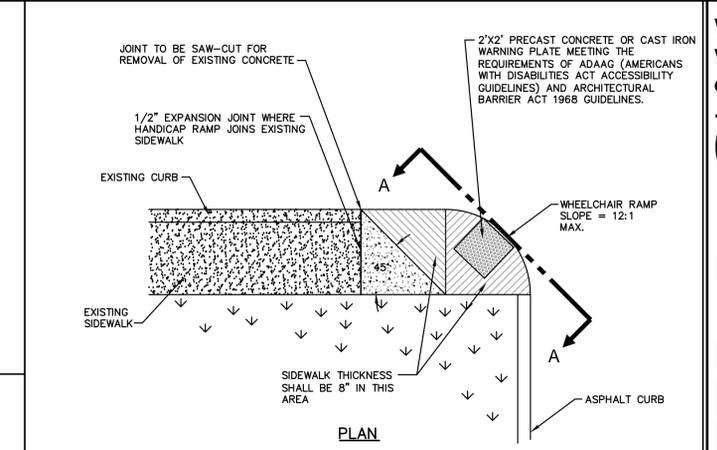


**30" CONCRETE ROLL CURB & GUTTER**

- CONSTRUCTION NOTES:**
1. CURB SHALL BE CONSTRUCTED WITH 4000 PSI CONCRETE.
  2. SURFACE SHALL BE GIVEN A LIGHT BROOM FINISH WITH THE BRUSH MARKS PARALLEL TO THE CURB.
  3. FILL AND SEAL THE TOP 1/2" OF EXPANSION JOINTS AND TOP 1" OF CONTRACTION JOINTS WITH APPROVED JOINT SEALING COMPOUND.
  4. REFERENCE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, SECTION 846-3.

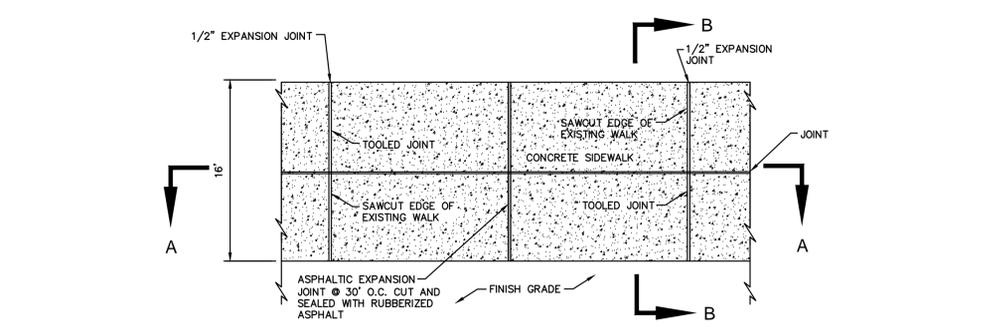


**CURB TERMINUS**

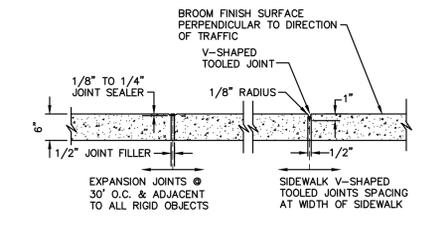


**HANDICAP RAMP WITH CONCRETE SIDEWALK**  
NOT TO SCALE

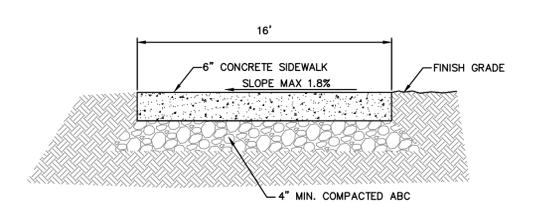
- NOTES:**
1. SIDEWALKS SHALL BE CONSTRUCTED WITH CLASS B, 4000PSI CONCRETE.
  2. AT ALL INTERSECTIONS, CROSS WALKS & LOCATIONS WHERE THERE IS A VERTICAL STEP IN EXCESS OF 1", WHEELCHAIR RAMPS SHALL BE CONSTRUCTED WITH MAXIMUM SLOPE 12:1 & MINIMUM WIDTH OF 3'-4". AT SPECIFIC LOCATIONS WHERE THE CONTRACTOR CANNOT DETERMINE WHEELCHAIR RAMP REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR FIELD APPROVAL PRIOR TO CONSTRUCTION.



**PLAN**



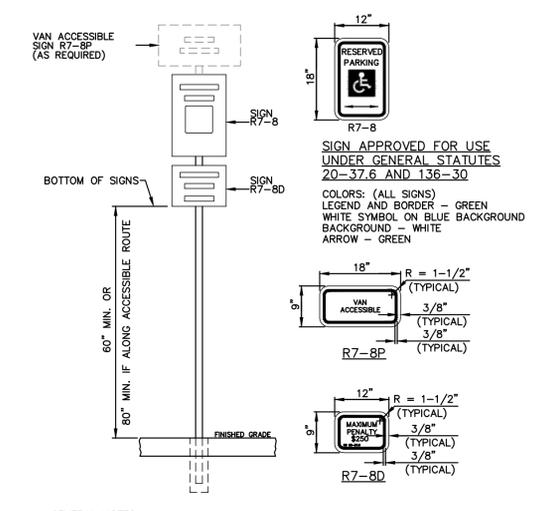
**SECTION A-A**



**SECTION B-B**

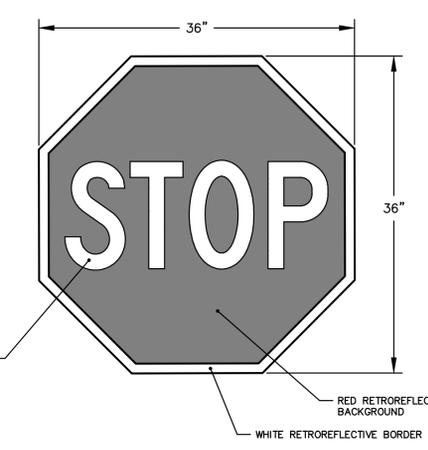
- CONSTRUCTION NOTES:**
1. SIDEWALK SHALL BE CONSTRUCTED WITH 4000 PSI CONCRETE.
  2. SIDEWALK SURFACE SHALL BE GIVEN A LIGHT BROOM FINISH WITH THE BRUSH MARKS PERPENDICULAR TO THE TRAFFIC.

**CONCRETE SIDEWALK**  
NOT TO SCALE



- GENERAL NOTES:**
1. REGARDLESS OF AGE, ALL ACCESSIBLE SPACES SHALL BE IDENTIFIED BY ABOVE-GROUND SIGNS ONLY. (SEE N.C.G.S.) SPACES SHALL NOT USE GROUND-PAINTED SYMBOLS.

**HANDICAP PARKING SIGNAGE**  
NOT TO SCALE



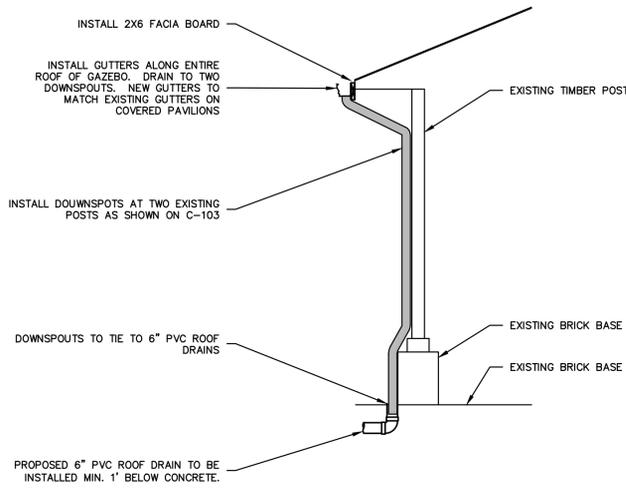
**STOP SIGN DETAIL**  
NOT TO SCALE

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS

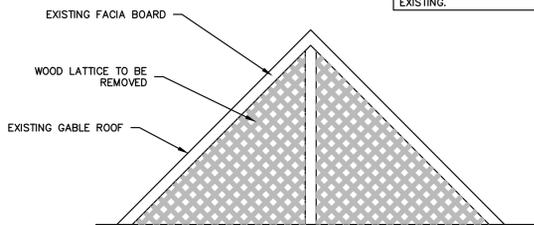
P:\2016\16.01080 TOWN OF CARRBORO - Town Commons\02\_Design Phase\Drawings\_Data\Drawings\Planets\Construction Drawings\1601080 - Carrboro Town Commons Details backup.dwg 10/12/2016 12:39 PM MARK HANLETT



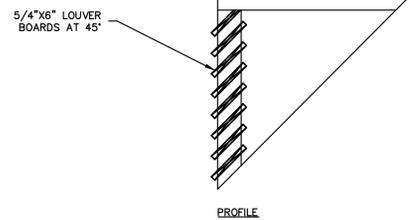
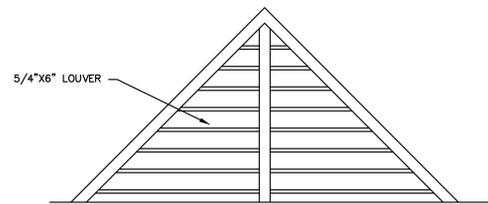
JOB NO.: 16.01080  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW: 33728  
CONST. REVIEW: \_\_\_\_\_  
1601080 - Carrboro Town Commons Details backup.dwg



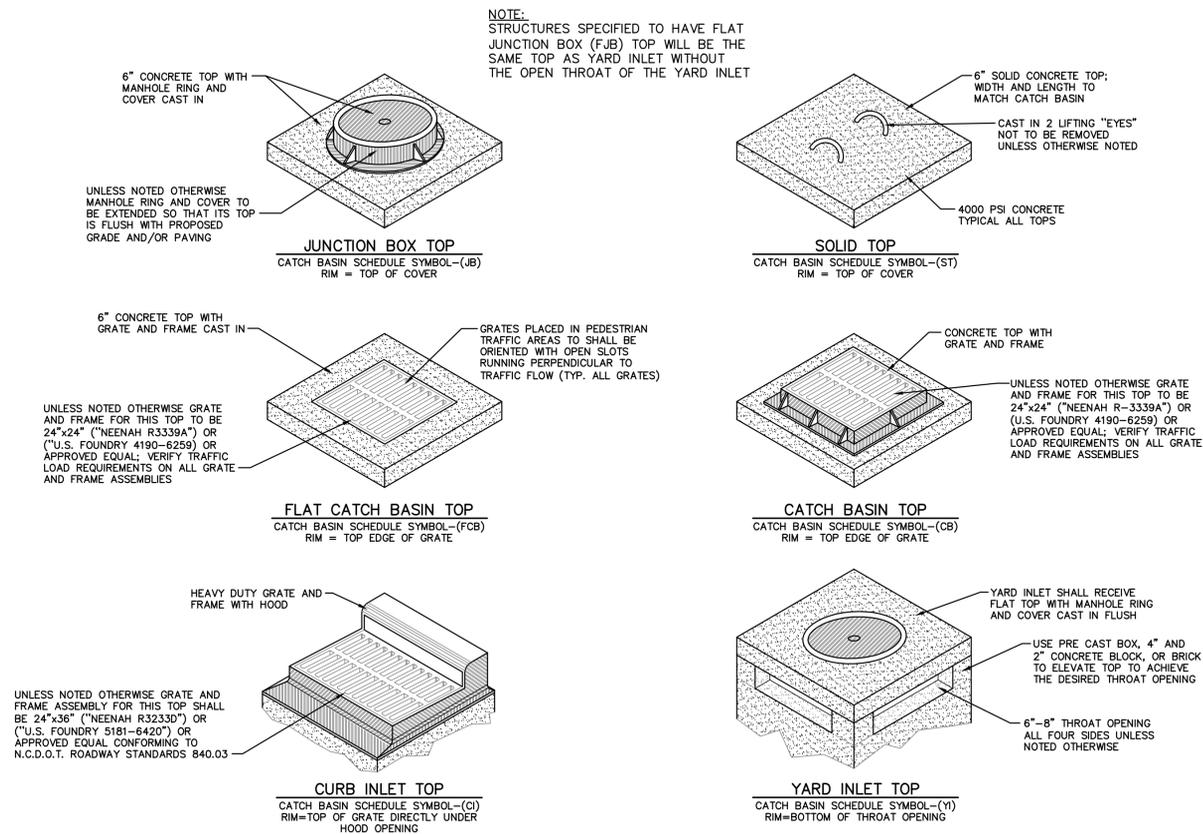
**GAZEBO GUTTERS AND DOWNSPOUTS**



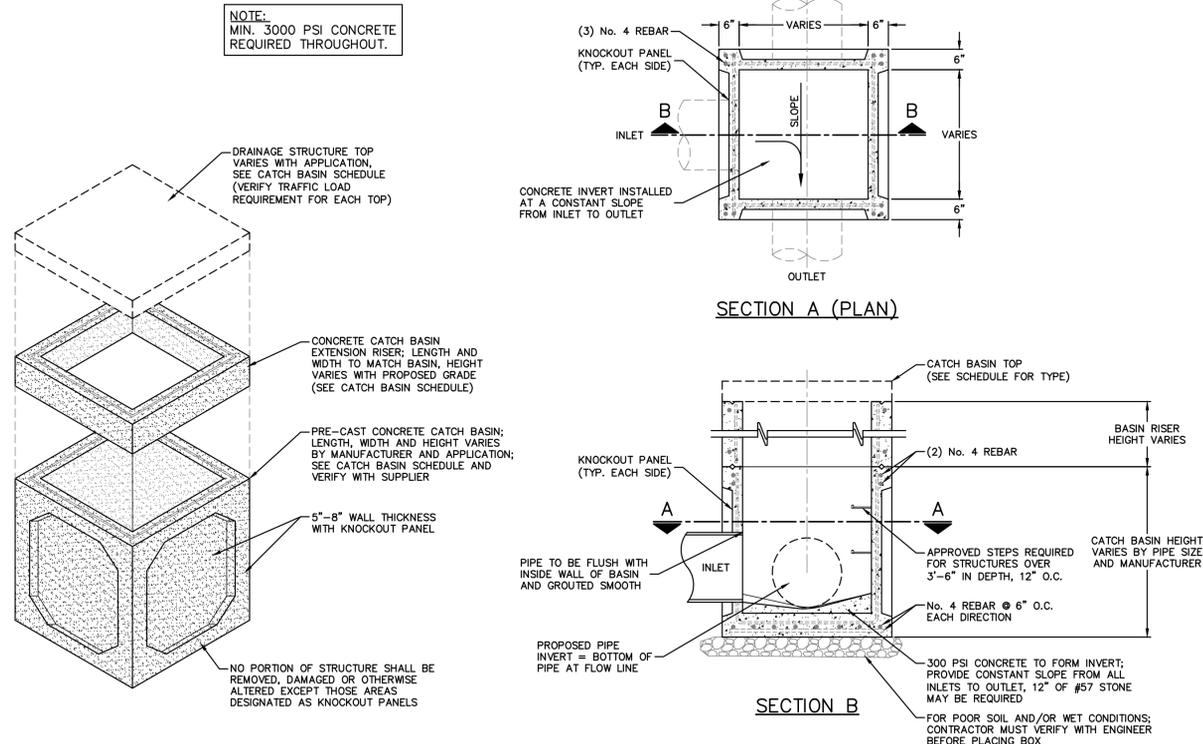
NOTE:  
1. ALL LUMBER TO BE PRESSURE TREATED  
2. LOUVER TO BE STAINED TO MATCH EXISTING.



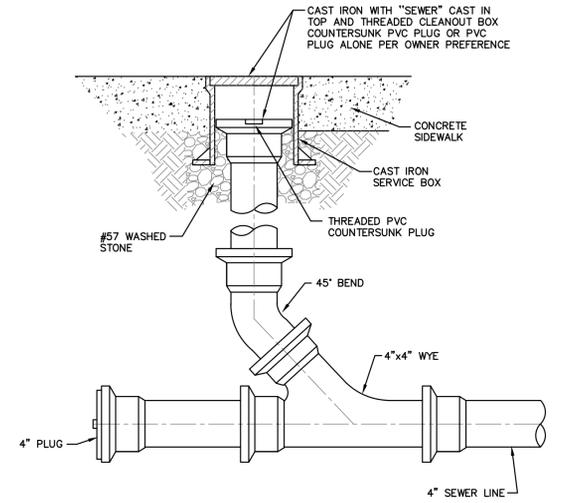
**LOUVER INSTALLATION**



**CATCH BASIN TOP DETAILS**

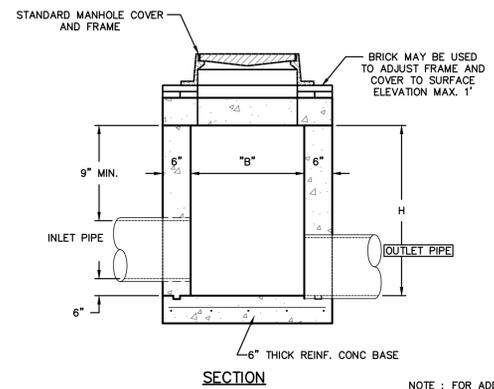
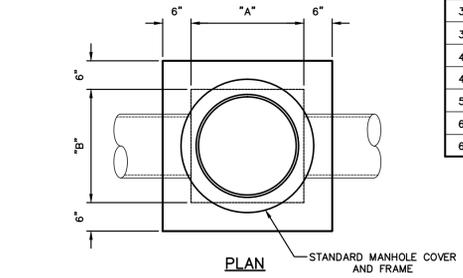


**PRE-CAST CATCH BASIN**



**CLEANOUT DETAIL**

PIPE DIA.	A	B	H (MIN.)
12"	2'-0"	2'-0"	2'-3"
15"	2'-3"	2'-3"	2'-6"
18"	2'-6"	2'-6"	2'-9"
24"	3'-0"	3'-0"	3'-3"
30"	3'-6"	3'-6"	3'-9"
36"	4'-0"	4'-0"	4'-3"
42"	4'-6"	4'-6"	4'-9"
48"	5'-4"	5'-4"	5'-3"
54"	5'-10"	5'-10"	5'-9"
60"	6'-6"	6'-6"	6'-3"
66"	7'-1"	7'-1"	6'-9"



**CONCRETE JUNCTION BOX**  
UPDATED JANUARY 01, 2016  
NOT TO SCALE

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS



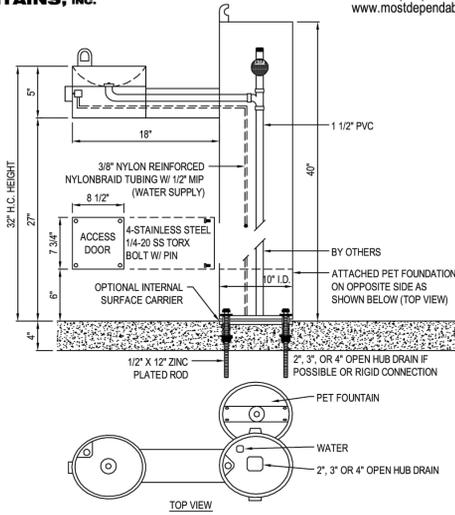
JOB NO.: 16.01908  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW: \_\_\_\_\_  
CONST. REVIEW: \_\_\_\_\_  
1601908 - Carrboro Town Commons Details backup.dwg

**DETAILS**

P:\2016\16.01908\TOWN OF CARRBORO - Town Commons\02\_Design\Phase\Drawings\_Data\Drawings\Plan\Details\Construction\Drawings\1601908 - Carrboro Town Commons Details backup.dwg 10/12/2016 12:39 PM MARK HAMLETT



MOST DEPENDABLE FOUNTAINS, INC.  
 5705 COMMANDER DR. P.O. BOX 587  
 ARLINGTON, TN 38002-0587  
 TOLL FREE: 1-800-552-6331  
 PHONE: (901) 867-0039  
 FAX: (901) 867-0159  
 www.mostdependable.com

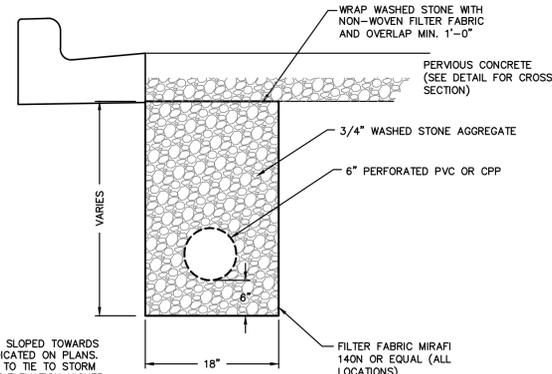


- NOTES:**
1. MEETS ADA REGULATIONS.
  2. OPTIONAL STAINLESS STEEL SURFACE CARRIER RECOMMENDED.
  3. SHOWN WITH OPTIONAL 10 STAINLESS STEEL SURFACE CARRIER, ATTACHED PET FOUNTAIN.
  4. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
  5. DO NOT SCALE DRAWING.
  6. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
  7. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
  8. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT [www.CADDdetails.com/info](http://www.CADDdetails.com/info) AND ENTER REFERENCE NUMBER 3354-1.51.

MODEL 440 SM (OR EQUIVALENT)  
 SHOWN W/ OPTIONAL SS SURFACE CARRIER, PF



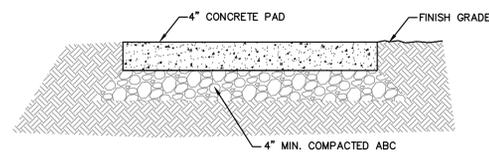
3354-1.51 REVISION DATE 07/20/2016  
 PROTECTED BY COPYRIGHT ©2016 CADDDETAILS.COM LTD. CADDdetails.com



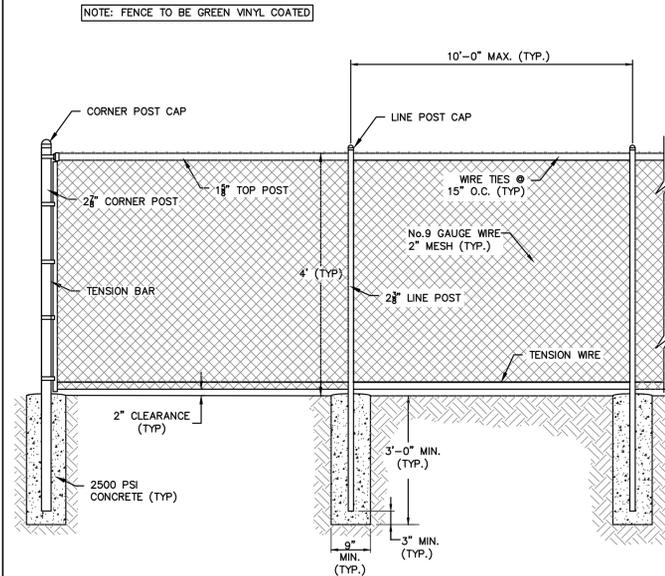
- NOTE:**
1. PIPE SHALL BE SLOPED TOWARDS OUTLET AS INDICATED ON PLANS.
  2. FRENCH DRAIN TO TIE TO STORM BOX AT INVERT ELEVATION HIGHER THAN CROWN OF ADJACENT PIPES.

FRENCH DRAIN

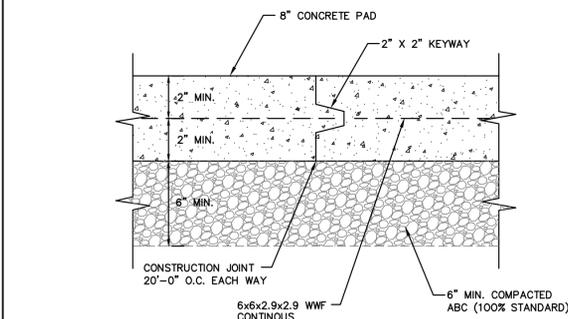
- CONSTRUCTION NOTES:**
1. SIDEWALK SHALL BE CONSTRUCTED WITH 3000 PSI CONCRETE.
  2. SIDEWALK SURFACE SHALL BE GIVEN A LIGHT BROOM FINISH WITH THE BRUSH MARKS PERPENDICULAR TO THE TRAFFIC.
  3. CONCRETE PAD TO BE 8'X4'.



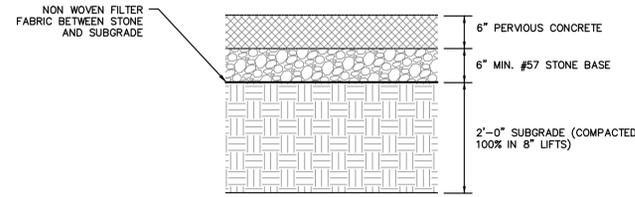
CONCRETE PAD FOR BENCH AND BIKE RACK



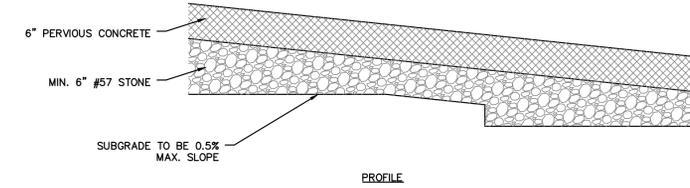
CHAIN LINK FENCE



CONCRETE PARKING

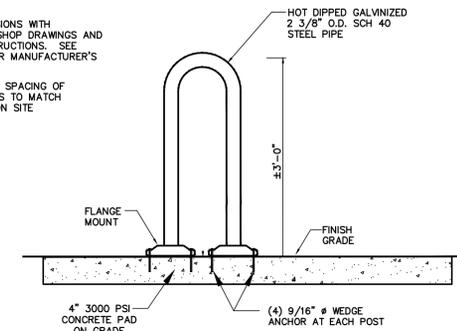


PERVIOUS CONCRETE



- MAINTENANCE**  
 AT ALL TIMES, THE PAVEMENT SHALL BE KEPT FREE OF:  
 - DEBRIS AND PARTICULATE MATTER THROUGH FREQUENT FLOWING THAT REMOVES SUCH DEBRIS, PARTICULARLY DURING THE FALL AND SPRING  
 - PILES OF SOIL, SAND, MULCH, BUILDING MATERIALS OR OTHER MATERIALS THAT COULD DEPOSIT PARTICULATES ON THE PAVEMENT.  
 - PILES OF SNOW AND ICE  
 - CHEMICAL OF ALL KINDS, INCLUDING DEICERS.
- SUBGRADE PREPARATION**
1. THE SURFACE OF THE SUBGRADE SOIL SUBGRADE SHALL HAVE A SLOPE NO GREATER THAN 0.5%
  2. TERRACES SHALL BE INSTALLED TO ACHIEVE FLAT SUBGRADES UNDER SLOPING PAVEMENT SURFACES.
  3. STONE BELOW PERVIOUS CONCRETE MUST BE MINIMUM 6" #57 STONE.

- NOTES**
1. INSTALL LEVEL.
  2. VERIFY ALL DIMENSIONS WITH MANUFACTURER'S SHOP DRAWINGS AND INSTALLATION INSTRUCTIONS. SEE SPECIFICATIONS FOR MANUFACTURER'S REQUIREMENTS.
  3. STYLE, COLOR AND SPACING OF INVERTED U RACKS TO MATCH EXISTING RACKS ON SITE



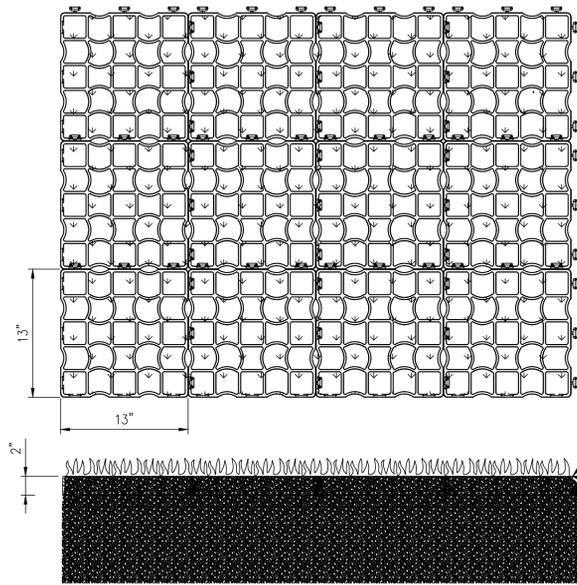
BIKE RACK - METAL



JOB NO.: 16.01908  
 DATE: SEPT 26, 2016  
 DESIGNED BY: MAH  
 CADD BY: MAH  
 DESIGN REVIEW: 33728  
 CONST. REVIEW: \_\_\_\_\_  
 1601908 - Carrboro Town Commons Details backup.dwg

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS

P:\2016\16.01908 TOWN OF CARRBORO - Town Commons\02\_Design\Drawings\Detail\Drawings\Plan\Details\Construction\Drawings\1601908 - Carrboro Town Commons Details backup.dwg 10/12/2016 12:39 PM MARK HAMLETT



- NOTES:
1. FILL GRID 50% WITH TOP SOIL.
  2. PLACE SOD OVER GRID AND COMPRESS SOD INTO GRID WITH SMOOTH DRUM ROLLER

ECORASTER E50:  
FILLED WITH TOPSOIL  
AND SODDED

ECORASTER E50:  
TOPSOIL & GRASS

ENSURE SMOOTH TRANSITION FROM ECORASTER  
TO ADJACENT FINISHED GRADE

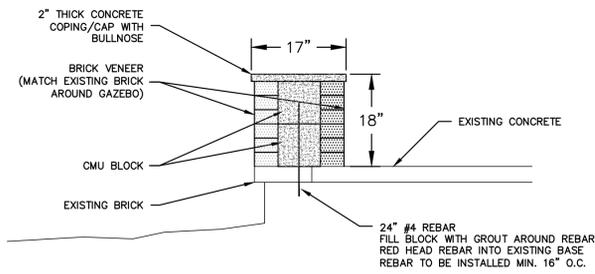
FIRM, NATURAL GROUND SUBGRADE,  
SMOOTH TRANSITION

**ECORASTER E-50 INSTALLATION**



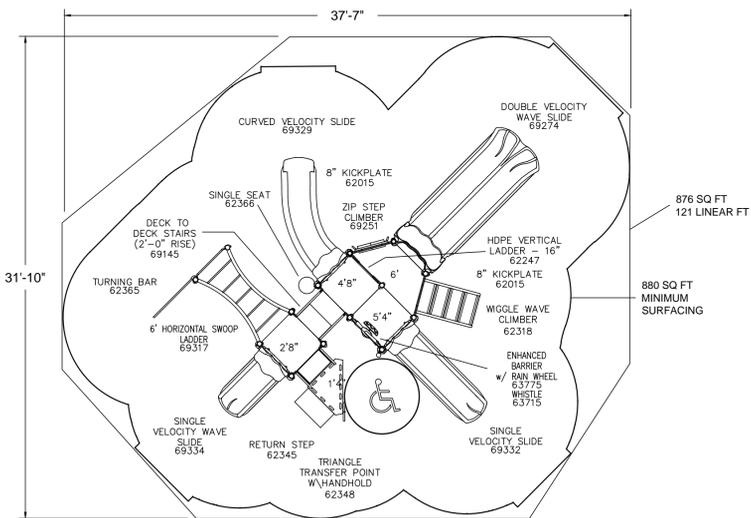
- NOTES:
1. BOLLARD SHALL BE INNOPLAST PCRB4 - 4.5" REMOVABLE POWDER COATED BOLLARD, OR EQUIVALENTS.
  2. BOLLARD HEIGHT SHALL BE 35.4"
  3. BOLLARD SHALL BE STEEL, POWDER COATED IN YELLOW.
  4. BOLLARD RECEIVER KEY SHALL BE PROVIDED TO TOWN OF CARRBORO

**BOLLARD - REMOVABLE**

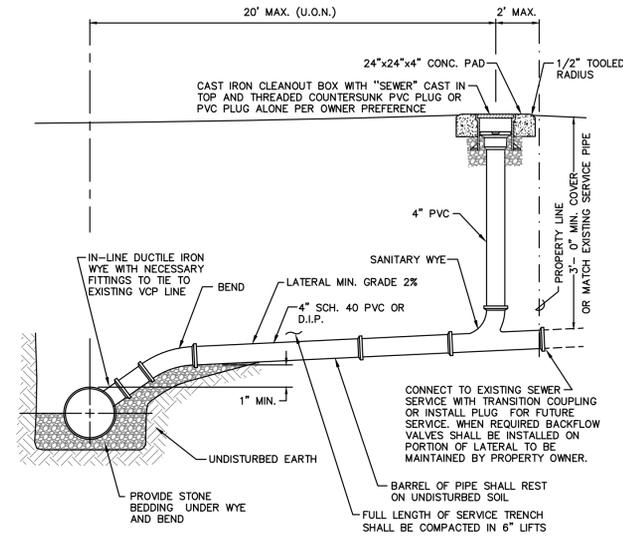


**GAZEBO SEAT WALL**

- NOTES:
1. PLAYGROUND EQUIPMENT TO BE PLAY & PARK STRUCTURES, SUPER CIRCUIT (10-95392) OR EQUIVALENT.
  2. COLOR PALETTE TO BE COORDINATED WITH TOWN OF CARRBORO
  3. PLAYGROUND TO BE INSTALLED PER ALL MANUFACTURER'S SPECIFICATIONS.

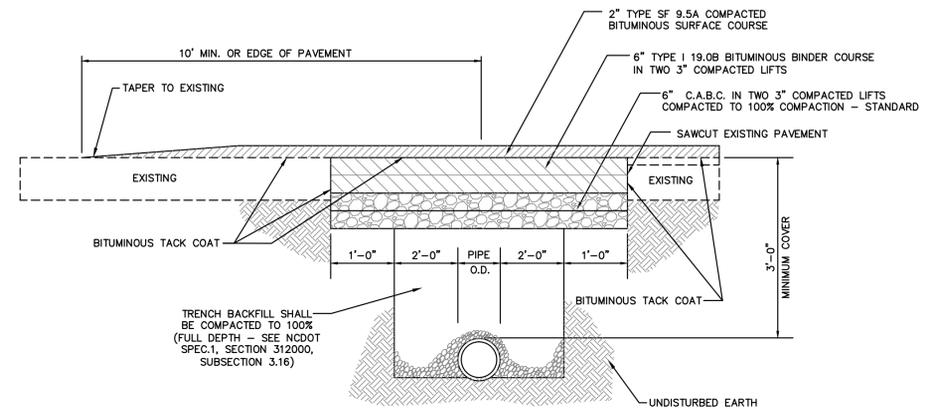


**ALTERNATE 2 - NEW PLAYGROUND EQUIPMENT**



- NOTES:
1. TAPPING SADDLES ARE APPROVED FOR CONNECTIONS TO EXISTING SEWER LINES ONLY.
  2. DUCTILE IRON PIPE REQUIRED UNDER PAVED ROADS.

**S SANITARY SEWER SERVICE**  
UPDATED JUNE, 2016  
NOT TO SCALE

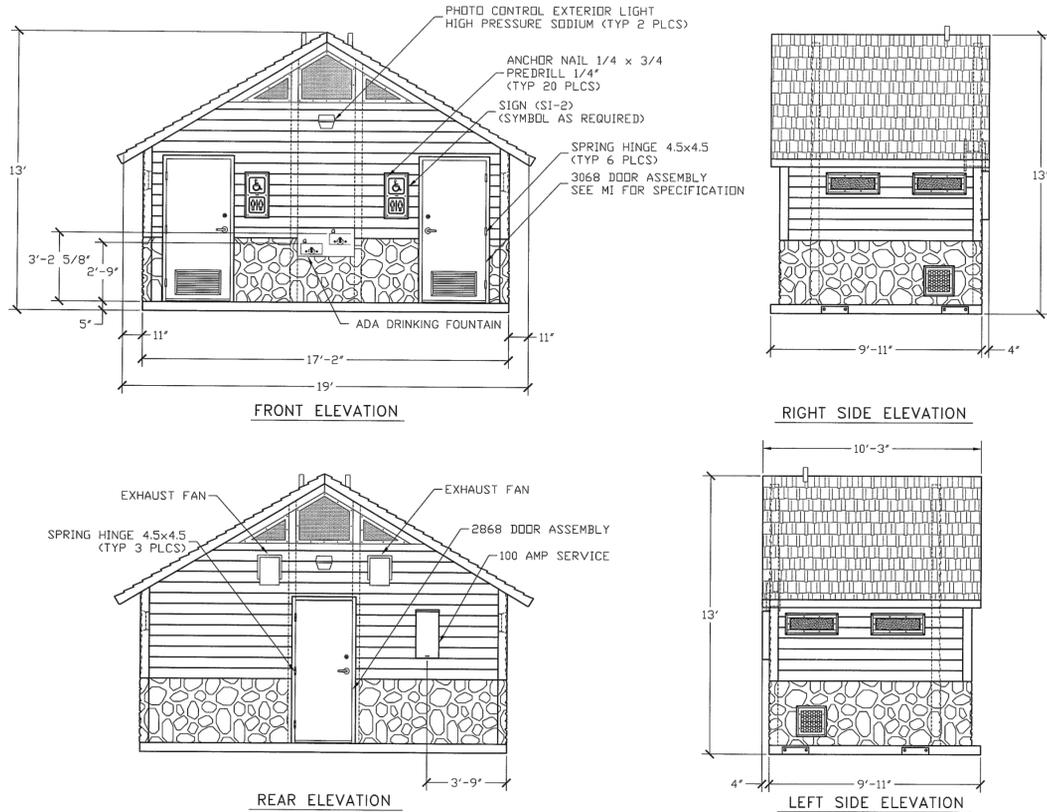


- NOTES:
1. EDGE TO BE SAWS WITH A CONCRETE SAW TO A NEAT SQUARED EDGE AND CLEANED OF DUST BEFORE TACK COAT IS APPLIED.
  2. EDGES TO BE TACKED WITH CRS-I OR CRS-II.
  3. THICKNESS OF C.A.B.C. STONE, 1-19.0B BINDER AND SF 9.5A SURFACE COURSE SHALL MATCH EXISTING CONDITIONS IF GREATER THAN SHOWN ON DETAILS.
  4. CONTRACTOR RESPONSIBLE FOR REPLACEMENT OF ANY PAVEMENT MARKINGS DISTURBED OR COVERED BY OVERLAY.

**TYPICAL PAVEMENT REPAIRS - PRIVATE AND TOWN STREETS**  
NOT TO SCALE

NO.	DATE	BY	REVISION DESCRIPTION
1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS





ITEM	QTY	ITEM	QTY
S-2	2		
SPRING HINGE 4.5x4.5	9		
3068 DOOR ASSEMBLY	2		
2868 DOOR ASSEMBLY	1		
ANCHOR NAIL 1/4x3/4	20		



PROJECT FILE			
DENALI			
CXT STANDARD BUILDING			
NOTICE			
The information contained herein is proprietary and the exclusive property of CXT Incorporated. The information may only be used by the original recipient for the purpose intended. Reproduction or distribution of this information is strictly prohibited without the prior written consent of CXT Incorporated. By allowing use of this information, CXT Incorporated grants no warranty, express or implied, including a warranty of merchantability or of fitness for a particular purpose.			
CXT Incorporated			
FILE	DESCRIPTION	APPROVAL	DATE
SCALE	1/4" = 1'-0"	DATE	10-27-07
DRAWN	ROB D WALKER	FILE NO.	DN-000
CHECKED		PLOT	48
BUILDING ELEVATIONS			
DWG NO.	SHEET	REV.	
DN-02	2	22	

NOTE: SEE ELECTRICAL PLAN FOR LIGHTING ON BUILDING

CXT INCORPORATED  
SPOKANE, WASHINGTON

SUGGESTIONS FOR INSTALLATION  
OF THE DENALI MODEL

1.0 MEASUREMENTS

A. Building

Floor Dimensions: 0'5" in height, 10'3" in width, 17'0" in length  
Total Building: 13' 0" in height, 10'3" in width, 19'0" in length  
Total Weight: 55,000 lbs.

2.0 INSTALLATION

A. Access to Site

Should the customer feel that site is not accessible, it would be up to the customer to contact CXT. A determination of changes and accessibility should be made at least 30 days prior to delivery date. Delivery to site is made on semi-trucks and specialized trailers. If at the time of delivery conditions of access are hazardous or unsuitable for truck and equipment due to weather, physical constraints, roadway width or grade, the building must be offloaded to a storage area until the site is made accessible. In any such case, additional costs for cranes, trucking etc. will be charged to the account of the customer.

B. Placement

The floor of the building should be the high spot of the chosen site.

C. Excavation and Compaction

The base area for the building should extend beyond the floor by at least 6 inches in each direction. Excavation of the area must be large enough and deep enough to accommodate the base area. Water, sewer, electrical etc. lines need to be placed before base material is added and compacted. See drawings for placement of utilities. Exact locations and pad dimensions for your specific building will be sent during the submittal process. Compact the bottom of the area prior to placing base material. A minimum of 6 inches of a compacted 3/4" minus angular gravel material (i.e. road base) should be used as the base material. The material should be placed level and compacted in two lifts of 3" each to support a minimum of 1500 pounds per square foot. The base material must be confined to prevent washout erosion or any other undermining. This base will provide support, leveling and drainage. The base also limits frost action.

Should the customer desire to pour a concrete pad or apron around the Cortez facility after it is placed, the compacted gravel pad should be extended in each direction to support the Cortez facility and concrete apron on the same density and composition of base material.

D. Recommended Lifting Equipment

CXT can provide a drawing of the recommended lifting/rigging arrangement. Crane of appropriate capacity to lift and place building (40,100 lbs.) onto designated site.

E. Utility Connection

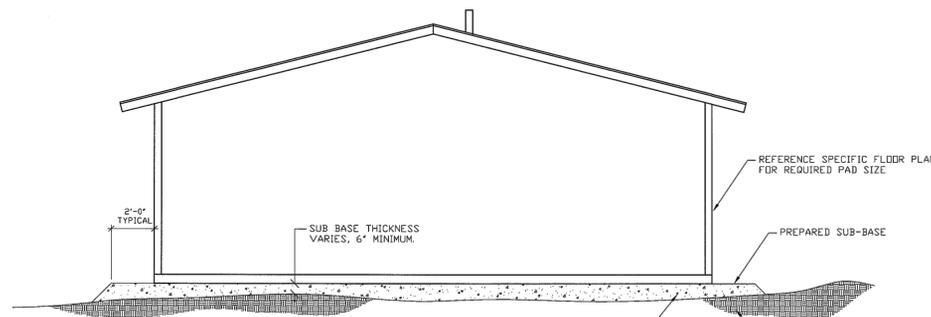
Mechanical drawings can be provided showing locations of stub up area and plumbing and electrical hook-ups. Utilize a licensed electrician and plumber to hook up all electrical and plumbing utilities from building section to building section and from the building itself and the stubbed up utilities that came up through the customer prepared gravel pad.

**NOTE:**  
THIS FACTORY ASSEMBLED BUILDING AS CONSTRUCTED PROVIDES A RIGID BOX TYPE STRUCTURAL SYSTEM. VERTICAL LOADS ARE TRANSFERRED PRIMARILY THROUGH BEARING WALLS TO A PREPARED GRANULAR SUB-BASE WHICH DISSIPATES VERTICAL LOADS UNIFORMLY TO THE NATIVE SUBGRADE AND ALSO ACTS AS A FROST BARRIER. DUE TO THE INHERENT STIFFNESS OF THE BUILDING, IT WILL REMAIN SAFE AND STRUCTURALLY SOUND IN THE UNLIKELY EVENT OF FREEZING ACTION BELOW THE BUILDING.

LATERAL LOADS ARE TRANSFERRED TO THE GROUND THROUGH FRICTIONAL RESISTANCE WITHOUT SLIDING OR SHIFTING BETWEEN THE BUILDING FLOOR SLAB AND THE PREPARED SOIL AND GRAVEL SUB-BASE ON WHICH THE BUILDING RESTS. SEISMIC ANALYSES ARE BASED ON LOADS DETERMINED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE USING THE FOLLOWING PARAMETERS, WHICH MEET OR EXCEED THE CODE PRESCRIBED REQUIREMENTS FOR THIS INSTALLATION:

SPECTRAL ACCELERATIONS: SS = 3.41 & S1 = 1.59.  
BEARING WALL SYSTEM WITH CONCRETE SHEAR WALLS, R = 5.5 & OMEGA = 2.5.  
SITE CLASS D  
SEISMIC USE GROUP = I  
20% OF THE 250 PSF SNOW LOAD IS INCLUDED TO DETERMINE SEISMIC LOADS  
SOIL/CONCRETE FRICTION FACTOR = 0.35

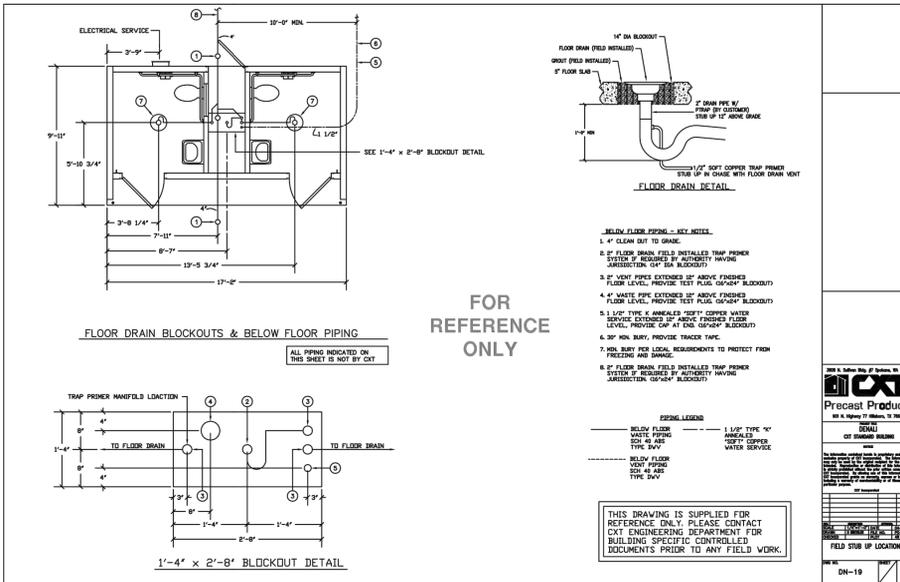
THIS BUILDING, AS DESIGNED, RESTING ON A PROPERLY PREPARED GRANULAR SUB-BASE WILL BE SAFE AND STRUCTURALLY SOUND FOR VERTICAL AND LATERAL LOADS AS DISCUSSED ABOVE. A FULL DEPTH FOUNDATION WALL AT THE BUILDING PERIMETER, TYPICAL FOR OTHER TYPES OF BUILDING CONSTRUCTION, IS NOT REQUIRED FOR THIS BUILDING.



PRIOR TO PLACEMENT OF BUILDING A PROPERLY PREPARED SUB-BASE SHALL BE PROVIDED. SUB-BASE SHALL BE A MINIMUM OF 6" THICK AND CONSIST OF 3/4" MINUS CRUSHED ROCK COMPACTED TO 95% OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D 1557. FINISHED SURFACE OF SUB-BASE SHALL BE UNIFORMLY LEVEL, NOT VARYING MORE THAN 1/8" FROM A TRUE HORIZONTAL PLANE. REFER TO BUILDING HANDLING SHEET FOR SUB-BASE REQUIREMENTS DURING BUILDING PLACEMENT. (PREPARED SUB-BASE NOT BY CXT).



PROJECT FILE			
DENALI			
CXT STANDARD BUILDING			
NOTICE			
The information contained herein is proprietary and the exclusive property of CXT Incorporated. The information may only be used by the original recipient for the purpose intended. Reproduction or distribution of this information is strictly prohibited without the prior written consent of CXT Incorporated. By allowing use of this information, CXT Incorporated grants no warranty, express or implied, including a warranty of merchantability or of fitness for a particular purpose.			
CXT Incorporated			
FILE	DESCRIPTION	APPROVAL	DATE
SCALE	1/4" = 1'-0"	DATE	10-27-07
DRAWN	ROB D WALKER	FILE NO.	DN-000
CHECKED		PLOT	48
GRAVEL PAD DETAIL			
DWG NO.	SHEET	REV.	
DN-02	2	22	



FOR REFERENCE ONLY

RESTROOM TO HAVE THE FOLLOWING OPTIONS BY SUPPLIER:

- FINAL CONNECTION TO UTILITIES
- TWO-TONE COLOR SCHEME (EXTERIOR BE COORDINATED WITH OWNER)
- STAINLESS STEEL PLUMBING FIXTURES
- ELECTRIC HAND DRYERS
- SKYLIGHT IN EACH RESTROOM
- FIBERGLASS ENTRY AND CHASE DOORS AND FRAMES
- TIMED ELECTRIC LOCK SYSTEM
- EXTERIOR FROSTPROOF HOSE BIB WITH BOX
- CXT WASTEBASKET

1	10-12-2016	MAH	PER TOWN AND OWASA COMMENTS
NO.	DATE	BY	REVISION DESCRIPTION

P:\2016\16.01008 - TOWN OF CARRBORO - Town Commons\02\_Design Phase\Drawings\_Data\Drawings\Plumbing\Construction Drawings\1601008 - Carrboro Town Commons Details backup.dwg 10/14/2016 3:17 PM MARK HAMLETT



PRELIMINARY DRAWINGS  
TOWN COMMONS IMPROVEMENTS  
**TOWN OF CARRBORO**  
ORANGE COUNTY, NORTH CAROLINA

JOB NO.: 16.01008  
DATE: SEPT 26, 2016  
DESIGNED BY: MAH  
CADD BY: MAH  
DESIGN REVIEW: \_\_\_\_\_  
CONST. REVIEW: \_\_\_\_\_  
1601008 - Carrboro Town Commons Details backup.dwg

RESTROOM  
DETAILS

SHEET  
C-506