

CENTRAL LIBRARY FIBER OPTIC DESIGN

1. WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE LATEST STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS, CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CITY OF HUNTINGTON BEACH SPECIAL PROVISIONS, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AND AS DIRECTED BY THE CITY REPRESENTATIVE.
2. LOCATION OF UTILITIES AND SUBSTRUCTURES HAVE BEEN SHOWN FROM A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 811, AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL AFFECTED AGENCIES AND UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
4. WHERE DAMAGE IS CAUSED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL AT HIS EXPENSE REPAIR OR REPLACE DAMAGED FACILITIES PROMPTLY IN ACCORDANCE WITH CALTRANS SPECIFICATIONS, TO THE SATISFACTION OF THE AFFECTED UTILITY, OWNERS AND THE ENGINEER IN THE FIELD. WHERE SIDEWALKS, CURBS, OR GUTTERS ARE TO BE REPAIRED, THE REPAIRS SHALL BE MADE BY REMOVING AND REPLACING THE ENTIRE SECTION BACK TO THE NEAREST JOINTS AND NOT BY REFINISHING THE DAMAGED PORTION.
5. EACH FIBER OPTIC CABLE SHALL BE PERMANENTLY IDENTIFIED BY DIRECT LABELING.
6. ALL NEW PULL BOXES SHALL BE PLASTIC, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS. ALL NEW PULL BOX EXTENSIONS SHALL BE PLASTIC EXCEPT WHERE NOTED OTHERWISE ON THE PLANS. ALL NEW PULL BOX LIDS SHALL BE PLASTIC, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS. ALL NEW PULL BOXES SHALL BE NO. 6 UNLESS NOTED OTHERWISE ON THE PLANS. NEW PULL BOXES, EXTENSIONS, AND PULL BOX LIDS SHALL BE CHRISTY CONCRETE PRODUCTS, INC. (FL36X18 FOR BOX, FL36X8 FOR EXTENSION, AND FL360 FOR LID) OR CITY APPROVED EQUAL.
7. NEW CONDUIT SHALL BE PULLED THROUGH OPPOSITE ENDS OF PULL BOXES USING 45° U.L. APPROVED ELBOWS, UNLESS OTHERWISE INDICATED ON THE PLANS.
8. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER THE PRECISE FIELD LOCATIONS OF ALL COMMUNICATION EQUIPMENT PRIOR TO INSTALLATION OF EQUIPMENT OR WIRING.
9. THE CONTRACTOR SHALL ARRANGE TO HAVE A FIBER OPTIC COMMUNICATION TECHNICIAN QUALIFIED TO WORK ON THE COMMUNICATION SYSTEM AND EMPLOYED BY THE MANUFACTURER OR THE MANUFACTURER REPRESENTATIVE, PRESENT AT THE TIME OF THE SYSTEM TURN ON. FULL TESTING OF ALL NEW FIBER OPTIC CABLING SHALL BE COMPLETED BY THE CONTRACTOR AND TEST RESULTS SHALL BE SUBMITTED TO THE CITY OF HUNTINGTON BEACH.
10. THE CONTRACTOR SHALL PROVIDE ALL PATCH CORDS AND CABLING WITH APPROPRIATE CONNECTORS TO CONNECT ALL THE EXISTING AND PROPOSED EQUIPMENT TO HAVE THE SYSTEM FULLY OPERATIONAL.
11. THE CONTRACTOR SHALL PROVIDE SYSTEM INTEGRATION OF THE PROPOSED EQUIPMENT TO THE CITY OF HUNTINGTON BEACH TRAFFIC MANAGEMENT CENTER (TMC). THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED COMMUNICATION EQUIPMENT TO PROVIDE A COMPLETE OPERATIONAL SYSTEM WITH MINIMUM DISRUPTION TO THE EXISTING COMMUNICATION SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF HUNTINGTON BEACH FOR EQUIPMENT INSTALLATION REQUIREMENTS INCLUDING NETWORK ADDRESSING.
12. THE TRAFFIC SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE CITY'S TRAFFIC ENGINEERING REPRESENTATIVES ACCORDINGLY.
13. THE LOCATIONS OF PROPOSED FIBER OPTIC SPLICE BOXES AND PULL BOXES ARE APPROXIMATE. EXACT LOCATION OF ALL EQUIPMENT SHALL BE DETERMINED BY CONDITIONS IN THE FIELD AND APPROVED BY THE CITY'S REPRESENTATIVE.
14. THE CONTRACTOR SHALL REVIEW THE EXISTING COMMUNICATION SYSTEM IN THE FIELD AND AT THE CITY OF HUNTINGTON BEACH TMC PRIOR TO ORDERING AND INSTALLING THE PROPOSED EQUIPMENT.
15. POTHOLES REQUIRED FOR UTILITIES SHOWN OR NOT SHOWN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST FOR THE POTHOLES REQUIRED SHALL BE INCLUDED IN THE CONTRACT BID PRICE.
16. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO CONSTRUCTION FOR SCHEDULING ALL INSPECTIONS.
17. CONTRACTOR SHALL PROVIDE MINIMUM 25' OF FIBER OPTIC DROP CABLE SLACK IN ALL PULL BOXES AND MINIMUM 50' SLACK IN PULL BOXES WITH SPLICE CLOSURES, ADJACENT TO CONTROLLER CABINETS, AND/OR ADJACENT TO SPLICE ENCLOSURE CABINETS.
18. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BIDDING.
19. WORK HOURS SHALL BE FROM 7:00 A.M. TO 4:00 P.M. LANE CLOSURES PROHIBITED FROM 6:00 A.M. TO 9:00 A.M. AND 3:00 P.M. TO 6:00 P.M. MONDAY TO FRIDAY.

CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



1. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING INDUSTRY ACCEPTED BEST MANAGEMENT PRACTICES (BMPs). THESE BMPs SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY SUCH AS GRADING THAT MAY CAUSE SOIL DISTURBANCE. THESE BMPs ARE TO BE MAINTAINED YEAR-ROUND OR UNTIL ALL LOOSE SEDIMENT HAS BEEN STABILIZED.
2. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES AND ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND. STOCKPILED MATERIAL SHALL BE NO MORE THAN 8 FEET IN HEIGHT AND SHALL BE COMPLETELY COVERED WITH A SECURE IMPERMEABLE COVER AT THE END OF EACH WORK DAY. ALL STOCKPILES SHALL BE LOCATED AWAY FROM ANY STORM DRAIN INLETS AND AWAY FROM ANY STORM WATER CONVEYANCE STRUCTURES. AT NO TIME SHALL ANY RAW MATERIAL BE STAGED OR STOCKPILED ON CITY STREETS, SIDEWALKS, AND/OR GUTTERS WITHOUT A VALID OBSTRUCTION PERMIT.
3. APPROPRIATE BMPs FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, AND ADJOINING PROPERTY BY WIND OR RUNOFF.
4. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED ON THE CONSTRUCTION SITE AND SHALL NOT BE DISCHARGED TO RECEIVING WATERS OR TO THE STORM DRAIN SYSTEM.
5. CONCRETE WASH OUT WATER SHALL BE CONTAINED IN A WATER-TIGHT DEVICE TO PREVENT CEMENT DEPOSITION ONTO THE GROUND AND RUNOFF INTO STREETS, DRAINAGE FACILITIES, AND RECEIVING WATERS.
6. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BMPs AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
7. AT THE END OF EACH WORK DAY, ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN COVERED TRASH OR RECYCLE BINS.
8. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT STORMWATER DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIALS OTHER THAN STORMWATER (NON-STORMWATER DISCHARGES) ARE PROHIBITED EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT OR THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.
9. ALL UNPAVED CONSTRUCTION ENTRANCES AND EXITS SHALL BE PROTECTED USING AN EFFECTIVE COMBINATION OF TRACKING CONTROL BMPs TO MINIMIZE AND/OR ELIMINATE OFF-SITE TRACKING OF SEDIMENT. THESE BMPs SHALL BE MAINTAINED AND INSPECTED DAILY.
10. ALL TEMPORARY PORTABLE RESTROOMS MUST HAVE A CATCHMENT PAN AND MUST BE LOCATED AT LEAST 50 FEET AWAY FROM ANY STORM DRAIN INLETS.
11. POLLUTANTS ARE ANY SUBSTANCES INTRODUCED INTO THE ENVIRONMENT THAT ADVERSELY AFFECTS THE USEFULNESS OF A RESOURCE. POTENTIAL POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO: SEDIMENT; SOLID OR LIQUID CHEMICALS SUCH AS: PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDE, HERBICIDE, FERTILIZERS, WOOD PRESERVATIVES AND ASBESTOS FIBERS, PLANK FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE, AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM ENGINE / EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHINGS AND TESTING.
12. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED MANNER. A DESIGNATED TEMPORARY AREA ON-SITE SHALL BE PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
13. DISCHARGING CONTAMINATED GROUNDWATER, PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES REQUIRES A NATIONAL POLLUTANTS DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
14. DISCHARGES OF STORM WATER FROM CONSTRUCTION SITES SHALL NOT BE LADEN WITH SEDIMENT. ALL STORM WATER DISCHARGES MUST BE RELATIVELY FREE OF SEDIMENT.
15. ALL CONTRACTORS AND CONSTRUCTION PERSONNEL SHALL MEET THE REGULATORY CONSTRUCTION REQUIREMENTS ON THE PROJECT SITE IN COMPLIANCE WITH THE CITY'S MUNICIPAL CODE 14.25, STORMWATER AND URBAN RUNOFF MANAGEMENT AND MUNICIPAL CODE 17.05, GRADING AND EXCAVATION CODE.

AGA Job No. : 113-008
AGA File Name: CENLIBFO
Print Date : 3/6/2023
Last Revision : 3/6/2023

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CONSTRUCTION NOTES (THIS SHEET):

- 1

— FURNISH AND INSTALL NEW #6 PULL BOX AS SHOWN.
- 2

— FURNISH AND INSTALL 3" SCHEDULE 80 PVC CONDUIT. CONDUIT SWEEPS IN PULL BOX SHALL BE PER DETAIL "C".
- 3

— FURNISH AND INSTALL PLENUM AND RISER RATED 144SMFO CABLE WITH MULE TAPE AND #10 AWG TRACER WIRE THROUGH NEW AND EXISTING CONDUIT AND INNERDUCT.
- 4

— SPLICE NEW 144SMFO CABLE TO EXISTING 96SMFO CABLE EXISTING SPLICE CLOSURE. SEE SHEET 3 FOR FIBER ASSIGNMENT DETAILS.
- 5

— FURNISH AND INSTALL NEW #6T (TRAFFIC RATED) PULL BOX AS SHOWN.
- 6

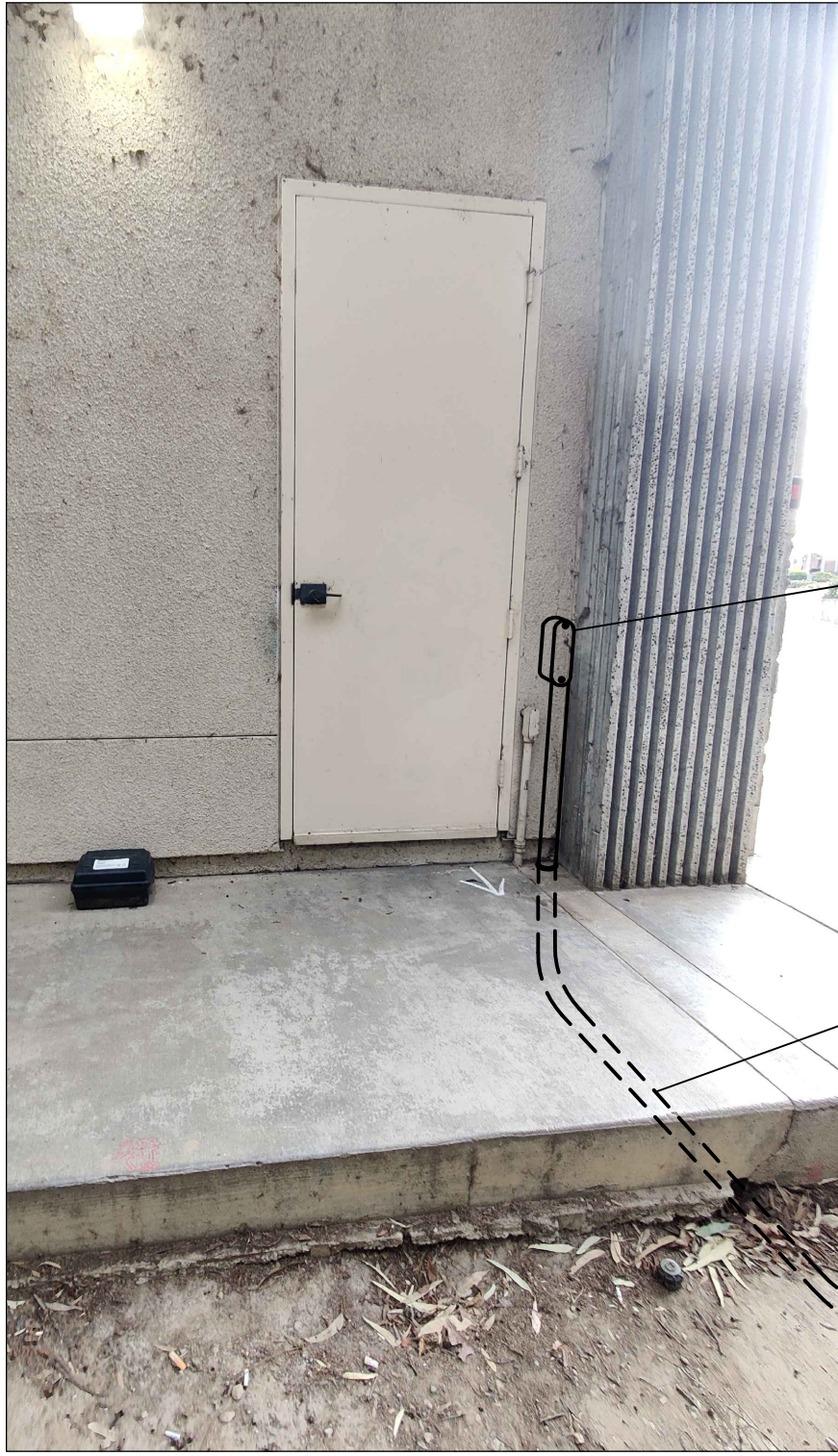
— FURNISH AND INSTALL 4U RACK MOUNTABLE FIBER CONNECTOR HOUSING COMPLETE WITH ALL NECESSARY CORNING CCH SPLICE CASSETTES, AND TWELVE (12) LC CONNECTOR PANELS IN EXISTING RACK. TERMINATE FIRST TWO TUBES (BLUE AND ORANGE) OF 144SMFO CABLE IN NEW FIBER CONNECTOR HOUSING.
- 7

— FURNISH AND INSTALL NEW 3" GALVANIZED RIGID STEEL CONDUIT WITH "LB" CONDUIT FITTING TO ENTER CENTRAL LIBRARY ELECTRICAL ROOM THROUGH WEST WALL. SEE DETAIL "B". COORDINATE WITH CITY OF HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT FOR EXACT LOCATION OF CONDUIT.
- 8

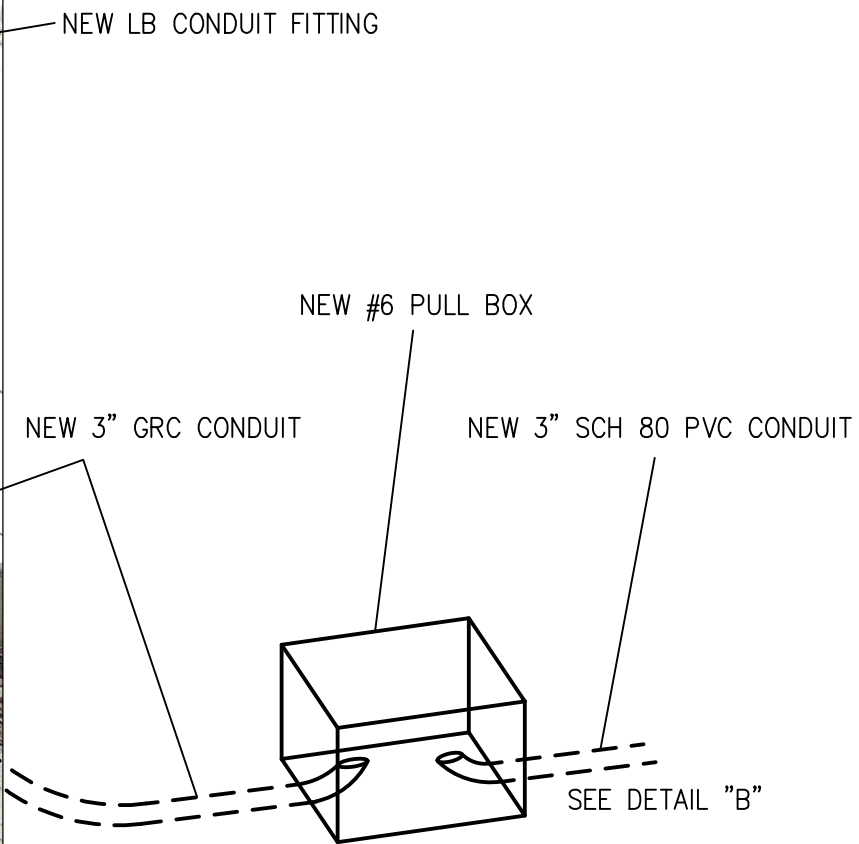
— FURNISH AND INSTALL NEW 4" ELECTRICAL METALLIC TUBING (EMT) BETWEEN THE EXISTING AND NEW CENTRAL LIBRARY WINGS. COORDINATE WITH THE CITY HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT FOR EXACT LOCATION OF CONDUIT.
- CB

— INSTALL CONDUIT INTO EXISTING PULL BOX.

West Side Electrical Room



DETAIL "A"



LIBRARY

CENTRAL
LIBRARY

SENIOR CENTER

DRIVEWAY

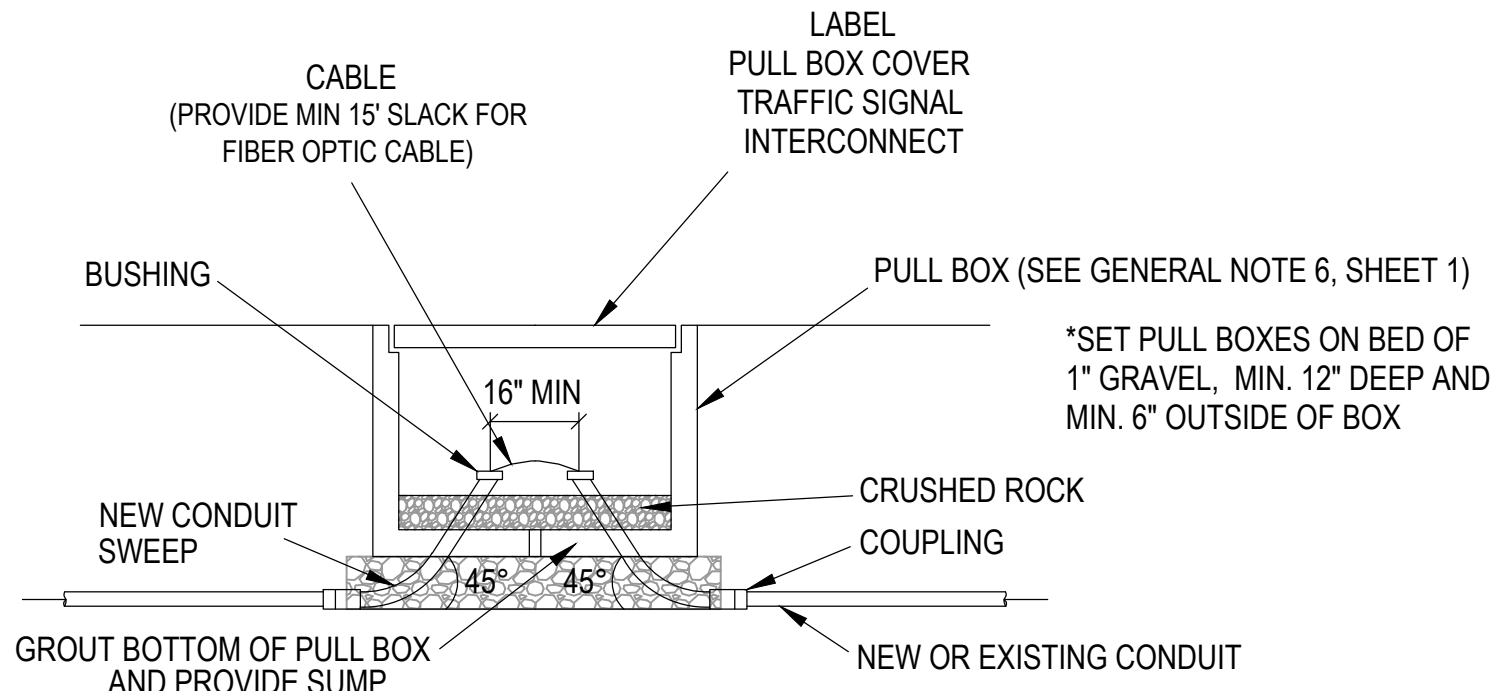
DRIVEWAY

PROPOSED 3" UNDERGROUND
GRC CONDUIT. LOCATION TO
BE DETERMINED BY CITY OF
HUNTINGTON BEACH
REPRESENTATIVE)



PROPOSED 3" UNDERGROUND
SCHEDULE 80 PVC CONDUIT.
LOCATION TO BE DETERMINED
BY CITY OF HUNTINGTON BEACH
REPRESENTATIVE)

DETAIL "B"



DETAIL "C"

NO SCALE

NOTE: THIS PLAN IS ACCURATE FOR FIBER OPTIC WORK ONLY.

Underground Service Alert

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811

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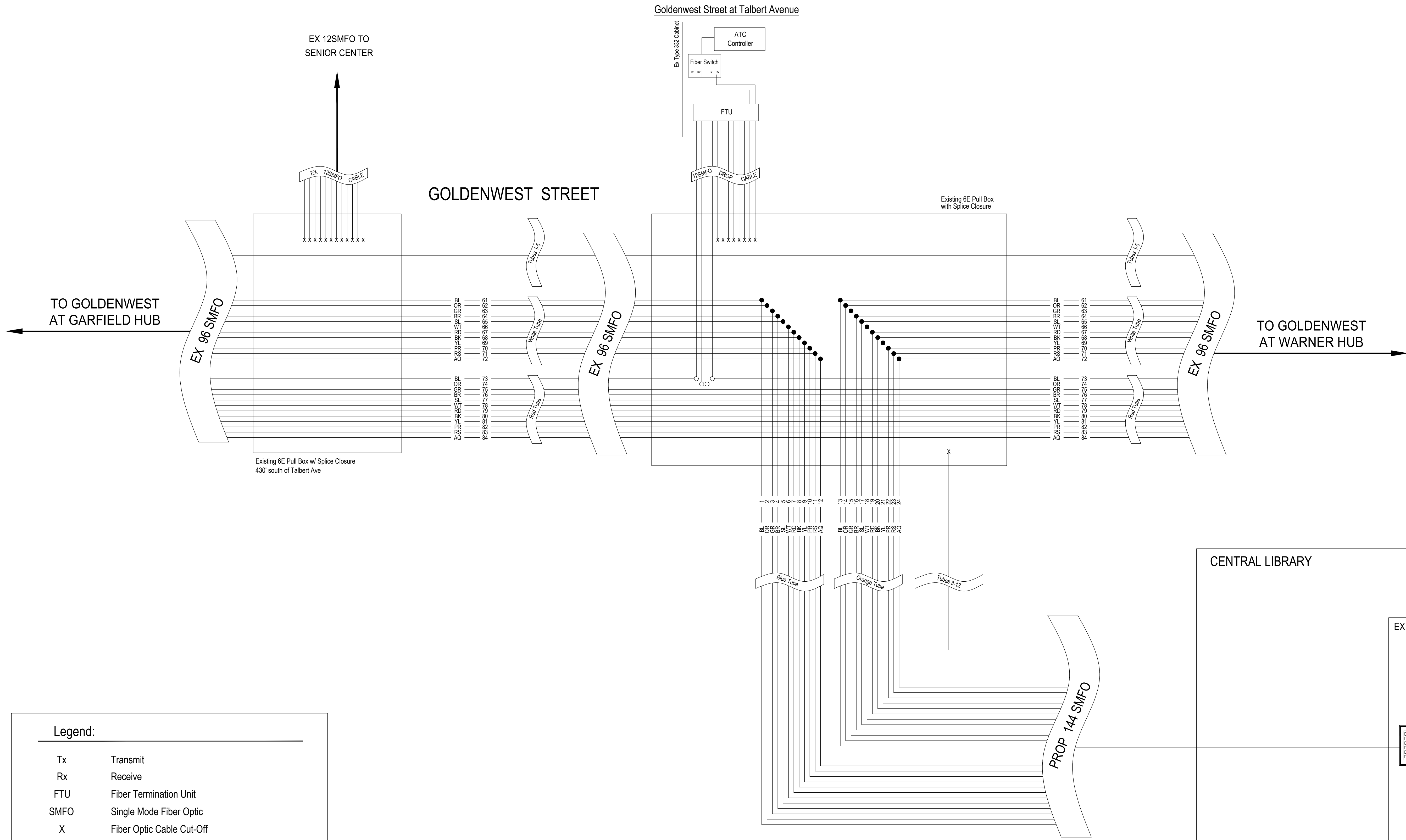

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

FIBER OPTIC COMMUNICATION PLAN
CENTRAL LIBRARY
GOLDENWEST STREET AT LIBRARY DRIVEWAY



AGA Job No. : 113-008
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PREPARED UNDER THE SUPERVISION OF:

RUBEN PERALES
R.C.E. NO.: 83169 DATE: _____

REVIEWED BY TRANSPORTATION ENGINEERING:

DATE: _____


CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

FIBER OPTIC COMMUNICATION PLAN
FIBER ASSIGNMENTS



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