

NOTES:

CONSTRUCTION STANDARDS:
 TO BE CONSTRUCTED IN ACCORDANCE WITH MANITOBA HYDRO DISTRIBUTION AND SUBTRANSMISSION STANDARDS. LATEST REVISION. NO MAJOR CHANGE SHALL BE MADE WITHOUT APPROVAL OF THE DESIGN ENGINEER OR DELEGATE.
 BUMPER POST/FIBERGLASS PAD
 MANITOBA HYDRO IS RESPONSIBLE FOR INSTALLING FIBERGLASS PAD AND BUMPER POSTS FOR PMT CUSTOMER ACCEPTANCE.
 THE CUSTOMER SERVICE DEPARTMENT REPRESENTATIVE IS RESPONSIBLE FOR OBTAINING WRITTEN CUSTOMER AGREEMENT TO THE PROPOSED INSTALLATION PRIOR TO CONSTRUCTION COMMENCEMENT.
 SITE GRADING
 THE DEVELOPER IS RESPONSIBLE FOR GRADING OF THE SITE TO WITHIN +0.15M OF FINISHED GRADE PRIOR TO CONSTRUCTION COMMENCEMENT. BENCHMARKS ARE TO BE OBTAINED FROM THE DEVELOPER OR CONSULTANT.
 EQUIPMENT ELEVATIONS
 THE DEVELOPER TO INDICATE ON ONE COPY OF THE MANITOBA HYDRO DRAWING(S) THE FINISHED GRADE AT ALL EQUIPMENT LOCATIONS, REFERENCED TO A BENCHMARK.
 PAD-MOUNTED EQUIPMENT
 1. ALL PAD-MOUNTED EQUIPMENT SHALL BE LOCATED AT LEAST 3M FROM ABOVE GROUND METALLIC EQUIPMENT STRUCTURES. IF PAD-MOUNTED EQUIPMENT HAS TO BE LOCATED WITHIN 3M OF PEDESTALS OR METAL BUILDINGS, THE PAD-MOUNTED EQUIPMENT SHALL BE BONDED TO THE PEDESTALS/BUILDINGS.
 2. ALL PAD-MOUNTED EQUIPMENT REQUIRE MINIMUM WORKING CLEARANCES OF:
 3M ON ANY SIDE WITHOUT OBSTACLES (TO ALLOW FOR HOT STICK OPERATION)
 7.5M ON ALL OTHER SIDES EXCEPT 0.6M ON ALL OTHER SIDES FOR SINGLE PHASE
 3. WHERE POSSIBLE AVOID PLACEMENT OF PAD MOUNTED EQUIPMENT UNDERNEATH OVERHEAD LINES.
 4. ALL PAD EQUIPMENT LOCATED IN AREAS NORMALLY ACCESSIBLE TO VEHICLES (E.G. PARKING LOTS) SHALL HAVE GUARD POSTS AROUND THE EQUIPMENT GUARD POSTS MAY ALSO BE INSTALLED AROUND ANY PAD-MOUNTED EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER IS NECESSARY TO PROTECT THE EQUIPMENT FROM VEHICLES.
 5. PAD-MOUNTED TRANSFORMERS WITH INTERNAL CURRENT LIMITING DEVICES AND PRESSURE RELIEF DEVICES SHALL BE LOCATED SUCH THAT THE WORKING CLEARANCES (NOTE 2) ARE MAINTAINED.
 NOTE: FOR NON-STANDARD TRANSFORMERS, CONTACT DISTRIBUTION DESIGN ENGINEERING FOR THE REQUIRED CLEARANCES.
 6. ALL THREE PHASE TRANSFORMERS SHALL BE PLACED IN A LOCATION WHERE THERE IS NO ACCESS FROM AT LEAST ONE SIDE. THREE PHASE TRANSFORMERS SHALL NOT BE COMPLETELY ENCLOSED. A THREE-SIDED ENCLOSURE (WITH OR WITHOUT A ROOF) IS PERMITTED. IF A THREE-SIDED ENCLOSURE IS USED, THE WALLS OF THE ENCLOSURE SHALL BE 2.4M IN HEIGHT AND SHALL BE A MINIMUM OF 1.0M FROM THE TRANSFORMER. IF THE ENCLOSURE HAS A ROOF, THE ROOF MUST BE REMOVABLE, AND MUST BE FITTED WITH LIFTING LUGS.

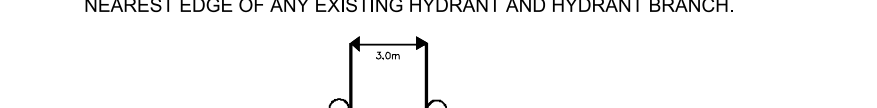
| REEL NUMBER | MANUFACTURER | MANUFACTURE DATE |
|-------------|--------------|------------------|
| | | |
| | | |

| AUTHORITY | NOTIFIED | NOT REQ'D | OBTAINED |
|-------------------|------------|-----------|------------|
| DISTRICT | 2018 02 28 | | |
| CITY OF WINNIPEG | 2018 02 13 | | 2018 02 23 |
| M.T.S. | | X | |
| GAS | | X | |
| SEWER | | X | |
| EASEMENTS | | X | |
| COMMUNICATIONS | | X | |
| S.C.C. | | X | |
| DEPT. OF HIGHWAYS | | X | |

| CONTACT | NAME | PHONE NUMBER | E-MAIL ADDRESS |
|-------------------------|----------------|--------------|-----------------------|
| DESIGN | FRAN HAYES | 451-3570 | FHAYES@HYDRO.MB.CA |
| DESIGN ENGINEER | MATT SINGER | 360-3201 | MSINGER@HYDRO.MB.CA |
| PORTFOLIO PM | DARIN WACH | 360-3062 | DWACH@HYDRO.MB.CA |
| TRANSFORMER ADVISOR | DARRYL STODICK | 360-7715 | DSTODICK@HYDRO.MB.CA |
| LUG CONSTRUCTION | DEAN ADAMS | 360-0772 | DADAMS@HYDRO.MB.CA |
| OH CONSTRUCTION | WAYNE IRELAND | 771-5272 | WIRELAND@HYDRO.MB.CA |
| HYDRO GAS | | | |
| SEWER | | | |
| M.T.S. | | | |
| CUSTOMER REPRESENTATIVE | CORY HUMBERT | 226-2303 | CHUMBERT@WINNIPEG.CA |
| DISTRICT ENGINEER | TODD FOUNTAIN | 366-7487 | TFOUNTAIN@HYDRO.MB.CA |

CITY OF WINNIPEG REQUIREMENTS:

WATER AND WASTE DEPARTMENT APPROVAL SUBJECT TO THE FOLLOWING NOTES:
 A MINIMUM CLEARANCE OF 1000 MILLIMETERS SHALL BE PROVIDED BETWEEN THE UNDERSIDE OF ANY EXISTING WATERMAIN OR SEWERMAIN PIPE AND THE TOP OF THE PROPOSED WORKS.
 A MINIMUM CLEARANCE OF 1000 MILLIMETERS SHALL BE PROVIDED BETWEEN THE UNDERSIDE OF THE PROPOSED WORKS AND THE TOP OF ANY EXISTING WATERMAIN OR SEWERMAIN PIPE.
 A MINIMUM LATERAL CLEARANCE OF 1.0 METER SHALL BE PROVIDED BETWEEN THE NEAREST EDGE OF THE PROPOSED WORKS AND THE NEAREST EDGE OF ANY EXISTING WATERMAIN, WATERMAIN VALVE, HYDRANT, SEWERMAIN OR SEWER MANHOLE.
 A MINIMUM CLEARANCE OF 3.0 METERS SHALL BE PROVIDED BETWEEN THE NEAREST EDGE OF ANY PROPOSED POLE OR LIGHT STANDARD INSTALLATION AND THE NEAREST EDGE OF ANY EXISTING HYDRANT AND HYDRANT BRANCH.



CITY OF WINNIPEG EXCAVATION STANDARDS:

- BEFORE EXCAVATION FOR INSTALLATION OF HYDRO UNDERGROUND PLANT, DEPTH AND LOCATION OF OBSTRUCTIONS MUST BE DETERMINED.
- BEFORE COMMENCING WORK, ALL UTILITIES ARE TO BE CONTACTED FOR CLEARANCES.
- CONCRETE SAW TO BE USED TO CUT PAVEMENT (FULL DEPTH)
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIR TO STREETS, CURBS, BOULEVARDS, SIDEWALKS, FENCES, AND ANY OTHER PROPERTY DAMAGE DURING COURSE OF CONSTRUCTION.
- ALL EXISTING STREET EXCAVATIONS TO BE BACKFILLED WITH STABILIZED FILL. SIDEWALK EXCAVATIONS WITH STABILIZED FILL. ALL OTHER EXCAVATIONS TO BE BACKFILLED WITH EARTH FILL.
- ALL WORK SHALL CONFORM TO MANITOBA HYDRO SPECIFICATIONS.
- MINIMUM 1.2 METERS COVERING CABLES AT DITCH BOTTOM. RESTORE AND REGRADE DITCH.

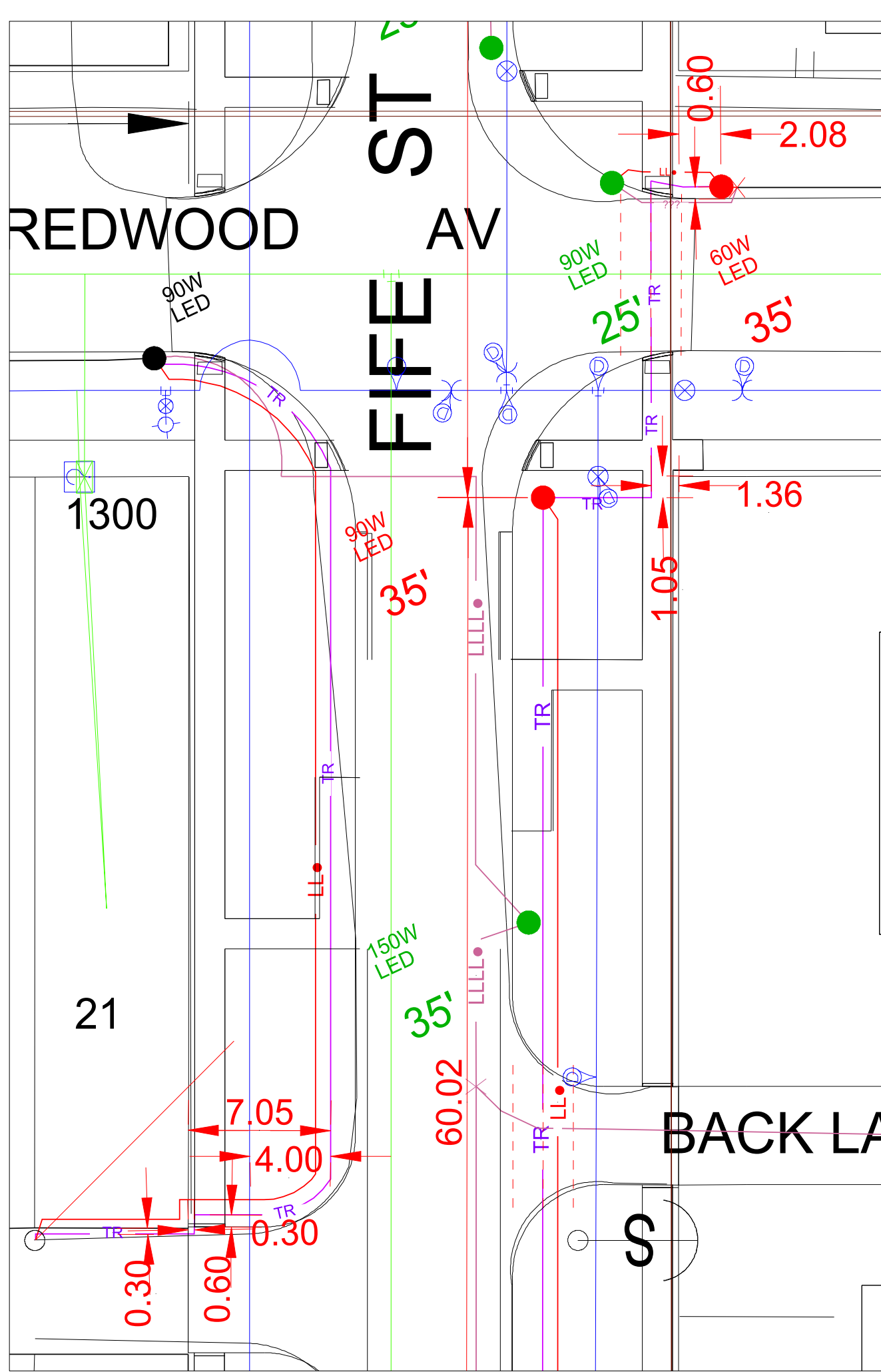
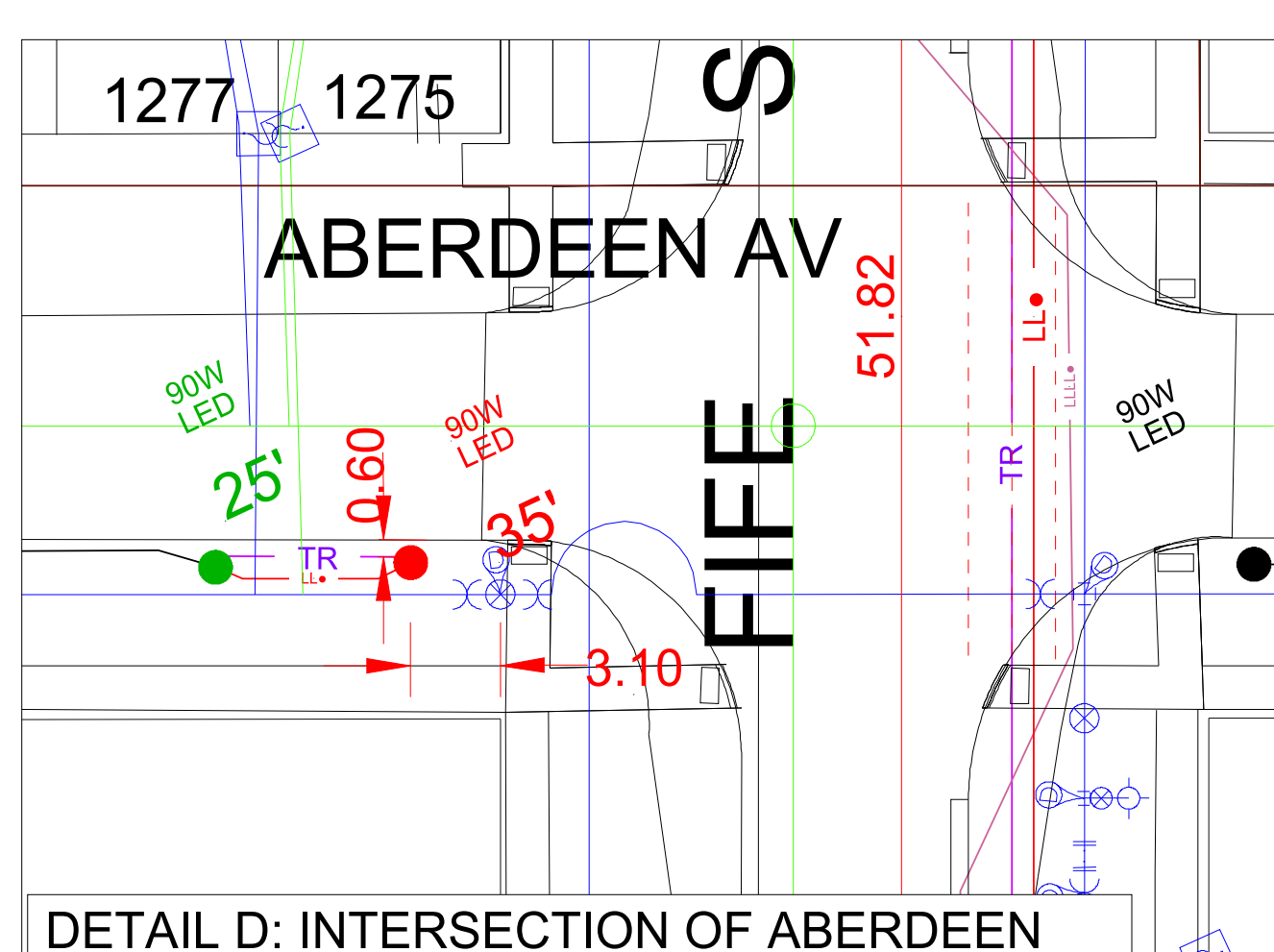
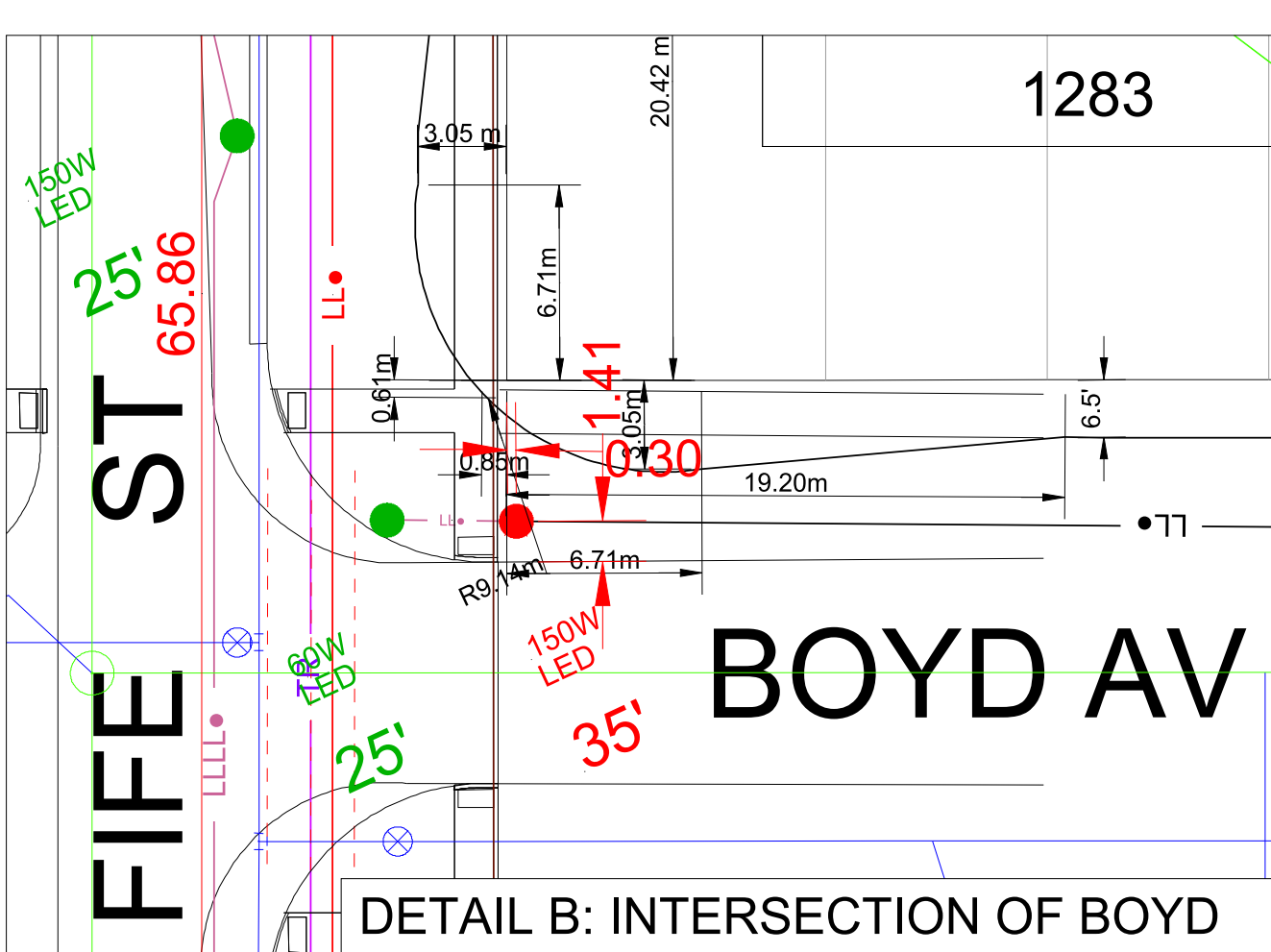
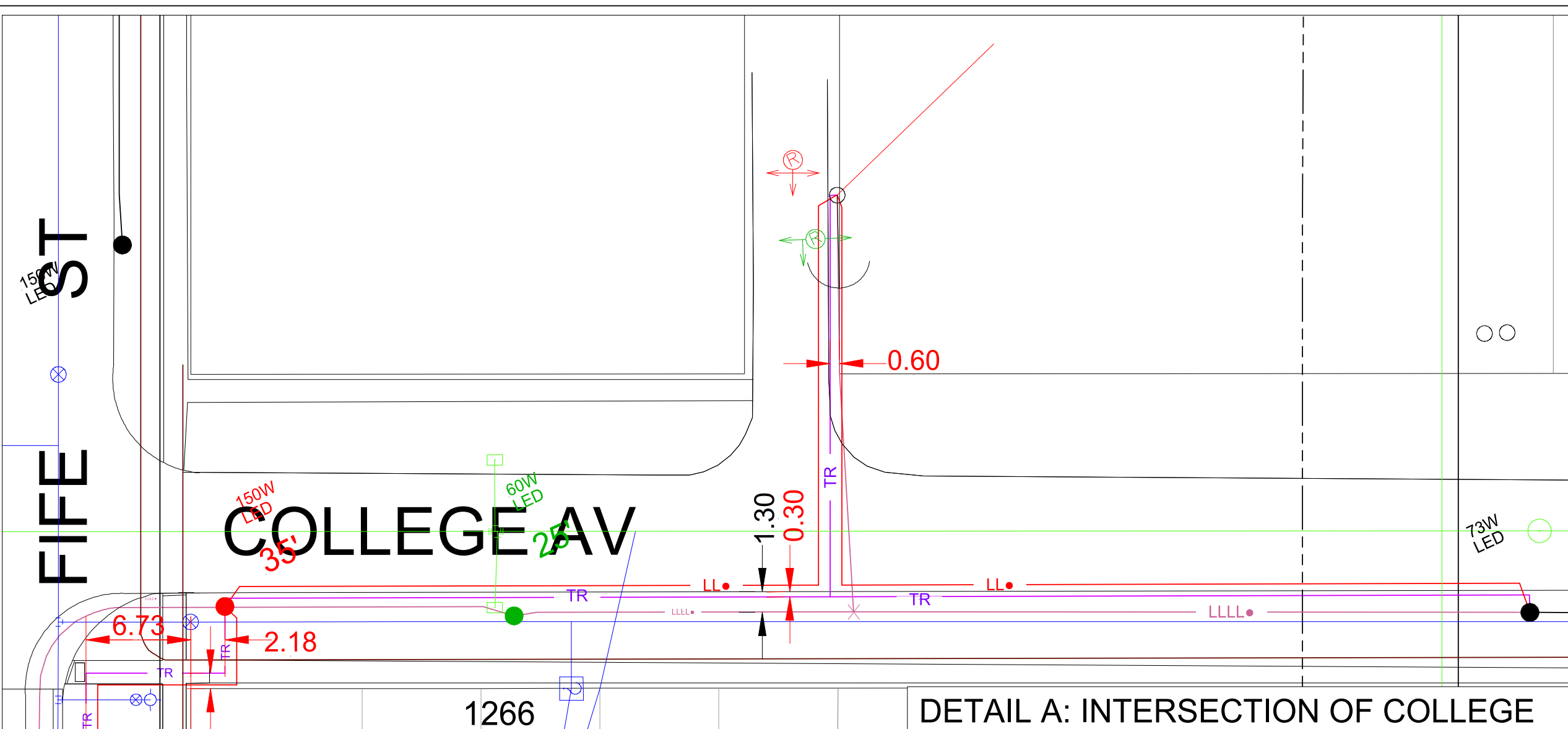
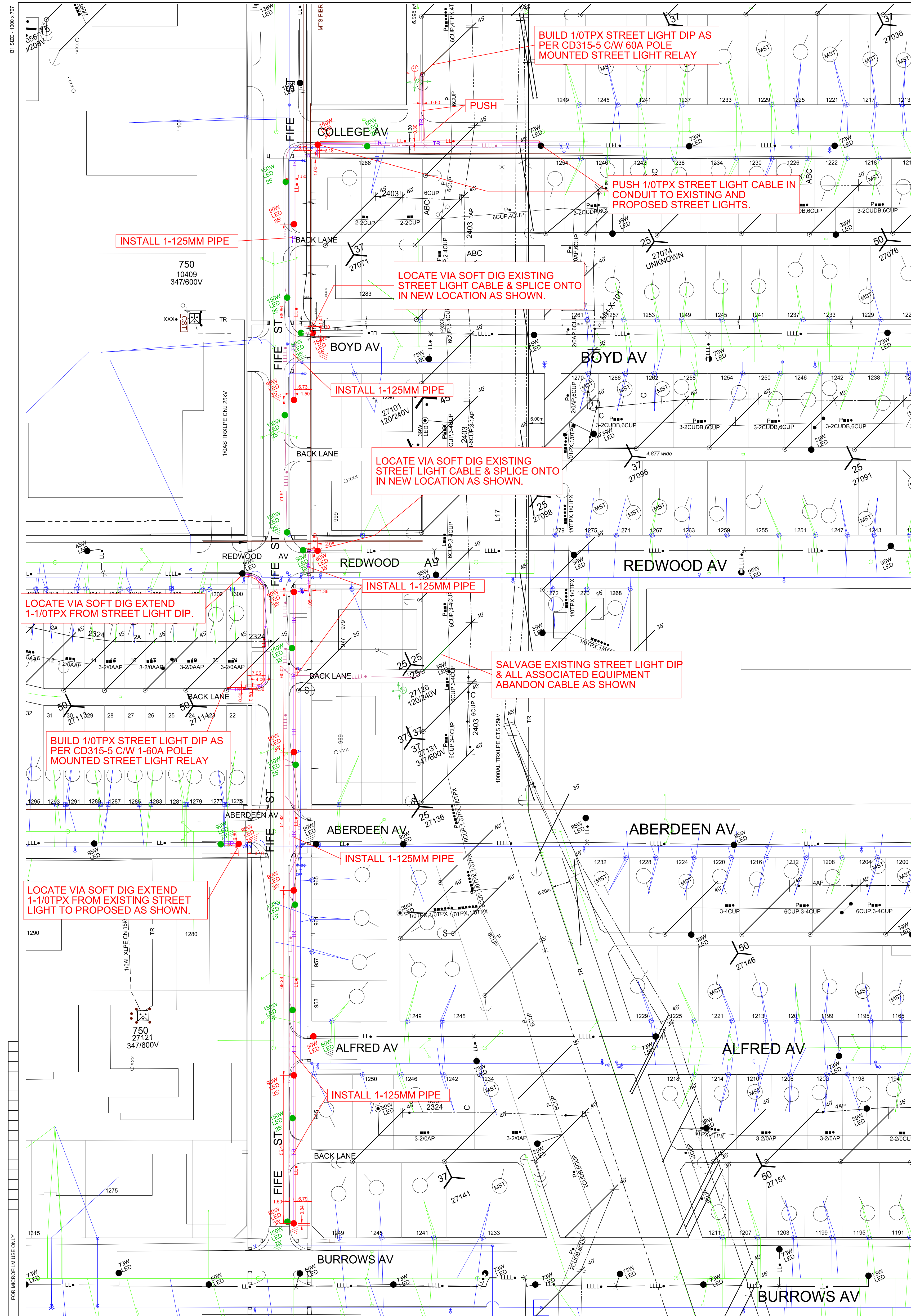
DISCLAIMER:
 THE INDICATION OF OTHER PARTIES ON THIS DRAWING ARE FOR TRENCH LOCATION PURPOSES ONLY. REFER TO THE OTHER PARTY'S DRAWINGS FOR DESIGN DETAILS.

BANNERS AND ASSOCIATED HARDWARE TO BE REMOVED AND RETURNED TO THE CITY OF WINNIPEG, 1277 PACIFIC AVENUE WITH AN ITEMIZED LIST AND QUANTITIES.

CONTACT "CLICK BEFORE YOU DIG MANITOBA" AT
ClickBeforeYouDigMB.com
 THREE FULL WORKING DAYS
 PRIOR TO CONSTRUCTION FOR LOCATION OF EXISTING WATER, WASTEWATER, LAND DRAINAGE UTILITIES AND MANITOBA HYDRO UTILITIES

| DATE | REVISIONS | BY | CHKD. | APP. |
|------|-----------|----|-------|------|
| | | | | |

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|----------------|-----------|--------------------------------------|
| AREA NUMBER | 5001 | MANITOBA HYDRO |
| STATION NUMBER | 1523 | WO# P:29541 NETWORK # 4304917 |
| FEDER NUMBER | 2324.2403 | CSC: CITY CENTRE |
| SYSTEM VOLTAGE | 2.4/16KV | CUSTOMER SERVICE PROJECT |
| | | FIFE STREET ROAD RENEWAL |
| | | REPLACE STREET LIGHTS ON FIFE STREET |
| | | BETWEEN COLLEGE AVE AND BURROWS AVE |



INSTALL ALL STREET LIGHT CABLE IN 50MM CONDUITS *AT INTERSECTIONS AND BACK LANES INSTALL 1-125MM CONDUIT.*

INSTALL PROPOSED STREET LIGHTS ON THE NEW TRENCH ALIGNMENTS AS SHOWN

INSTALL PROPOSED DAVITS ON BREAK-AWAY BASES.

PRELIMINARY NOT TO BE USED FOR CONSTRUCTION

| INSTALLED | | | |
|-----------|--------------|---------|-----------|
| Quantity | Fixture Type | Wattage | Pole Type |
| 2 | LED | 150 | EXCLUSIVE |
| 9 | LED | 90 | EXCLUSIVE |
| 1 | LED | 60 | EXCLUSIVE |

| REMOVED | | | |
|----------|--------------|---------|-----------|
| Quantity | Fixture Type | Wattage | Pole Type |
| 10 | LED | 150 | EXCLUSIVE |
| 2 | LED | 90 | EXCLUSIVE |
| 2 | LED | 60 | EXCLUSIVE |

| LOCATION | LUMINAIRE | TYPE | MOUNTING HEIGHT | AUG. COORD. | MAX. BATHING RATIO | MAX. LUMEN | MAX. LUMEN/VA |
|-------------|-----------|------|-----------------|-------------|--------------------|------------|---------------|
| FIFE STREET | 90W | LED | 3F | 0.6 | 3.5 | 6.0 | 0.6 |

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|----------------|--------|--------------------|--------------------------------|-------|------------|
| DRAWING NUMBER | 3L-837 | REFERENCE DRAWINGS | CITY OF WINNIPEG APPROVED PLAN | DRAWN | FH |
| CHECK | | SCALE | 1:750 | DATE | 2018 02 27 |

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