

SPECTRUM NOTES:

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(285)	2023	10	287

- ORIGINAL
PLAN

SURVEY PLOTTED BY

DATE

DRAWN BY

DATE

TRACED BY

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NOTED BY

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CHECKED BY

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1. The Contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incident to the due and lawfull prosecution of the work.

2. The locations of existing utilities are approximate only. The Contractor shall verify their locations and shall be responsible for any damages to these utilities as a result of their operations. Adjustments to the new ductline alignment, if required, shall be made to provide the required clearances.

3. The Contractor shall brace all poles or light standards near the new ductline, manhole or handhole during its operations.

4. The Contractor shall saw-cut a.c. pavement, concrete gutter, and concrete sidewalk wherever new manholes, handholes, pullboxes or ductlines are to be placed and shall restore to existing condition or better.

5. The underground pipes, cables, or ductlines known to exist by the Engineer from their search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the plans. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.

6. The Contractor, at their own expense, shall keep the project and surrounding area free from dust nuisance. The cost for supplementary measures, which will be required by the City and County, shall be borne by the Contractor.

7. The Contractor, at their own expense, shall keep the project area free from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State of Hawaii, Department of Health.

8. Prior to the excavation of the ductline, the Contractor shall request that Spectrum Oceanic Cable Company to locate existing ductline wherever required.

9. The Contractor shall take necessary precaution not to damage existing cables or ducts. Any work involving existing cables or ducts shall be done in the presence of the Spectrum Oceanic Inspector or their Representative. Temporary cable and duct support shall be provided wherever necessary.

10. The Contractor shall notify the Spectrum Oceanic Inspector 72 hours prior to the start of work on CATV infrastructure, pouring concrete, or backfilling. Spectrum Oceanic's Inspector(s): Perry Samuelu at 808 387-2496 or Paul Caspillo at 808 479-1637.

11. Wherever connections to existing utilities are shown on the plans, the Contractor shall expose the existing lines prior to excavation of the main trenches to verify their locations and depths.

12. Contractor shall provide all materials and furnish all labor and equipment necessary to install the ductline in place complete.

13. The Contractor shall be responsible for laying out all required lines and grades and shall preserve all bench marks and working points necessary to lay out the work correctly. The new ductline shall be adjusted by the Contractor to suit the existing conditions and the details as described in the plans.

14. The location of CATV facilities shown on plans are from existing records with varying degrees of accuracy as to its actual fixed location. The Contractor shall use extreme caution when working in close proximity of CATV facilities.

15. The Contractor shall obtain excavation permit clearance from Spectrum Oceanic's Engineering Section located at 200 Akamainui St., Mililani Tech Park.

16. For any field assistance or verification of CATV facilities, the Contractor shall call Spectrum Engineering & Construction Services at 808 625-8570 or email: haw.engineering.research@charter.com

17. Any work required to relocate CATV facilities shall be done by Spectrum Oceanic Cable and the Contractor shall be responsible for all coordination requirements and associated costs.

18. Any damage to Spectrum Oceanic's facilities shall be reported to Spectrum Oceanic's TOC Department at 808 625-8169.

19. The Contractor shall tunnel under existing concrete curb and gutter as necessary to extend conduit into existing CATV pullbox and into the proposed power supply pullbox.

20. All existing improvements that are disturbed during the construction phase shall be restored to its original or better condition at no cost to the City in accordance with City's Standards.

21. At locations where existing CATV pullbox replacement is proposed, the Contractor shall take all necessary precaution not to damage the existing cables in the pullbox. All damages to existing cables shall be repaired by Spectrum Oceanic Cable and paid for by the Contractor.

22. Coordinate all penetration of telephone pullboxes with Hawaiian Tel Inspector.

23. Smooth finish inside wall of existing pullboxes and hand-holes to its original condition or better.

24. All new concrete encased conduit shall be PVC Pipe-Schedule 40. All new direct-buired conduit shall be PVC Pipe-Schedule 80. Use of any other material type (GTS, etc.) shall be limited to matching existing facilites. Connection of dissimilar materials to require approval from Spectrum Oceanic Inspector and Engineering Dept.

25. The Contractor shall place poly cord through out project, and secure in manholes, handholes, and pullboxes.

26. For 3" conduits or larger, the Contractor shall install NEPTCO WP1800 muletape or approved equal in all ductlines, leave muletape in place for future use as a pull or fish line, unless otherwise noted. Reference GTE material code No. 571154. All ducts shall be capped to prevent entry of foreign material during construction and at completion of installation. Endbells are required for conduits 2" and larger.

27. Penetration into pullboxes if necessary to be from factory installed opening or from bricks position. Penetration from pullbox walls is not acceptable.

28. Bends in the duct alignment, due to changes in grade shall have a minimum radius of 20-feet. All 90-degree c-bends at a pole or at the building floor slab penetration, shall have a bend radius of 10 times the diameter of the duct or greater.

29. Minimum length of conduit used shall not be less than 5-feet in length use of partial conduit sections allowable is at Spectrum Oceanic Inspector(s) discretion.

30. All conduits shall enter throught the end "short wall" of the pull-box. Entry shall be at 90 degress (perpendicular) to wall face with bends no less than 12" from exterior wall.

31. A minimum of (2) precast sections must be used on all 2x4 or 2x6 pullboxes.

32. All new construction shall utilize concrete precast base unless otherwise approved or specified by Spectrum Oceanic Inspector(s).

33. For pull-box locations where vehicular intrusion possible, concrete collar required per Spectrum Oceanic Standards and Specifications Manual. Examples include, but not limited to, rolled/ribbon curbs, curb / headers less than 5" in height, vehicle travelways with no defined curb / header, etc.

a .Non sidewalk areas, see Chapter 2, figure 18.1c, 19.1c and 20.1b in the Spectrum Specifications Manual.

34. When three (3) or more 4" conduits enter one end wall of any pullbox, only brick bases will be allowed unless otherwise instructed/approved by Spectrum Oceanic Inspector(s).

35. Two minimum layers of bricks to be used lower than the lowest duct entering the pullbox. Top layer of brick to be flush with top of conduit or higher.

36. For upgrade/repairs to existing pull-boxes, bricks may be used and shall always be at least two layers lower than the lowest duct entering the pullbox.

37. At no time shall cement mortar, wood, or any other material be used between precast sections.

38. Leveling or raising of boxes to grade must be done:

a. Pre-cast base(s) –using gravel layer under base (Type 3B or equivalent approved by Spectrum Oceanic Inspector)

b. Brick base(s) –adjustments to brickwork section. The permanent of wooden wedges to accomplish this purpose will not be accepted.

39. 5/8" x 8' copper ground rods shall be placed in all pullboxes unless otherwise directed by spectrum oceanic cable. Ground rods will be placed in the corner 3" to 4" from the wall and away from any conduit with no more than 8" sticking up above ground.

40. Trenching to be conducted by hand digging near and across existing utility lines.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPECTRUM NOTES

INTERSTATE ROUTE H-1 IMPROVEMENTS
Vicinity of Pearl City Viaduct to Waimalu Viaduct
Federal-Aid Project No. NH-HI-1(285)

Scale: None

Date: May 2023

RANDALL M. URASAKI
LICENSED
PROFESSIONAL
ENGINEER
No. 7288-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
Randall M. Urasaki
SIGNATURE

04/30/24
EXPIRATION DATE
OF THE LICENSE

SHEET No. N-8 OF 9 SHEETS

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