FED. ROAD DIST. NO.	STATE	FED.-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(279)	2021	3	304

GENERAL CONSTRUCTION NOTES:

1. The scope of work for this project consists of resurfacing, repairing/reconstruction of weakened pavement; upgrading of existing guardrails; pavement marking and signage; freeway lighting upgrades and other site improvements required to complete this project.

2. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 104.11 - Utilities and Services, and Section 107 - Legal Relations and Responsibility to Public. Attention is also directed to the following Section of the Hawaii Standard Specifications Subsection 107.02 - Permits and Licenses, which states the Contractor shall obtain all permits and licenses required to perform the work and that the Contractor assumes exclusive responsibility for identifying, acquiring and paying for all permits and licenses required to perform the work.

3. The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations and/or guardrail work.

   The Contractor shall obtain a Permit to Perform Work Upon State Highways from the Oahu District Engineer, State Highways, at 727 Kakoi Street, prior to commencement of work within the State's highway right-of-way.

   The Permit to Perform Work Upon State Highways may be suspended or revoked because of default in any of the following, but not limited to, conditions:

   a. Work or lane closures performed before or after permitted hours.
   b. Failure to maintain roadway surfaces in a smooth and safe condition.
   c. Failure to clean up construction debris generated from project work.
   d. Failure to provide proper traffic control.
   e. Failure to replace damaged pavement markings and signs.
   f. Failure to maintain highway lights and/or traffic signal systems.
   g. Failure to maintain or install traffic control devices.
   h. Failure to address public complaints to the satisfaction of the engineer.

   Any revocation of the permit shall be at the Contractor's expense and no additional cost to the State and no additional contract time will be added.

4. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.

5. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data, but the accuracy is not guaranteed. The encountering of other obstacles during the course of the work is possible. The Contractor shall make an independent check on the ground by probing and/or checking with the various utility companies or government agencies to verify the exact locations and depth of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating in the area. Whenever connections of new 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 excavating. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations. All damaged portions shall be replaced or repaired and shall include all upgrades and betterments to the standards of the utility or agency.

6. Furnishing and installation of construction signs and temporary restriping to provide adequate space for traffic control measures shall be considered incidental to the various contract items.

7. No section of incomplete guardrail shall be left unshielded at the end of each work day.

8. Removal and disposal of the existing guardrail, bridge railing, concrete reinforcement bars and bridge endpost shall be considered incidental to the various guardrail items.

9. The exact locations and limits or areas to be reconstructed and cold planed shall be determined in the field by the Contractor. The Contractor shall not begin work until the limits of work are verified and accepted by the Engineer. The Contractor shall provide drawings showing locations including the outlines of the proposed repair areas. The total area of repairs shall be calculated and provided to the Engineer with the drawings. The Contractor shall not begin any repair until the Engineer verifies and accepts the location and size of the area to be repaired.

10. Preformed Pavement Marking Tape shall be removed prior to resurfacing. Removal shall be by scraping, grinding or other method approved by the Engineer. Payment shall be incidental to the various pavement markings items.

11. The Contractor shall remove and dispose of all existing raised pavement markers prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to the various pavement markings items.

12. Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, side streets and driveways as shown on the plans and/or as directed by the Engineer.

13. Existing drainage system shall be functional at all times during construction. Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.

14. Contractor shall provide for access to and from existing side streets and driveways at all times.

15. All saw cutting work shall be considered incidental to Item No. 414.0100 - Reconstruction of Weakened Pavement Areas, and shall not be paid for separately.

16. Unprotected pavement drop offs greater than 2" shall not be allowed during non-working hours, except where approved by the Engineer in writing.

17. The Contractor shall place an advertisement in the newspaper for temporary road closures. The "Notice to Motorist" shall be placed in the Honolulu Star Advertiser for three consecutive days within one week before the temporary lane closures. The "Notice to Motorist" shall be in accordance with the current Hawaii Standards Specifications for Road and Bridge Construction, 2005, Subsection 107.06 - Contractor Duty Regarding Public Convenience, and Subsection 645.03(H) - Advertisement.

    The Contractor shall submit requests for detours and lane closures in accordance with Hawaii Standard Specifications Subsection 645.03(F), refer to minimum timeframes required for implementation. Once the request has been approved by HDOT, the Contractor is required to provide a written Weekly Lane Closure Request to the HDOT Construction Field Office at least 1-week ahead of all upcoming work. All public notices and advertisements shall be incidental to lump sum traffic control item 645.0100 - Traffic Control, and shall not be paid for separately.

18. Temporary striping on cold planed surfaces shall be with paint (tape will not be allowed). Temporary striping on final overlay shall be with temporary tape. This work shall be considered incidental to the various pavement marking items.

19. At the end of each work day, the AC shall be brought up to 2" below finish grade. The final 2" lift of AC shall occur once a large area is available to pave for an entire work day. This is to limit the number of AC joints on the finish surfaces.

20. Pavement striping shall be done with alkyd-based thermoplastic.

21. Lane closures or detours that slow down traffic shall not occur during peak hours (6:30 am to 8:30 am and 3:30 pm to 6:00 pm). Night work will be permitted. If the Contractor elects to perform work at night, a noise variance permit shall be obtained at his cost with no additional time.

22. The Contractor shall obtain all permits and licenses required to perform the work and assumes exclusive responsibility for identifying, acquiring and paying for all permits and licenses required to perform the work as stated in the Hawaii Standard Specification Subsection 107.02.

23. Cold planing of adjacent travel ways shall be completed on the same day. Temporary pavement markings shall be installed prior to the end of each work day.

24. If night work is approved, the Contractor shall stop all work and contact the Fish and Wildlife Service (808 792-9400) if bats or birds are seen flying around the work area at night.

25. When trench excavation is adjacent to or under existing structures or facilities, the Contractor shall be responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins and settlement and for properly supporting existing structures and facilities with beams, struts or under-pinning to fully protect them from damage.

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HAWAII USA

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SIGNATURE — 04/30/22 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-H1-1(279)

Scale: N/A Date: August 2021

SHEET No. G2 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED.-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(279)	2021	4	304

GENERAL CONSTRUCTION NOTES (CONTINUED):

26. All work called for in the contract documents but not itemized in the proposal and all work not called for but required for the construction in the project shall be considered incidental to the various contract items.

27. Verify and check all dimensions and details shown on the drawings prior to the start of construction. Any discrepancy shall be immediately brought to the attention of the Engineer for direction.

28. In accordance with Hawaii Standard Specification Subsection 107.12 - Protection of Persons and Property no Contractor shall perform any construction activity so as to cause falling rock, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural water courses. Should such violations occur, the costs incurred for any remedial action shall be payable by the Contractor.

29. The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. In accordance with Hawaii Standard Specification Subsection 104.11 - Utilities and Services, the Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company and shall be the Contractor's responsibility. Personal injury resulting from contact with existing utilities shall be the Contractor's responsibility. 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 new lines.

30. The Contractor shall be responsible for conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.

31. The Contractor shall independently tone areas of excavation not more than 30 days prior to excavation. Provide written notice of scheduled toning and specific locations to the Engineer at least one week ahead of toning. The Contractor shall obtain HDOT as-builts at the HDOT Kapolei Kakuhihewa Building to locate potential conflicts with utilities prior to excavation. If there is a potential conflict, the Contractor shall inform DOT within 24 hours of discovery. Contractor shall probe around area and take precautions to not damage utilities.

32. HAWAII ONE CALL CENTER
The Contractor shall contact Hawaii One Call Center to have respective utility companies and agencies mark where their undeground utilities are located. The Contractor shall comply with all requirements of Hawaii One Call Law. The Contractor shall be liable for any damages if Hawaii One Call requirements are not strictly adhered to.

    a. Before conducting any excavation in the public right of way or on private property, call the Hawaii One Call Center at least five (5) working days before planning to dig. Be sure to give them the address and location of the nearest cross street(s) near where digging is planned.

       Call 811 toll-free 24 hours a day.
       For more information, go to www.callbeforeyoudig.org

    b. The Hawaii One Call Center will contact all utility companies to tone, mark or identify the location of their underground utilities for free. Mark the area where Contractor plans to excavate in white and label all of the other utilities as listed below.

RED	Electric power lines, cables, or conduits, and light cables
YELLOW	Gas, oil, steam, petroleum or other hazardous liquid or gaseous materials
ORANGE	Communications, cable TV, alarm or signal lines, cables, or conduits
BLUE	Water, irrigation, and slurry lines
GREEN	Sewers, storm sewer facilities or other drain lines
WHITE	Proposed excavation
PINK	Temporary survey markings
PURPLE	Reclaimed water, irrigation and slurry lines

    c. In accordance with Hawaii State Law Section 269E-7, the Hawaii One Call Center (HOCC) shall provide an inquiry identification number for each location request provided by the Contractor. The inquiry identification number and utility marks shall remain valid for not more than twenty-eight (28) calendar days from the date of issuance and after that date shall require the Contractor to submit a new request for HOCC revalidation. The Contractor shall provide all inquiry identification numbers for each location request to the Engineer.

33. This project will affect bus operations, bus routes, bus stops, and para-transit operations. At least two (2) weeks prior to construction, the Contractor shall provide notification of the scope of work, location, detour, proposed closure of any street, traffic lane, sidewalk, or bus stop and duration of project to:

    DTS-PTD: 768-8396 and TheBusStop@honolulu.gov
    Oahu Transit Services:
        Bus Operations: 848-4571 and 848-4565 and
        Field_Operation_Mgr@thebus.org
        Para-transit Operations: 454-5006 and 454-5083

34. The Contractor shall restore to their original condition or better, all improvements damaged as a result of the construction, including pavements, embankments, curbs, signs, landscaping, structures, utilities, walls, fences, etc. unless provided for specifically in the proposal. Demolition and restoration of existing items shall be incidental to the various contract items.

35. The Contractor shall probe near utility lines before installing guardrail posts. This shall be considered incidental to various guardrail items. All materials including but not limited to guardrail, lighting signage, and fencing shall be brand new and free of defects, such as rust, damage, or corrosion. The contractor shall promptly replace any material exhibiting any of these characteristics at no additional cost or time to HDOT. No signs, fencing, lightning, or guardrail removed shall be reused.

36. Temporary cold mix trench patches will be permitted in any given area for a maximum duration of two weeks, and shall be a minimum of 2 inches thick. All temporary patches shall be placed over properly placed and compacted backfill and base course layers. Contractor shall be responsible for maintaining all temporary patches and to make repairs to unsatisfactory patches within 24 hours.

    The Contractor shall allow HDOT personnel unlimited and unimpeded access to materials that will be used in the project at all times for inspection and/or testing (this includes but is not limited to access to contractor or subcontractor's base yards, manufacturer yard, production plant, separate storage areas). The Engineer reserves the right to reject any material from being used in the project that the contractor refuses to provide access material too.

37. The Contractor shall designate a Quality Manager (QM) that performs in a separate role from the Contractor's project manager, superintendent, and foreman at no additional cost or time to HDOT.

38. The contractor shall perform Quality Control (QC) in accordance with the contract and specifications. Contractor QC responsibilities shall include (but not limited too) all specified QC material testing and general quality control monitoring of all construction activities to ensure all materials and workmanship meet contract requirements and complies with all local, state, and federal laws/regulations at no additional cost or time to HDOT.

39. The contractor shall create a Quality Management Quality Control Plan (QMQC Plan) and submit and receive approval from the Engineer at least 2 weeks prior to the start of construction. At a minimum, the QMQC Plan shall include the following requirements:

    a. Quality Control and Production Organization - specify the purpose and persons designated as the Quality Manager (QM, contractor-employed or third-party), Foreman, and Quality Control (QC) Technician(s) who will perform any contractor sampling and testing on the project with contact information for all project personnel and attach a personnel organizational chart.

    b. Project QC Implementation - the QCQM Plan shall incorporate submittals as performed by the QM for the weekly schedules, overall project schedules, work plans, and weekly meetings with the Engineer in accordance with Hawaii Standard Specification Section 108. In addition, a pre-activity meeting is required in advance of the start of each new activity, except when waived by the Engineer.

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SIGNATURE — 04/30/22 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-H1-1(279)

Scale: N/A Date: August 2021

SHEET No. G3 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED.-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	5	304

GENERAL CONSTRUCTION NOTES (CONTINUED):

c. Inspection and Testing - submit a QC sampling and testing plan for each material or line item specified within the contract with method of documenting compliance. Reporting of contractor QC tests shall be submitted to the Engineer as soon as practical, but no later than the day following the test. Test data shall be immediately provided to the Engineer upon request at any time, including prior to the submission of the test report. No payment will be made for the work performed until applicable satisfactory QC test results have been received by the Engineer and confirmed by QA test results.

d. Hold Points - events in the work process that require approval from HDOT prior to continuing work. Hold Points shall be determined by the Engineer. Additional Hold Points can be added by the Engineer when necessary.

e. Material Receiving - all material delivered to the project, excluding testable material, will be inspected for appropriate dimensions, quantity, condition, markings, etc., and accompanied with appropriate documentation. At receipt, the Contractor QC Staff shall inspect general condition of material and determine if material is compliant based on the contract requirements. HDOT shall be given access to the material location with opportunity to inspect the material prior the utilization within the project.

f. Quality Documentation - the contractor shall submit the following documentation at the specified frequency:

1) Daily Inspection Report (DIR) and lane closure inspection checklist within 24-hours after the work shift ends.
2) Submit a traffic control inspection report with any deficiencies and corrective measures taken to address the issue once per week.
3) Submit a material receiving inspection report with pictures for each shipment of material that is not testable but is applicable to the project.
4) Submit a request for transfer of inspected material for applicable material that has been approved on another state project.

g. Quality documentation shall be submitted to the Engineer electronically via email or as otherwise specified by the Engineer, and a hardcopy shall be provided for the previous week in each weekly meeting. The materials receiving inspection report shall also be made available to the project inspector(s).

h. Control of Nonconforming Work and Material - The contractor shall submit a Non-Conformance Report (NCR) to the Engineer as soon as practical for any work, material, temporary traffic control, and/or BMP erosion control that is not in compliance with the contract. The contractor shall propose a resolution to the non-conforming item. Acceptance of a resolution by the Engineer is required before closure of the NCR.

i. Corrective Action - In the event that a non-conforming condition persists or the severity of the condition meets at least one of the criteria listed in the Corrective Action Request (CAR) definition below, then the QM shall issue a CAR to the Engineer. The CAR may also be initiated by the State.

j. The contractor shall propose a resolution to the corrective action request. Acceptance of a resolution by the Engineer is required before closure of the CAR, and work can resume (if ordered to cease in the CAR).

k. No direct payment will be made for compliance with the Quality Management Quality Control Plan notes.

l. The QMQC Plan does not give the contractor authority to deviate from any contract requirements or preclude the responsibility of the contractor to obtain any and all necessary approvals and permits from the appropriate federal, state, and local agencies prior to the start of construction. If there are any discrepancies between the requirements listed in these notes and HDOT Standard Specifications, Job Special Provisions, Plan Sheets, or other contract requirements, the contractor shall notify the Engineer in writing.

40. Quality Management Quality Control Definitions:

a. Daily Inspection Report (DIR) - The DIR shall include a detailed diary that describes the work performed as well as observations made by QC Inspection staff regarding quality control. The DIR shall include other items such as weather conditions, location of work, installed quantities, removed material (with disposal location), tests performed, personnel that performed the work, equipment used, and a list of all subcontractors that performed work on that date. The DIR shall be digitally signed by the responsible person that filled out the document.

b. Lane Closure Inspection (LCI) - checklist that shall be performed daily when a lane closure is used. LCI shall be submitted in conjunction with the DIR. The LCI shall list the exact times (specify as to the nearest minute) that the lane closure began and ended during each work shift.

c. Traffic Control Inspection Report - weekly inspection of temporary traffic control used in a work zone. Each traffic control item shall be inspected with deficiencies noted. Deficiencies shall be corrected by the end of the work shift on the same day of discovery. Deficiencies that pose a direct safety hazard to the public and/or personnel on the project shall be corrected immediately (these deficiencies shall be classified as 'major deficiencies'). Immediately notify the Engineer after the discovery of a major deficiency.

d. Materials Receiving Report - inspection report for each non-testable material shipment associated with the project. The receiving report shall list the name of the responsible part for receiving the material, inspection parameters (identification, quantity, damage, required markings, conformance to specifications, material certification on file, test report, dimensions verified, cleanliness/good condition, properly stored and protected), associated line number, unit, description of the material/equipment, quantity, storage location, and installation location. The Materials Receiving report shall be digitally signed and submitted to the Engineer prior to the use of the material within the project.

e. Materials Request for Transfer of Inspected Material - inspection and transfer report to be addressed to the District Construction Engineer for any approved materials that the contractor wishes to transfer from another State project to this project. The request for transfer shall include type of material, quantity, present location, supplier/manufacturer, and identification (Lot Numbers, Heat Numbers, DOT Sample Card Numbers, or Other Identification on labels or tags). Prior to approval, the material shall be made available to HDOT personnel for re-inspection and testing.

f. Nonconformance Report (NCR) - Report shall be created by the Quality Manager for any for any work, material, temporary traffic control, and/or BMP erosion control that is not in compliance with the contract. The report shall include a description of the nonconformance item with applicable pictures and documentation attached. The NCR shall be digitally signed and email to the Engineer with a proposed resolution to the problem.

g. Corrective Action Request (CAR) - A CAR may be issued for the following conditions:
1) Recurring or systemic non-conformances

2) A situation that threatens public and/or worker safety, could severely damage a utility, reduces the integrity of an existing or new structure, reduces the life span of the work, causes excessive rework or repair, or results in work that deviates from the contract requirements.

3) If the QM and/or the State consider it necessary, the Engineer will request to stop the work that has caused the problem, or in some instances, stop all work on the project. A State issued Corrective Action Request will in the form of a HDOT Order Record (OR).

h. Pre-activity Meeting - Meeting held in advanced before the start of each new activity. At a minimum, the discussion topics shall include: safety precautions, any QC testing, traffic impacts, and any required Hold Points. Attendees shall include the Engineer, the Quality Manager and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.

i. Hold Points - Hold Points are events that require approval by the engineer prior to continuation of work. Hold Points occur at definable stages of work when, in the opinion of the Engineer, a review of the preceding work is necessary before continuation to the next stage. Use of the Hold Point process will only be required for the project-specific list of Hold Points, if any, that the Engineer submits to the contractor in advance of the work. The Engineer may make changes to the Hold Point list at any time. Prior to all Hold Point inspections, the contractor shall verify the work has been completed in accordance with the contract and specifications. If the Engineer identifies any corrective actions needed during a Hold Point inspection, the corrections shall be completed prior to continuing work. The Engineer may require a new Hold Point to be scheduled if the corrections require a follow-up inspection. Re-scheduling of Hold Points require a minimum 24-hour advance notification from the contractor unless otherwise allowed by the Engineer.

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SIGNATURE — 04/30/22 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: N/A Date: August 2021

SHEET No. G4 OF 11 SHEETS

C:_CIVIL 3D PROJECTS\2016_202.000 DOT-HWYS H1 RESURFACING - MILLER TO KAPINT\01 CIVIL DRAWINGS\G4 GENERAL NOTES 3.DWG 9/1/2020 5:41 PM

FED. ROAD DIST. NO.	STATE	FED.-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	6	304

GENERAL CONSTRUCTION NOTES (CONTINUED):

41. The Contractor shall submit copies of all paving quality control measurements and test results to the Engineer on a weekly basis. This includes compaction, density, and pavement core thickness results.

42. The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities, and existing structures from damages due to construction. Repairing any damages shall be at the Contractor$^{5}/_{32}$s own expense, to the satisfaction of the Engineer.

43. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer.

44. Prior to paving operations, the Contractor shall be responsible for locating, preserving, and marking all utility and highway facilities that will require adjustments to the new finished grade. The Contractor shall coordinate with the Engineer for site verification and subsequently submit a list of all items to be adjusted to the new finished grade. Coordination with State Construction Surveyor shall be done separately.

45. After completion of resurfacing, the Contractor shall test for and determine ponding areas (ie, low spots within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas at no cost to the State.

46. The final asphalt paved surface shall not have any trench lines on the final roadway surface, unless approved by Engineer.

47. The Contractor shall verify the presence of existing utilities which may conflict with activities and shall coordinate with the utility company for temporary relocation, as necessary. All costs associated with the temporary relocation shall be borne by the Contractor.

48. No section where guardrails have been removed shall be left unshielded at the end of each work day. Open sections shall be shielded by portable physical barriers. Furnishing, installing, and maintaining physical barriers shall be considered incidental to the various contract items.

49. The Contractor shall furnish and maintain all temporary physical barriers needed for all work on the project. This work shall be paid for under lump sum traffic control item No. 645.0100 and shall not be paid for separately.

50. The Contractor shall be responsible for preserving all survey monuments on State property. All survey monuments disturbed or destroyed by the Contractor shall be reinstalled at no cost to the State. Only licensed State of Hawaii Land Surveyors shall reference, locate, adjust or reinstall monuments. The Contractor shall coordinate with the State Construction Surveyor prior to construction to locate and verify all monuments. Adjusted or reset monuments shall comply with Standard Plan D-07 or D-08 where applicable. Following the completion of the monuments, their locations shall be checked. The monuments must check within a tolerance of the smaller of and error ratio of 0.03 feet. Failure to meet the tolerance will require the Contractor to reset the monuments. All costs associated with coordination, referencing, preserving, adjusting, installation, and verification of survey monuments is included in the various contract pay items related to survey monuments.

51. The existing drainage system shall be functional at all times. The Contractor shall furnish materials, equipment, labor, tools, and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.

52. The Contractor shall place hot ashalt around manholes and compact properly with a vibrating plate compactor. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller.

53. The Contractor shall provide the proper equipment and utilize the necessary means and methods to meet the pavement smoothness requirements noted in the paving specifications. The Contractor shall provide all necessary surveying and engineering services necessary to meet the requirements. Payment for this work shall be included in the various paving pay items and shall not be paid for separately.

54. The Contractor shall comply with utility coordination requirements per Standard Specification Section 104.11. As part of coordination requirements, the Contractor shall include the Engineer in all email correspondences with utilities.

55. Highway lights shall be kept operational and maintained during construction. This work shall be paid for in the highway lighting pay item and shall not be paid for separately.

56. Traffic signals shall be kept operational during construction. Temporary microwave devices shall be installed three working days prior to any signalized intersection disturbance work. All work shall be done in accordance to the requirements of the Department of Transportation Services, City and County of Honolulu. This work shall be pain for inclusive in the various contract pay items and shall not be paid for separately.

57. Initial preparation of shoulder areas shall be done by the Contractor. Shoulder preparation shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable excavated material from roadway reconstruction and cold planing, as shown on the plans and/or as directed by the Engineer. Contractor shall also be responsible for finish rolling and maintaining the shoulders until project completion. This work shall be considered incidental to Item No. 401.0100 - Hot Mix Asphalt Pavement, Mix No. IV.

58. All walkways shall conform to ADA requirements. Contractor shall maintain access to existing bus stops, bus routes, HandiVan operations and bicycle facilities during construction. Coordinate with The Bus and the HandiVan as necessary.

59. Contractor shall maintain at least one paved shoulder free and clear of debris for pedestrian and bicycle traffic at the end of each work day.

60. The Contractor shall notify all agencies to verify the actual locations of all utilities in the project area prior to excavating. the Contractor shall coordinate all work.

61. Prior to placement of asphalt concrete base, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition. The work shall be considered incidental to item No. 301.0100 Hot Mix Asphalt Base Course.

62. The Contractor shall coordinate the construction of the concrete gutters, driveways and sidewalks with property owners to minimize disruptions and allow vehicular access by the end of the work day, either with phased construction or utilizing high-early strength concrete. Concrete mix designs shall be submitted to HDOT for review and approval.

63. Bed course material for concrete curb ramps, sidewalks and gutter shall be considered incidental to the various contract items.

64. Monuments that are disturbed shall be restored under the Hawaii licensed land surveyor's direction. Any new data such as elevations shall be certified by the surveyor, and submitted to the Engineer.

65. The Contractor shall be responsible for replacing/reconstructing all concrete curbs and gutters, concrete swales, driveways, fences and sidewalks damaged during construction.

66. Pedestrian walkways shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided.

67. All work called for on the plans and not itemized in the proposal and all work not called for but required for the construction of this project, shall be considered incidental.

68. No blasting shall be allowed on this project.

69. The Contractor shall notify the One Call Center at (866) 423-7287 at least five (5) days prior to the start of excavation or trenching.

70. The Contractor shall coordinate utility relocation activities with the respective utility agencies as required to maintain contract duration.

71. All saw cutting and safety edge work shall be considered incidental to Hot Mix Asphalt Pavement, Mix No. IV.

72. Dressing of shoulder, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. Suitable materials shall include materials from roadway excavation, including topsoil and base material therefrom and if necessary, additional materials from borrow outside the limits of the right of way. This Work shall be considered incidental to the various contract items.

73. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks, ADA access routes, side streets and cross streets at all times. This work shall be considered incidental to the various contract items.

74. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the Oahu District Office at telephone no. 831-6712.

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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

04/30/22
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: N/A Date: August 2021

SHEET No. G5 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED.-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 7	304

GENERAL CONSTRUCTION NOTES (CONTINUED):

75. All holes, depressions and wheel nuts shall be filled and compacted with Hot Mix Asphalt Pavement, Mix No. V prior to resurfacing. This work shall be considered incidental to the various contract items.

76. Prior to his paving operations, the Contractor shall be responsible for locating, preserving and marking all utility and highway facilities that will require adjustments to the new finished grade. The Contractor shall submit to the Engineer a list of all items, including water, drainage, sewer, gas, electrical, telephone and cable utilities, etc. to be adjusted to the new finished grade.

77. After completion of resurfacing, the Contractor and the Engineer will test for and determine ponding areas (i.e. low spots within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas at no cost to the State.

78. The Contractor shall obtain all necessary permits prior to start of work at his own cost.

79. The Contractor shall be responsible for preserving all survey monuments on State property. All survey monuments disturbed or destroyed by the Contractor shall be reinstalled at no cost to the state. Only licensed State of Hawaii Land Surveyors shall reinstall monuments. The Contractor shall coordinate with the state Construction Surveyor prior to construction. Adjusted and/or reset monuments shall comply with Standard Plan D-07 or D-08 as appropriate.

80. Contractor shall reference, adjust, install new monuments and/or reset an existing street monuments under the direct supervision of a licensed State of Hawaii Land Surveyor. Following the completion of the monuments, their locations shall be checked. The monuments must check within a tolerance of the smaller of an error ratio of 1:20,000 for distance and alignment or a maximum positional error of 0.03 feet. Failure to meet the tolerance will require the Contractor to reset the monuments.

81. Contractor shall adjust all utility boxes and manhole frames and covers, valve box frames and covers, new street monuments, etc. to new finish grades. Contractor shall coordinate with all utility agencies and companies for work on each respective utility.

82. The Contractor shall exercise care and protect all existing electrical and street light poles throughout the project's construction duration. Contractor shall be held liable for any damages incurred to the existing electrical and light poles. All damaged poles shall be replaced with the requirements of the affected owner or user at the Contractor's expense.

WATER NOTES:

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the Standard Specifications for Road and Bridge Construction, dated 1994, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu Board of Water Supply's "Water System Standards", Dated 2002, the "Water System External Corrosion Control Standards", Volume 3, Dated 1991, and all subsequent amendments and additions.

2. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply.

3. The existence and location of underground utilities and structures as shown on the plans are from the latest available data, but are not guaranteed as to their accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.

4. The contractor shall be responsible for the protection of all waterlines during construction. The contractor shall be especially careful when excavating behind waterlines, tees, and bends wherever there is a possibility of waterline movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the waterlines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.

5. Re-approval shall be required if this project is not under construction within a period of two (2) years.

6. The Contractor shall notify BWS Capital Projects Division, Construction Section in writing and submit six (6) sets of approved construction plans one week prior to commencing work on the water system.

7. Prior to any excavating, the Contractor shall verify in the field, the location of existing waterlines and appurtenances.

8. The contractor shall adjust all manhole frames/valve boxes/meter boxes within the resurfaced areas. The Contractor shall be responsible for "referencing" these manholes/valve boxes/meter boxes to facilitate the adjustments.

9. Maintain 3'-0" minimum cover for all existing waterlines from new finish grade. The contractor shall probe the waterline and service laterals and submit the probing data to BWS Capital Projects Division, Construction Section.

10. Any adjustments to the existing water system required during construction, to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS.

11. Two-way blue reflective hydrant markers Type DB shall be installed at all fire hydrant locations.

12. The Contractor and State DOT-HWYs shall notify BWS Capital Projects Division, Construction Section (748-5730) sixty (60) days prior to construction at or near areas in conflict with the BWS project (Job No. 21-053B and Kalawahine 180 2.0 MG Reservoir - Pipeline) to avoid delays and conflict during construction. The Contractor shall allow BWS's contractor to install new water mains prior to any resurfacing work at areas in conflict. BWS shall not be liable for any delays due to the contractor's failure to coordinate the construction schedule for this project.

SEWER NOTES:

1. All sewer construction shall be performed in accordance with the City's Standard Specifications, Sept. 1986, the Department of Public Works Standard Details, Sept. 1984, Current City Practices And Revised Ordinances of Honolulu, 1990, as Amended, and Design Standards of the Department of Wastewater Management Vol. 1, July 1993.

2. The underground pipes, cables, or ductlines known to exist by the Engineer from his research of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities, including and affecting sewer lines, in the presence of the Wastewater Inspector and exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.

3. The Contractor shall be responsible for the protection of all sewer lines and maintaining continuous sewer service to all affected areas during construction.

4. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notifications and press releases.

5. Maintain 3'-0" min. horizontal clear separation between all sewer sytems and nearest street lighting ductlines, pullboxes, and handholes paralleling the sewer system at no cost to the city.

6. Maintain 5'-0" horizontal clear separation between street lighting and traffic signal standards (including any modular units) and nearest sewer line system. The Contractor shall field verify for conflicts at each lighting and traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the with the Project Engineer to revise the street lighting and traffic signal standard to provide the required clearances at no cost to the city.

7. At the electrical/signal ductline sewer crossing, adjust all electrical/signal ductline elevations to maintain 24' vertical clear separation from all sewelines or provide reinforced concrete jackets on sewer lines at no cost to the city.

8. For sewer manhole (SMH) adjustment upward less than 3", see City Std. Details S-25. For SMH adjustments upward greater than 3" or for any adjustments downward, reconstruct SMH top from below the cone section.

9. The Contractor shall adjust all manhole frames within the resurfaced area prior to resurfacing. The Contractor shall be responsible for "referencing" these manholes to facilitate the adjustments.

10. The Contractor shall notify the Inspection Section, Wastewater, Wastewater Branch, DDC, At 527-5855 or 523-4345 to arrange for inspection services. Submit 4 sets of approved construction plans. Call 7 days prior to commencement of sewer work. The contractor shall pay for all inspection costs.

11. Sewer manhole frame and covers shall be adjusted and reinstated within 60 calendar days of adjacent repaving completion, to allow City maintenance trucks to regain access to manholes to perform sewer maintenance.

APPROVED: 3

MANAGER AND CHIEF ENGINEER, BWS — DATE
(For Work Affecting BWS Facilities in City/State R/W and BWS Easements Only)

VICTOR O. VALDEZ
LICENSED PROFESSIONAL ENGINEER
NO. 15546-C
HAWAII USA

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE — 04/30/22 EXPIRATION DATE OF THE LICENSE

DATE	REVISION
7/9/21	3 BWS Tracings

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: N/A — Date: August 2021

SHEET No. G6 OF 11 SHEETS

ADD. 7

C:_CIVIL 3D PROJECTS\2016_202.000 DOT-HWYS H1 RESURFACING - MILLER TO KAPIOLANI\01 CIVIL DRAWINGS\G6 GENERAL NOTES 5.DWG 7/7/2021 9:10 AM

FED. ROAD DIST. NO.	STATE	FED.-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 8	304

LEGEND:

e	Existing Electrical Line
E	New Electrical Line
jp	Existing Joint Pole
pp	Existing Power Pole
emh	Existing Electric Manhole
EMH	Adjusted Elec. MH Frame/Cover
EMH	New Electric Manhole
EB	Adjusted Electric Box
t	Existing Telephone Line
T	New Telephone Line
tp	Existing Telephone Pole
tmh	Existing Telephone Manhole
tpb	Existing Telephone Pullbox
TMH	Adjusted Tele. MH Frame/Cover
TMH	New Telephone Manhole
w 12	Existing 12" Water Line
W 12	New 12" Water Line
wmh	Existing Water Manhole
WMH	Adjusted Water MH Frame/Cover
WMH	New Water Manhole
av	Existing Water Air Valve
AV	Adjusted Water Air Valve
AV	New Water Air Valve
wv	Existing Water Valve Box
WV	Adjusted Water Valve Box
WV	New Water Valve Box
wm	Existing Water Meter
WM	Adjusted Water Meter
WM	New Water Meter
fh	Existing Fire Hydrant
FH	New Fire Hydrant
bfp	Existing Water Backflow Preventer
s 12	Existing Sewer Line
S 12	New 12" Sewer Line
smh	Existing Sewer Manhole
SMH	Adjusted Sewer MH Frame/Cover
SMH	New Sewer Manhole
g 6	Existing 6" Gas Line
G 6	New 6" Gas Line

gv	Existing Gas Valve Box
GV	Adjusted Gas Valve Box
GV	New Gas Valve Box
gmh	Existing Gas Manhole
GMH	Adjusted Gas MH Frame/Cover
GMH	New Gas Manhole
mon.	Existing Monument
MON.	Adjusted Monument
MON.	New Monument
d 24	Existing 24" Drain Line
24" RCP	New 24" RCP Drain Line
sdmh	Existing Storm Drain Manhole
SDMH	Adjusted Storm Drain MH Frame/Cover
SDMH	New Storm Drain Manhole
gdi	Existing Grated Drop Inlet
cb	Existing Catch Basin
TS	Adjusted Traffic Sensor
	Existing Traffic Sign With 1 Post
	New Traffic Sign With 1 Post
	Existing Traffic Sign With 2 Posts
	New Traffic Sign With 2 Posts
	Existing Traffic Sign With 3 Posts
	New Traffic Sign With 3 Posts
	Existing Highway Lighting Standard
	Existing Single Metal Guardrail
	New Single Metal Guardrail
	Existing Double Metal Guardrail
	New Double Metal Guardrail
	Right-of-Way
x	Existing Fence
x	New Fence
tsb	Existing Traffic Signal Box
tsp	Existing Traffic Signal Pole
lpb	Existing Street Lamp Pullbox

APPROVED: 3

MANAGER AND CHIEF ENGINEER, BWS DATE
(For Work Affecting BWS Facilities in City/State R/W and BWS Easements Only)

ABBREVIATION LIST:

A.C.	Asphalt Concrete
ACB	Asphalt Concrete Base
ADT	Average Daily (two-way) Traffic volume
Ah.	Ahead
Approx.	Approximately
ASTM	American Society for Testing and Materials
Avg.	Average
AV/AVE.	Avenue
Az.	Azimuth
Blvd./BLVD	Boulevard
℄	Baseline
Bk.	Back
BVC	Beginning of Vertical Curve
C	Chord Length
℄	Center Line
Conc.	Concrete
CRM	Concrete Rubble Masonry
D	The directional distribution of traffic during the design hour. It is the one-way volume in the predominant direction of travel expressed as a percentage of DHV.
D, Dia.	Diameter
DIST.	District
Demo	Demolition
Det.	Detail
DHV	Design Hourly Volume. It is normally the estimated 30th highest hour two-way traffic volume for the design year selected.
DI 3	Drop Inlet
Dir.	Director
Div.	Division
EB	Eastbound
EG	Existing Ground
EMH	Electric Manhole
EP	Edge of Pavement
Elev.	Elevation
ES	Edge of Shoulder
Exist./Ext'g	Existing
FAP	Federal Aid Project
Fed.	Federal
Fin. Gr.	Finished Grade
Ft.	Foot
Gnd.	Ground
H	Height
Haw.	Hawaii
H.B.	Hose Bibb
HDOT	Hawaii Department of Transportation
HMA	Hot Mix Asphalt
Horiz.	Horizontal
ht.	Height
Hwy.	Highway
Inv.	Invert
K	Ratio of DHV to ADT, expressed as a percent.
L	Length
Lc	Length of Curve
LF	Linear Foot
Lt.	Left
Max.	Maximum
Min.	Minimum
Mix.	Mixture
M.L.	Match Line
MON.	Monument
MPH	Miles Per Hour
MUTCD	Manual on Uniform Traffic Control Devices
N/A	Not Applicable
No., #	Number
NPDES	National Pollutant Discharge Elimination System
N.T.S.	Not To Scale
o.c.	On Center
o/s	Offset
Pavt./Pav't.	Pavement
P.C.	Point of Curvature
P.C.C.	Portland Cement Concrete
PL	Place
PMA	Polymer-Modified Asphalt
psi	Pounds per Square Inch
Proj.	Project
P.T.	Point of Tangency
PWE	Pressurized Welding Enclosure
R	Radius
RD	Road
RM	Reflective Marker
RPM	Raised Pavement Marker
Rt.	Right
R/W	Right of Way
S	Spread
SDMH	Storm Drain Manhole
S.E.	Superelevation
SMA	Stone Matrix Asphalt
SMH	Sewer Manhole
SSD	Stopping Sight Distance
Sht.	Sheet
Sq.	Square
St./ST.	Street
Sta.	Station
Std.	Standard
T	The proportion of trucks, exclusive of light delivery trucks, expressed as a percentage of DHA
T_{24}	Tangent Length
TCP	Percent Trucks
TCS	Traffic Control Plan
T.M.K.	Traffic Counting System
Trv.	Tax Map Key
Typ.	Traverse
V	Typical
VC	The design speed in MPH.
Vert.	Vertical Curve
W	Vertical
WB	Width
WMH	Westbound
WV	Water Manhole
	Water Valve

DATE	REVISION
7/9/21	3 BWS Tracings, Added DI

VICTOR Q. VALDEZ
LICENSED PROFESSIONAL ENGINEER
NO. 15546-C
HAWAII USA

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SIGNATURE 04/30/22 EXPIRATION DATE OF THE LICENSE

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LEGEND AND ABBREVIATIONS

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: N/A Date: August 2021

SHEET No. G7 OF 11 SHEETS

ADD. 8

C:_CIVIL 3D PROJECTS\2016_202.000 DOT-HWYS H1 RESURFACING - MILLER TO KAPIOLANI\01 CIVIL DRAWINGS\G7 LEGEND AND ABBREVIATIONS.DWG 7/9/2021 7:46 PM