EDDIE BAZA CALVO
Governor

RAY TENORIO
Lieutenant Governor

Office of the Governor Of Guam

DEC 31 2018

Honorable Therese M. Terlaje
Acting Speaker
I Mina'trentai Kuåttro Na Liheslaturan Guåhan
Guam Congress Building
163 Chalan Santo Papa
Hagåtña, Guam 96910

Vice Speaker Therese M. Terlaje
34GL-18-2718
DEC 31 2018
Time: 16:35
Received by:

2019 JAN -2 AM 9:18

Dear Madame Speaker:

Transmitted herewith is Bill No. 331-34 (COR), **"AN ACT RELATIVE TO APPROVING THE ARCHITECTURAL AND ENGINEERING DESIGN FOR THE REHABILITATION AND IMPROVEMENT OF THE HARMON INDUSTRIAL PARK ROADWAY, PURSUANT TO § 77710 OF ARTICLE 7, CHAPTER 77, TITLE 12, GUAM CODE ANNOTATED,"** which was signed on December 28, 2018, as **Public Law 34-154.**

Senseramente,

EDDIE BAZA CALVO

2718

I MINA'TRENTAI KUÅTTRO NA LIHESLATURAN GUÅHAN
2018 (SECOND) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO *I MAGA'LÅHEN GUÅHAN*

This is to certify that **Bill No. 331-34 (COR), "AN ACT RELATIVE TO APPROVING THE ARCHITECTURAL AND ENGINEERING DESIGN FOR THE REHABILITATION AND IMPROVEMENT OF THE HARMON INDUSTRIAL PARK ROADWAY, PURSUANT TO § 77710 OF ARTICLE 7, CHAPTER 77, TITLE 12, GUAM CODE ANNOTATED,"** was on the 17th day of December 2018, duly and regularly passed.

Therese M. Terlaje
Acting Speaker

Attested:

Régine Biscoe Lee
Legislative Secretary

This Act was received by *I Maga'låhen Guåhan* this 17th day of Dec, 2018, at 5:30 o'clock P.M.

Assistant Staff Officer
Maga'låhi's Office

APPROVED:

EDWARD J.B. CALVO
I Maga'låhen Guåhan

Date: DEC 28 2018

Public Law No. 34-154

I MINA'TRENTAI KUÅTTRO NA LIHESLATURAN GUÅHAN
2018 (SECOND) Regular Session

Bill No. 331-34 (COR)

Introduced by: FRANK B. AGUON, JR.
Thomas C. Ada
William M. Castro
James V. Espaldon
Fernando Barcinas Esteves
Régine Biscoe Lee
Tommy Morrison
Louise B. Muña
Telena Cruz Nelson
Dennis G. Rodriguez, Jr.
Joe S. San Agustin
Michael F.Q. San Nicolas
Therese M. Terlaje
Mary Camacho Torres

AN ACT RELATIVE TO APPROVING THE ARCHITECTURAL AND ENGINEERING DESIGN FOR THE REHABILITATION AND IMPROVEMENT OF THE HARMON INDUSTRIAL PARK ROADWAY, PURSUANT TO § 77710 OF ARTICLE 7, CHAPTER 77, TITLE 12, GUAM CODE ANNOTATED.

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. *I Liheslaturan Guåhan* finds that through the passage of Public Law 33-191, a public-private partnership was established between the government of Guam and the *Harmon* Industrial Park Association (HIPA) to realize the rehabilitation and improvement of the *Harmon* Industrial Park roadway. The repair of the roadway is necessary to address the

significant flooding problems experienced by individuals who traverse this roadway during the rainy season, and to address the worsening and unsafe condition of the roadway that has contributed to damaged tires, and has occasionally led to vehicular accidents. *I Liheslaturan Guåhan* further finds that HIPA members were required by the aforementioned legislation to submit the Architectural and Engineering design for the project, with the guidance and oversight of the Department of Public Works, to the Speaker of *I Liheslaturan Guåhan*, a requirement which has since been complied with in accordance with established timelines. The *Harmon* Industrial Park area serves as an integral part of Guam's economic business sector, wherein over thirty-six (36) businesses are located that employ more than four thousand (4,000) residents; thus, it is essential that this roadway repair and upgrade commence immediately.

Therefore, it is the intent of *I Liheslaturan Guåhan* to accept the Architectural and Engineering design submitted to the Speaker of *I Mina'Trentai Kuåttro Na Liheslaturan Guåhan* in accordance with the requirements set forth within Public Law 33-191, as amended by Public Law 34-10, which will allow for the rehabilitation and improvement of the *Harmon* Industrial Park roadway.

Section 2. Approval of the Architectural and Engineering Design for the Rehabilitation and Improvement of the Harmon Industrial Park Roadway. In accordance with 12 GCA § 77710, the Architectural and Engineering (A&E) Design for the rehabilitation and improvement of the *Harmon* Industrial Park roadway submitted by the *Harmon* Industrial Park Association to the Speaker of *I Liheslaturan Guåhan* on April 27, 2018 (attached hereto as Exhibit A) is hereby approved.

Section 3. Effective Date. This Act *shall* be effective upon enactment.

B.331-34(COE)

EXHIBIT A

Frank Shimizu President
Harmon Industrial Park Association
124 Chalan Achote
Tamuning, GU 96913

April 24, 2018

Honorable Speaker Benjamin J.F. Cruz
I Mina'trentai Kuattro Na Liheslaturan Guahan
163 Chalan Santo Papa
Hagatna, Guam 96910

Dear Speaker Cruz;

Enclosed herewith, as required by Public Law 33-191 and subsequently by Public Law 34-10, are the Architectural and Engineering (A&E) Designs for the rehabilitation and improvements of the Harmon Industrial Park Roadway project. PL 34-10 stipulates that no tax credits shall be applied for, or approved, until the completion of the A&E, and identified the submittal to be no later than May 1, 2018. We have also included both PL 33-191 and PL 34-10 for your reference.

The attached A&E identifies all the projects of the Harmon Industrial Park Roadway that will be rehabilitated and improved, which is within the total cost of $3,700,000 that was identified in both PL 33-191 and PL 34-10. We have also identified the total expenditures of the A&E which amounts to $300,000, which was stipulated in the two public laws.

The Harmon Industrial Park Association (HIPA) will be taking the next steps of this public law by issuing a Request for Proposal for the initiation of the projects and the application of specific tax credits related to what was noted in PL 34-10. We thank the Guam Legislature for their support in improving the Harmon Industrial Park Roadway, which will be beneficial for island residents.

Sincerely,

Frank Shimizu

CC: **Senator Frank Aguon**
Guam Economic Development Agency

I Mina'Trentai Tres Na Liheslaturan Received
Bill Log Sheet

BILL NO.	SPONSOR	TITLE	DATE INTRODUCED	DATE REFERRED	CMTE REFERRED	PUBLIC HEARING DATE	DATE COMMITTEE REPORT FILED	FISCAL NOTES
PUBLIC LAW 33-191 285-33 (COR)	FRANK B. AGUON, JR.	AN ACT TO ADD A NEW ARTICLE 7 TO CHAPTER 77, DIVISION 2, TITLE 12, GUAM CODE ANNOTATED, RELATIVE TO TAX CREDITS FOR THE REHABILITATION AND IMPROVEMENT OF THE HARMON INDUSTRIAL PARK ROADWAY.	03/29/16 8:51 a.m.	03/31/16	Committee on Finance and Taxation, General Government Operations and Youth Development	09/30/16 3:00 p.m.	11/22/16 4:33 p.m.	Fiscal Note Request 04/01/16 Fiscal Note 04/15/16
	DATE PASSED	**TITLE**	**DATE AND TIME TRANSMITTED**		**DUE DATE**	**DATE SIGNED BY I MAGAS..I HEN GU..I HAN**	**PUBLIC LAW NO.**	**NOTES**
	12/03/16	AN ACT TO ADD A NEW ARTICLE 7 TO CHAPTER 77, DIVISION 2, TITLE 12, GUAM CODE ANNOTATED, RELATIVE TO AUTHORIZING CERTAIN BUSINESS PRIVILEGE TAX CREDITS AND USE EXCISE TAX CREDITS FOR THE REHABILITATION AND IMPROVEMENT OF THE HARMON INDUSTRIAL PARK ROADWAY.	12/05/16	4:50 p.m.	12/16/16	12/13/16	33-191	M&C No. 33GL-16-2256

TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

April 27, 2018

Harmon Industrial Park Association
c/o Ambros Inc.
124 Chalan Achote
Harmon Industrial Park
Tamuning, GU 96913

Attn: Mr. Frank Shimizu, President

Subject: **Harmon Industrial Park Roadway Rehabilitation and Improvement Design Projects**

Hafa Adai Frank,

TG Engineers, PC, in cooperation with the Harmon Industrial Park Assocation, has identified the list of design projects, including the total estimated cost, that would qualify under the tax credits of Public Law 34-10. We are submitting today with the intent of HIPA making the submittal for Legislative Approval on schedule, by May 01, 2018.

DESIGN PROJECTS

- **Ilipog Drive Rehabilitation and Improvement** - This project provides for the improvement of Ilipog Drive, from the Route 1/GTA intersection to the Harmon Industrial Park Roadway, by widening the existing 2-lane roadway to a 4-lane roadway to provide safety and increased capacity. This work includes erosion control, grading, surfacing, paving, striping, utility adjustment, and traffic control.

- **Harmon Industrial Park Roadway (Siket Ln to Old Flea Market)** - This project provides for the improvement of approximately 4,830 linear feet of Harmon Industrial Park Roadway, from Siket Ln to the Old Flea Market road, by widening the existing 2-lane roadway to a 3-lane roadway with a center turning lane. This work includes erosion control, grading, surfacing, paving, striping, utility adjustment, and traffic control.

- **Harmon Industrial Park Roadway to the DPW Hamburger Hwy Pavement Limit** - This project provides for the improvement of approximately 475 linear feet of new road construction from the Harmon Industrial Park Roadway to Hamburger Highway. This work includes erosion control, grading, surfacing, paving, striping, utility adjustment, and traffic control.

101 First Street Tiyan
Barrigada, GU 96913
Phone: (671)647-0808
Fax: (671)647-0886

ESTIMATED COST

Architectural and Engineering Design:	$ 300,000
Construction Management:	$ 397,000
Construction Cost:	$3,303,000
Total Cost	**$4,000,000**

Please note the Architectural and Engineering design fee and the $4 million total budget from P.L. 34-10 are incorporated in the budget summary.

We look forward to continue the collaborative working relationship with the HIPA. Should you have any questions, please don't hesitate to contact Jack Edward or myself at 647-0808 or via email at jacke@tg-engr.com or torg@tg-engr.com.

Si Yu'os Ma'ase,

Tor Gudmundsen, PE
TG Engineers, PC
President

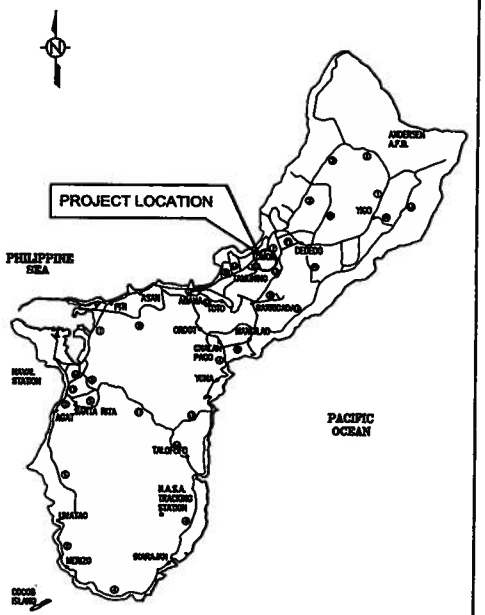
Attachments: Design Project Drawing

Cc (via email): Leonard Kaae
Monty McDowell
Bobby Shringi

HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

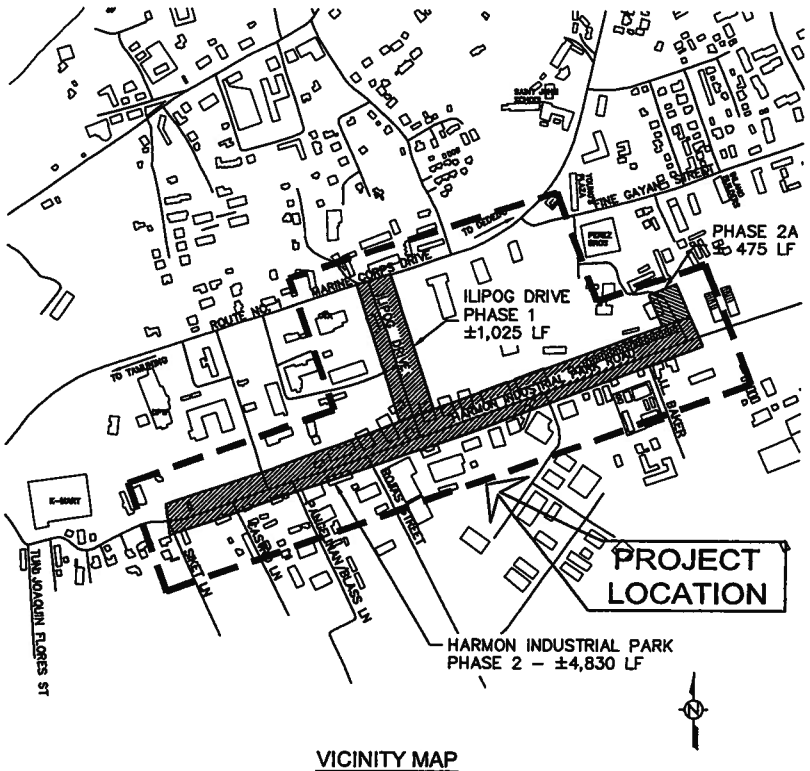
HARMON, GUAM

LOCATION MAP



KEY MAP OF GUAM
scale: nts

VICINITY MAP



VICINITY MAP
SCALE: NTS

SHEET INDEX

SHEET NO.	DWG. REF. NO.	TITLE
1 OF 19	T100	TITLE SHEET, LOCATION MAP AND VICINITY MAP
2 OF 19	T101	KEYPLAN
3 OF 19	T102	GENERAL NOTES
4 OF 19	T103	SUMMARY OF QUANTITIES
5 OF 19	C000	EXISTING SITE AND SURVEY PLAN
6 OF 19	C010	ALIGNMENT PLAN/DATA
7 OF 19	C020	TYPICAL ROAD SECTIONS
8 OF 19	C021	TYPICAL ROAD SECTIONS
9 OF 19	C101	PHASE 1 ILIPOG DRIVE IMPROVEMENT
10 OF 19	C102	PHASE 1 ILIPOG DRIVE IMPROVEMENT
11 OF 19	C201	PHASE 2 HARMON INDUSTRIAL ROAD IMPROVEMENT
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15 OF 19	C205	PHASE 2 HARMON INDUSTRIAL ROAD IMPROVEMENT
16 OF 19	C206	PHASE 2 HARMON INDUSTRIAL ROAD IMPROVEMENT
17 OF 19	C207	PHASE 2 HARMON INDUSTRIAL ROAD IMPROVEMENT
18 OF 19	C208	PHASE 2 HARMON INDUSTRIAL ROAD IMPROVEMENT
19 OF 19	C301	PHASE 2A HARMON INDUSTRIAL ROAD TO HAMBURGER HIGHWAY

DPW STD NO.	DPW STANDARD DRAWINGS
157-01	SILT FENCE DETAILS
157-02	TEMPORARY CURB INLET PROTECTION
403-01	ASPHALT PAVEMENT OVERLAY TRANSITIONS
604-09	MANHOLE COVER, FRAME, & CONCRETE COLLAR
633-01	ROADSIDE SIGN INSTALLATION
634-01	PAVEMENT MARKINGS AND DIRECTIONAL ARROW
634-02	2-LANE PAVEMENT MARKING
634-03	MULTI-LANE PAVEMENT MARKING
634-04	INTERSECTION PAVEMENT MARKING
635-01	CHANNELIZING DEVICES AND BARRICADES
635-02	LANE CLOSSURE ON TWO LANE HIGHWAY

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DRAWING REVISIONS

REVISION	DATE	BY	DESCRIPTION

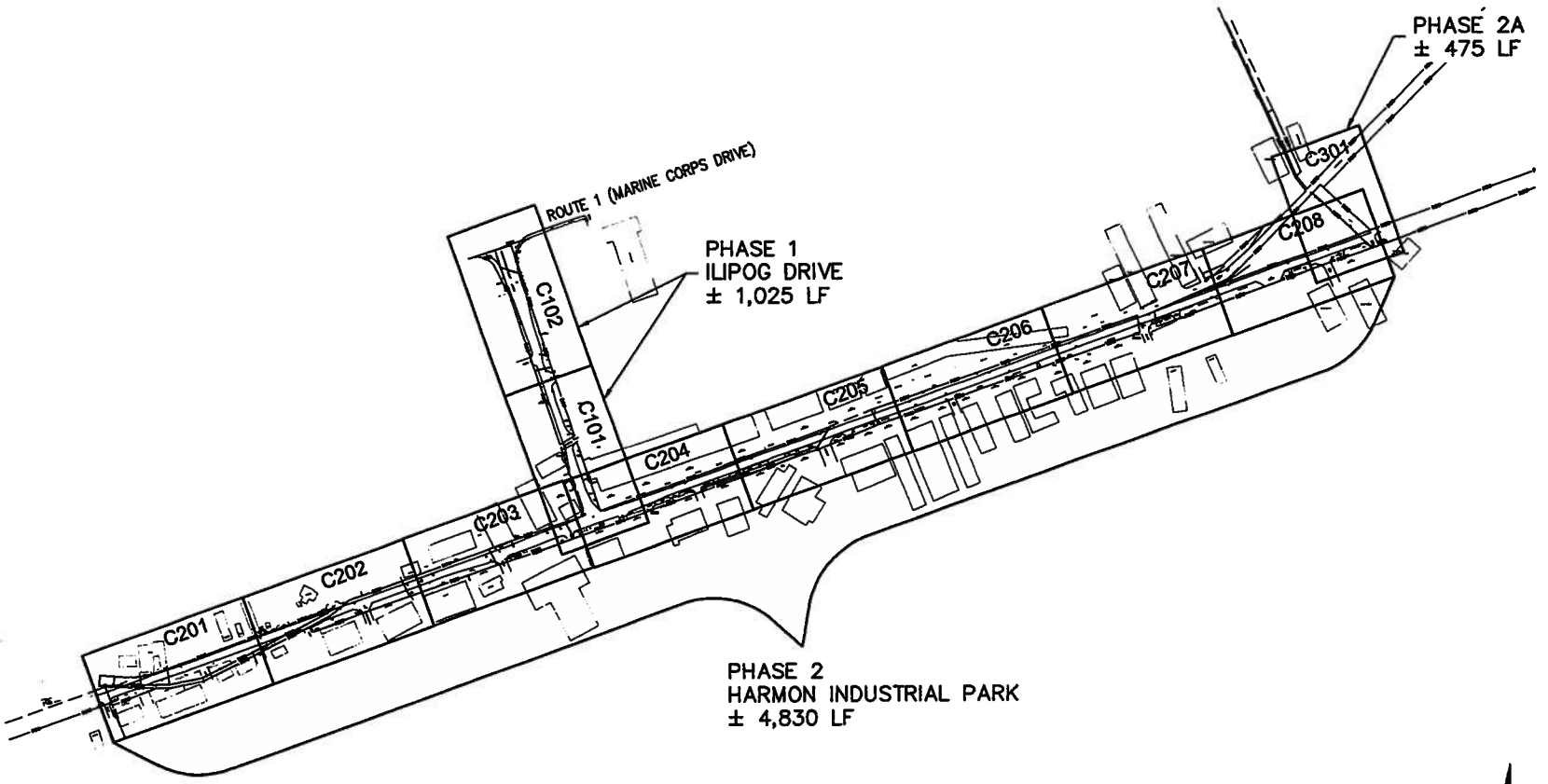
DESIGNER: JE
DRAFTER: RJ
CHECKER: TG/JE
DATE: MAY 01, 2018

TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

HARMON INDUSTRIAL PARK ROADWAY
REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS
TITLE SHEET

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	T100		



DRAWING REVISIONS				DESIGNER	TG ENGINEERS, PC	HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS	GUAM DEPARTMENT OF PUBLIC WORKS					
REVISION	DATE	BY	DESCRIPTION	JE	CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING	KEYMAP	VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
				DETAILER RJ			TIYAN	GUAM	HIPA	T101	1	
				CHECKER TG/JE								
				DATE MAY 01, 2018								

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GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS, DPW STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, 2012, FP-03, AND SCR'S INCLUDED IN THIS CONTRACT.
2. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ANY OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS MUST BE REMOVED FROM THE PUBLICLY OWNED PROPERTY EACH DAY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
3. EXISTING SUPER ELEVATION AND TRANSITIONS ARE TO BE MAINTAINED AT ALL LOCATIONS UNLESS OTHERWISE SHOWN ON THE PLANS.
4. ALL WORK IN THIS PROJECT, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, SHALL BE CONSTRUCTED WITHIN THE EXISTING RIGHT-OF-WAY OR APPROVED RIGHT-TO-ENTER (RTE) AREAS.
5. MAINTAIN READY ACCESS TO DRIVEWAYS, HOUSES, AND BUILDINGS ALONG THE LINE OF WORK.
6. ALL CONSTRUCTION WORK ZONE ACTIVITIES AND HARDWARE SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
7. ALL AREAS SUBJECT TO REMOVAL OF THE NATURAL VEGETATION DUE TO EARTHWORK OPERATIONS SHALL BE RESTORED WITH TURF PER SPECIFICATIONS. THIS INCLUDES ALL SLOPES AND AREAS DISTURBED BY THE CONTRACTOR NOT SHOWN ON THE PLANS. SALVAGE EXISTING TOPSOIL AND PLACE ON FINISHED SLOPES.
8. CONTRACTOR SHALL STOP WORK IMMEDIATELY AND NOTIFY THE CONTRACTING OFFICER IF ANY HISTORIC OR CULTURAL ITEMS ARE ENCOUNTERED.
9. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES WITHIN THE PROJECT LIMIT. UNDERGROUND UTILITIES ARE TAKEN FROM RECORD DRAWINGS, TO THE EXTENT AVAILABLE AND FIELD MARKINGS COMPLETED TO DATE.
10. VARIOUS UTILITIES SUCH AS TELEPHONE OR COMMUNICATION/HANDHOLES JUNCTION BOXES, WATER VALVES, MANHOLES, ETC. SHALL BE ADJUSTED TO FINAL GRADE AS NECESSARY. CARE SHALL BE EXERCISED TO PROTECT ALL EXISTING UTILITIES INDICATED TO BE PROTECTED. ANY DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE UTILITY OWNER. NOTIFY ALL UTILITY AGENCIES PRIOR TO EXCAVATION ACTIVITIES.
12. THE CONTRACTOR SHALL VERIFY AND CHECK THE DIMENSIONS AND DETAILS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER FOR CLARIFICATION AND RESOLUTION.
13. WITHIN THE PROJECT RIGHT-OF-WAY LIMITS ARE SITES THE CONTRACTOR MAY CONSIDER TO USE AS STAGING AREAS. THE CONTRACTOR SHALL SUBMIT A STAGING PLAN TO THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO USE.

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DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

DESIGNER: JE
DRAWN: RJ
CHECKER: TG/JE
DATE: MAY 01, 2018

TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

HARMON INDUSTRIAL PARK ROADWAY
REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS

GENERAL NOTES

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	T102	1	

SUMMARY OF QUANTITIES

STD ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	GROUPS		
				ILIPOG DRIVE	PHASE 2 - HARMON INDUSTRIAL PARK ROAD	PHASE 2A - HARMON INDUSTRIAL PARK TO HAMBURGER HIGHWAY
15101-0000	MOBILIZATION	LPSM	ALL	LPSM	LPSM	LPSM
15201-0000	CONSTRUCTION SURVEY AND STAKING	LPSM	ALL	LPSM	LPSM	LPSM
15401-0000	CONTRACTOR TESTING	LPSM	ALL	LPSM	LPSM	LPSM
15501-0000	CONSTRUCTION SCHEDULE	LPSM	ALL	LPSM	LPSM	LPSM
15701-0100	SOIL EROSION CONTROL	LPSM	ALL	LPSM	LPSM	LPSM
15801-0000	WATERING FOR DUST CONTROL	MGAL	80	15	35	15
20315-0000	SAWCUTTING PAVEMENT	LNFT	8,415	367	6,204	44
20401-0000	ROADWAY EXCAVATION INCL HAUL	CUYD	3,169	106	1,992	704
30102-0300	AGGREGATE BASE, 8-INCH DEPTH	SQYD	8,225	367	5,983	774
30107-0000	SUBBASE, 8-INCH DEPTH	CUYD	1,903	71	1,330	258
40201-XXXX	ASPHALT CONCRETE PAVEMENT, 2-INCH DEPTH	TON	2,991	321	2,139	132
40201-1010	HOT MIX ASPHALT (HMA) CONCRETE FRICTION COURSE, 1-INCH DEPTH	SQYD	2,564	2,564	0	0
41301-0000	ASPHALT PAVEMENT MILLING, 2" DEPTH	SQYD	16,720	1,520	12,800	0
41301-0200	ASPHALT PAVEMENT MILLING, 1" DEPTH	SQYD	2,564	2,564	0	0
61208-XXXX	ADJUST UTILITY COVER WITH CONCRETE COLLAR	EACH	54	6	38	2
63301-0009	SIGN SYSTEM (36" X 36") - STOP SIGN	EACH	13	1	9	1
63301-XXXX	SIGN SYSTEM (STREET SIGN)	EACH	10	0	7	1
63401-1501	PAVEMENT MARKINGS, TYPE H, 4-INCH WIDE SOLID LINE, WHITE	LNFT	13,612	2,152	9,660	0
63401-1503	PAVEMENT MARKINGS, TYPE H, 4-INCH WIDE SOLID LINE, YELLOW	LNFT	14,034	1,624	9,660	950
63401-1506	PAVEMENT MARKINGS, TYPE H, CROSSWALK/STOP, 12-INCH WIDE SOLID LINE, WHITE	LNFT	862	192	634	12
63401-1601	PAVEMENT MARKINGS, TYPE H, 4-INCH WIDE, BROKEN LINE, YELLOW	LNFT	10,180	0	8,380	0
63401-1602	PAVEMENT MARKINGS, TYPE H, 4-INCH WIDE, BROKEN LINE, WHITE	LNFT	1,752	1,752	0	0
63405-2900	PAVEMENT MARKINGS, TYPE H, TURN ARROW	EACH	42	12	22	4
63405-2950	PAVEMENT MARKINGS, TYPE H, STRAIGHT ARROW	EACH	30	0	22	4
63405-3000	PAVEMENT MARKINGS, TYPE H, STRAIGHT/TURN ARROW COMBINATION	EACH	3	3	0	0
63406-0201	RAISED PAVEMENT MARKER, REFLECTORIZED 2-WAY, TYPE "YY"	EACH	2,335	147	1,731	119
63406-02XX	RAISED PAVEMENT MARKER, REFLECTORIZED 2-WAY, TYPE "CR"	EACH	55	55	0	0
63406-02XX	RAISED PAVEMENT MARKER, REFLECTORIZED 2-WAY, TYPE "BB"	EACH	9	2	5	0
63501-0000	TEMPORARY TRAFFIC CONTROL	LPSM	ALL	LPSM	LPSM	LPSM
63701-0100	FIELD OFFICE	LPSM	ALL	LPSM	LPSM	LPSM

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DRAWING REVISIONS

REVISION	DATE	BY	DESCRIPTION

DESIGNER: JE
DETAILER: RJ
CHECKER: TG/JE
DATE: MAY 01, 2018

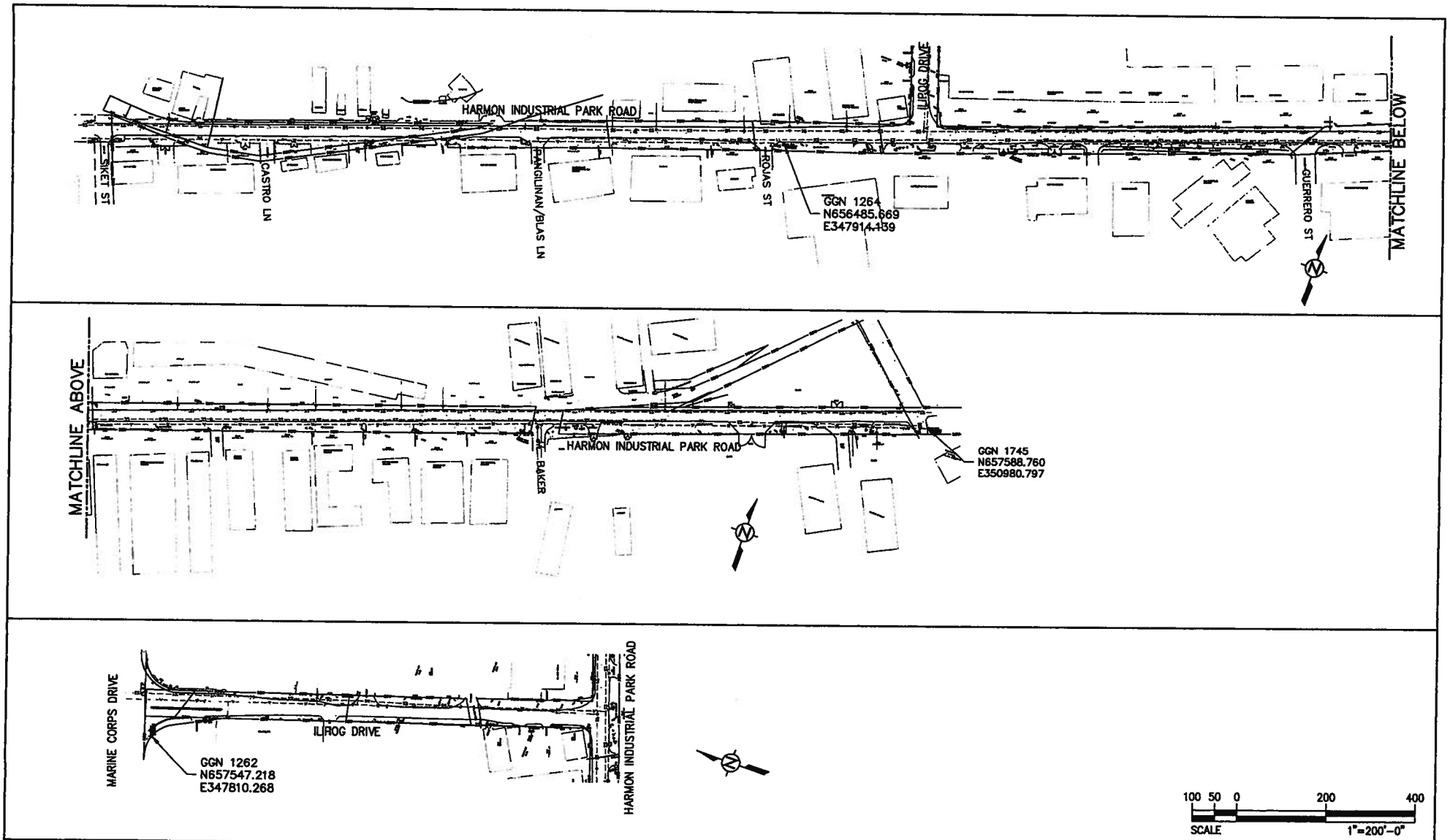
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CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

SUMMARY OF QUANTITIES

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	T103	1	



DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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DESIGNER	JE
DETAILER	RJ
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DATE	MAY 01, 2018

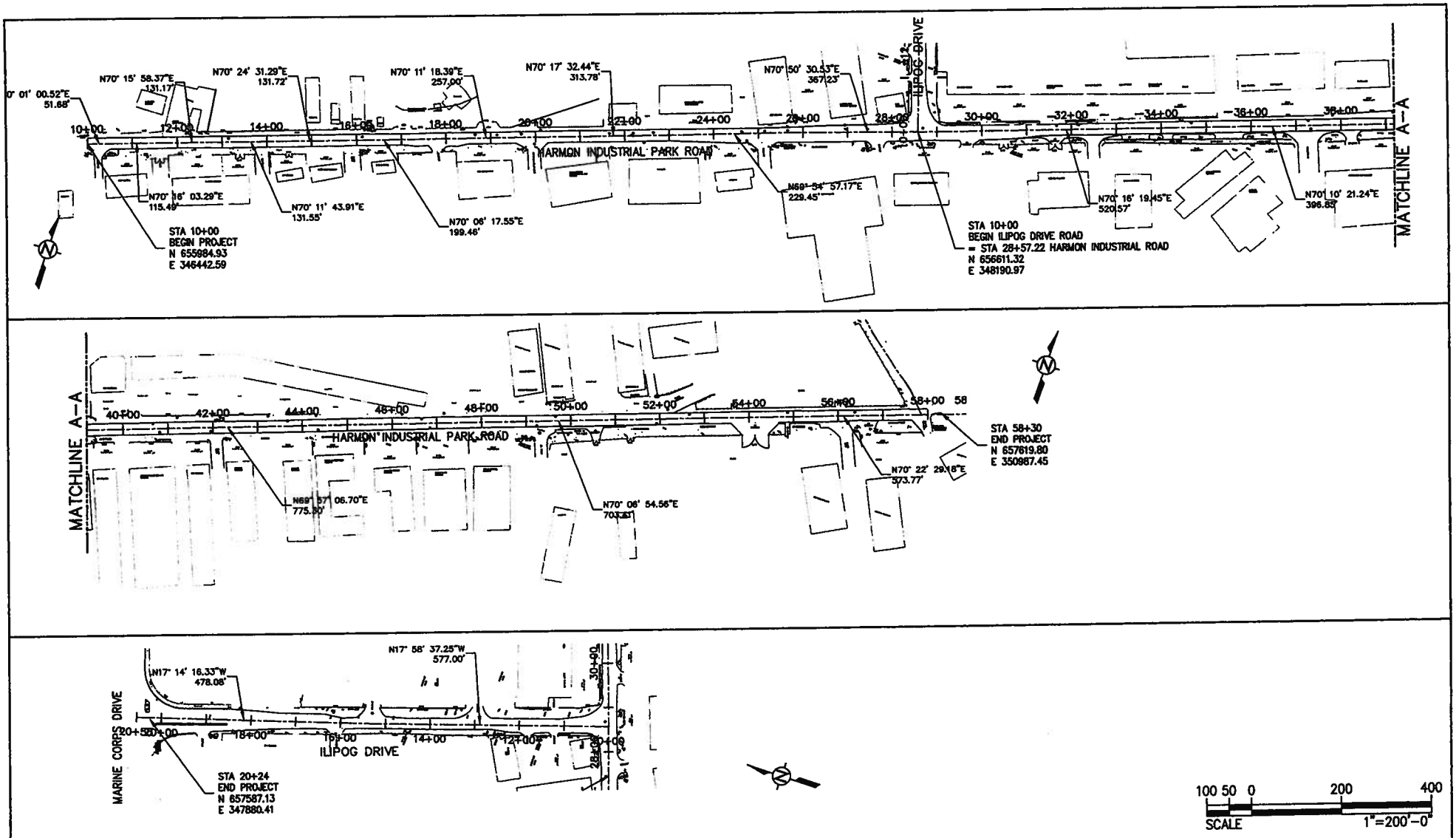
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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

EXISTING SITE AND SURVEY PLAN

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C000	1	



DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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DESIGNER	JE
DETAILER	RJ
CHECKER	TG/JE
DATE	MAY 01, 2018

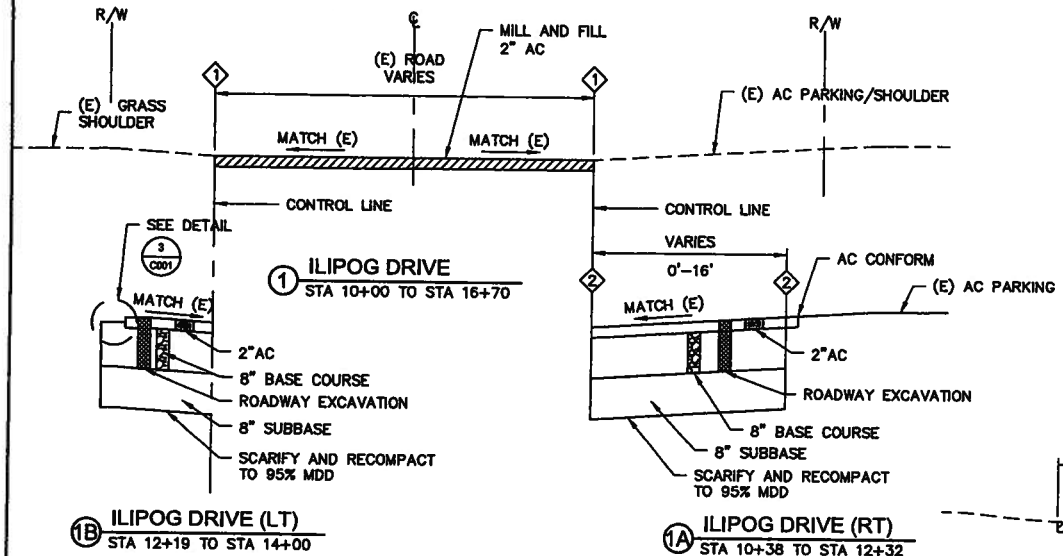
TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

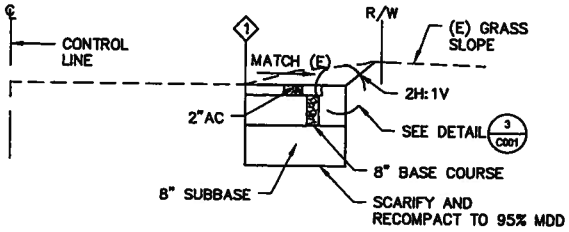
HARMON INDUSTRIAL PARK ROADWAY
REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS

ALIGNMENT PLAN AND DATA

GUAM
DEPARTMENT OF PUBLIC WORKS

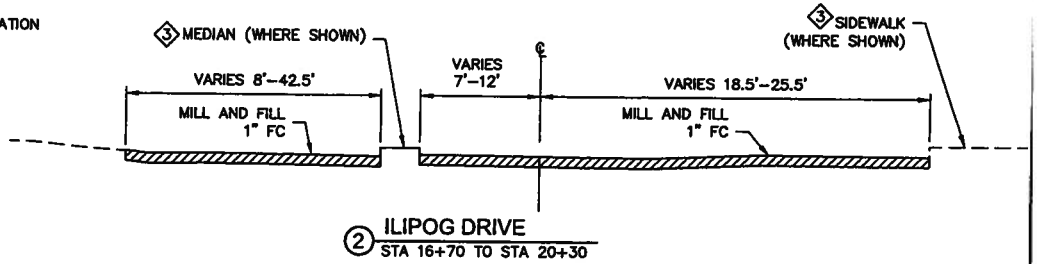
VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C010	1	

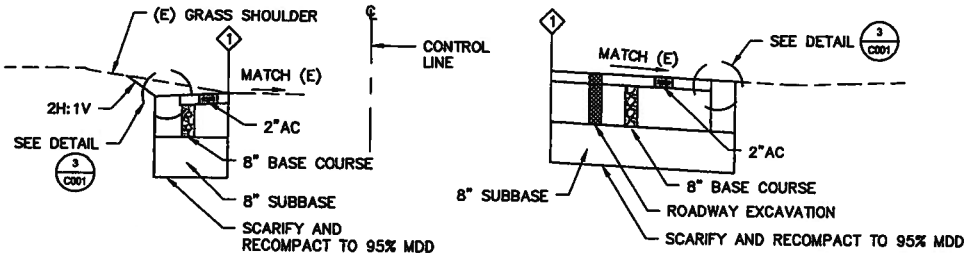


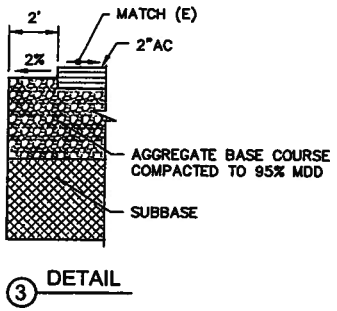


KEYNOTES

1. (E) EOP
2. SAWCUT
3. PROTECT IN PLACE







DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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DESIGNER: JE
DETAILER: RJ
CHECKER: TG/JE
DATE: MAY 01, 2018

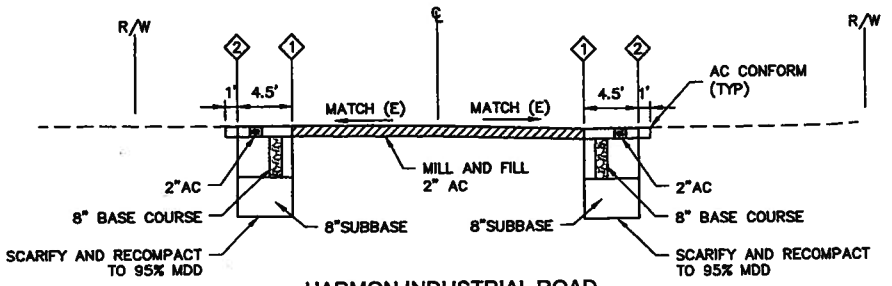
TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

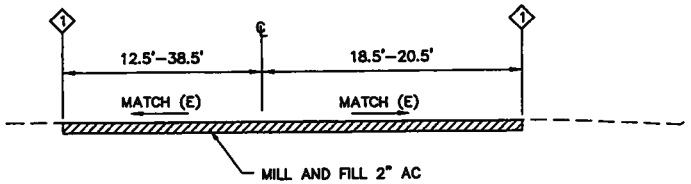
TYPICAL ROADWAY SECTIONS

GUAM
DEPARTMENT OF PUBLIC WORKS

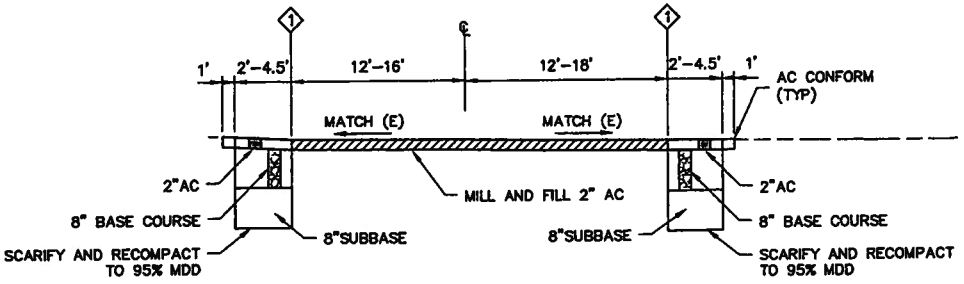
VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C020	1	



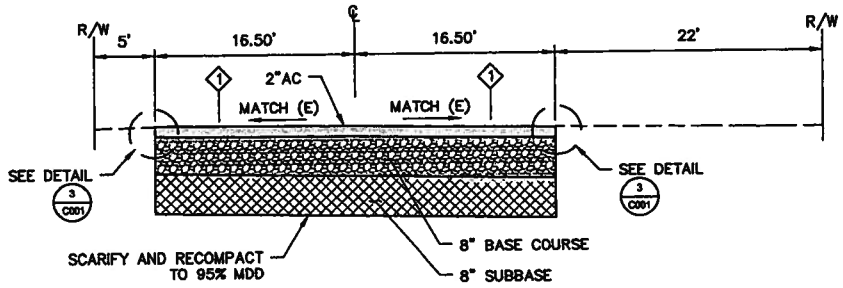
1 HARMON INDUSTRIAL ROAD
STA 10+00 TO STA 26+00



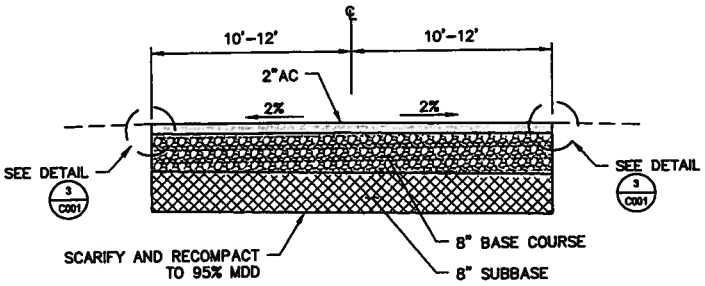
2 HARMON INDUSTRIAL ROAD
STA 26+00 TO STA 29+08



3 HARMON INDUSTRIAL ROAD
STA 29+08 TO STA 58+00



4 HARMON INDUSTRIAL ROAD
STA 58+00 TO STA 58+30



5 PHASE 2A
10+00 – 14+75

DRAWING REVISIONS				DESIGNER	JE
REVISION	DATE	BY	DESCRIPTION	DETAILER	RJ
				CHECKER	TG/JE
				DATE	MAY 01, 2018

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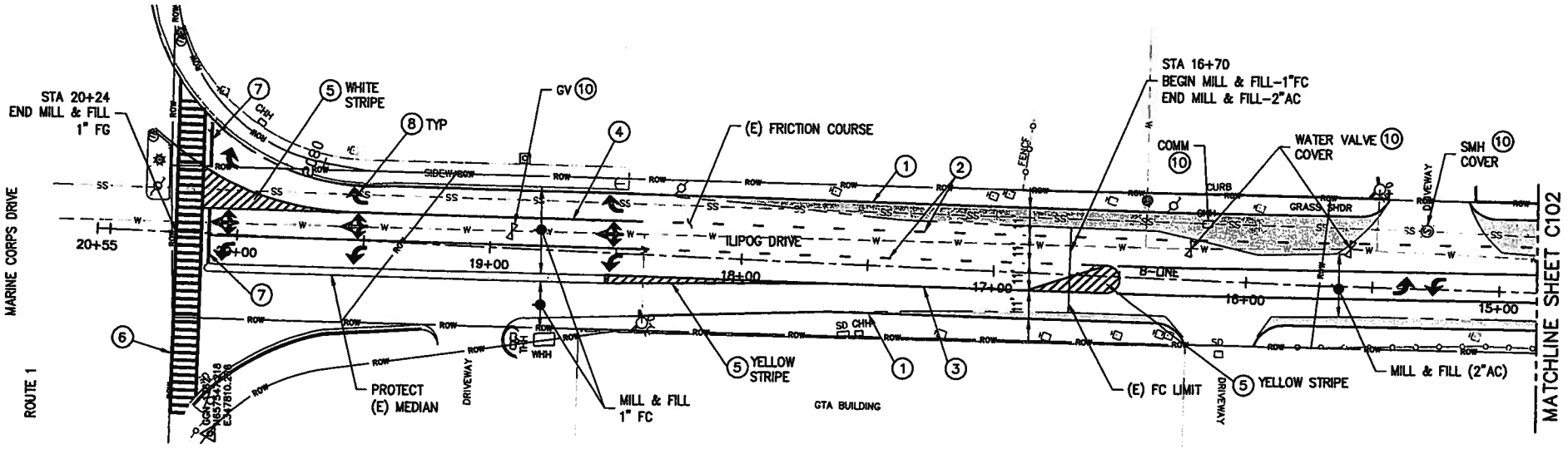
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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

TYPICAL ROADWAY SECTIONS

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C021	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN PER DPW STD DWG 633-01

LEGEND

- FULL DEPTH RECONSTRUCTION
- ROW — RIGHT OF WAY
- SAWCUT LINE

NOTES:

1. STRIPING SHALL BE THERMOPLASTIC MATERIAL (TYPE H) IN ACCORDANCE WITH DPW STANDARDS.
2. ILIPOG DRIVE SHALL BE RESTRIPED FOLLOWING DPW STANDARDS FOR MULTI-LANE WITH DOUBLE CENTERLINES AND WITH CENTER TURNING LANE AS SHOWN ON DPW STANDARD DRAWING 634-03.

20 10 0 40 80
SCALE 1"=40'-0"

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DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

DESIGNER JE
DETAILER RJ
CHECKER TG/JE
DATE MAY 01, 2018

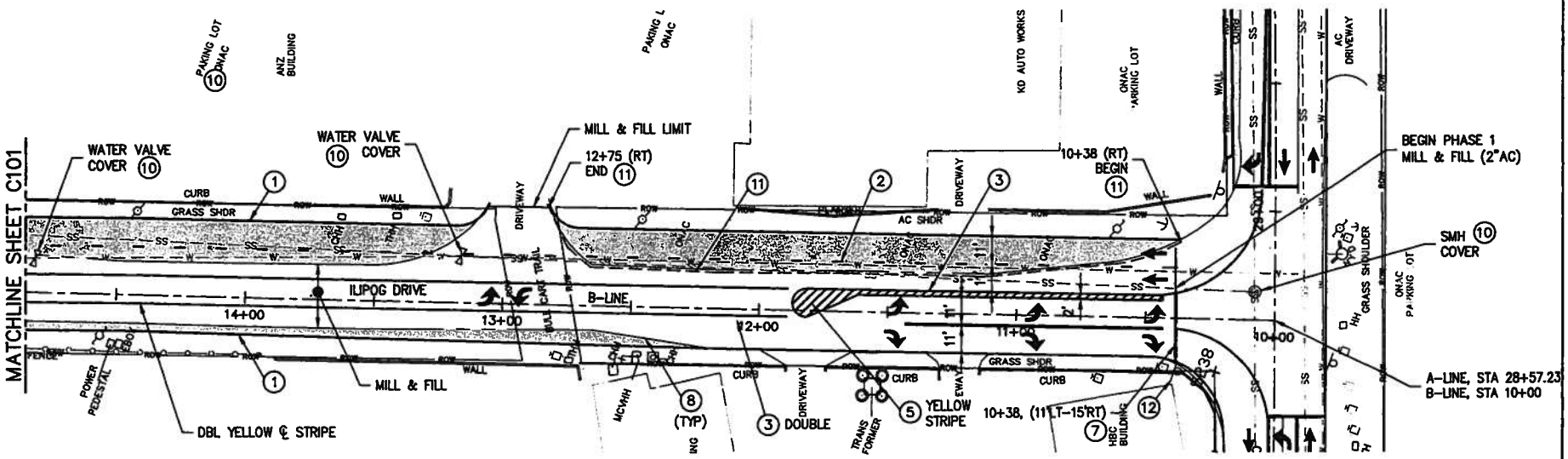
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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

PHASE 1 - ILIPOG DRIVE IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C101	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN PER DPW STD DWG 633-01

NOTES:

1. STRIPING SHALL BE THERMOPLASTIC MATERIAL (TYPE H) IN ACCORDANCE WITH DPW STANDARDS.
2. ILIPOG DRIVE SHALL BE RESTRIPED FOLLOWING DPW STANDARDS FOR MULTI-LANE WITH DOUBLE CENTERLINES AND WITH CENTER TURNING LANE AS SHOWN ON DPW STANDARD DRAWING 634-03.
3. HARMON INDUSTRIAL PARK ROAD SHALL BE RESTRIPED FOLLOWING DPW STANDARDS FOR 2-LANE WITH CENTER TURNING LANE AS SHOWN ON DPW STANDARD DRAWING 634-02.

SCALE 20 10 0 40 80
1"=40'-0"

This work was prepared by me or under my responsible control

DRAWING REVISIONS

REVISION	DATE	BY	DESCRIPTION

DESIGNER JE
DRAWER RJ
CHECKER TG/JE
DATE MAY 01, 2018

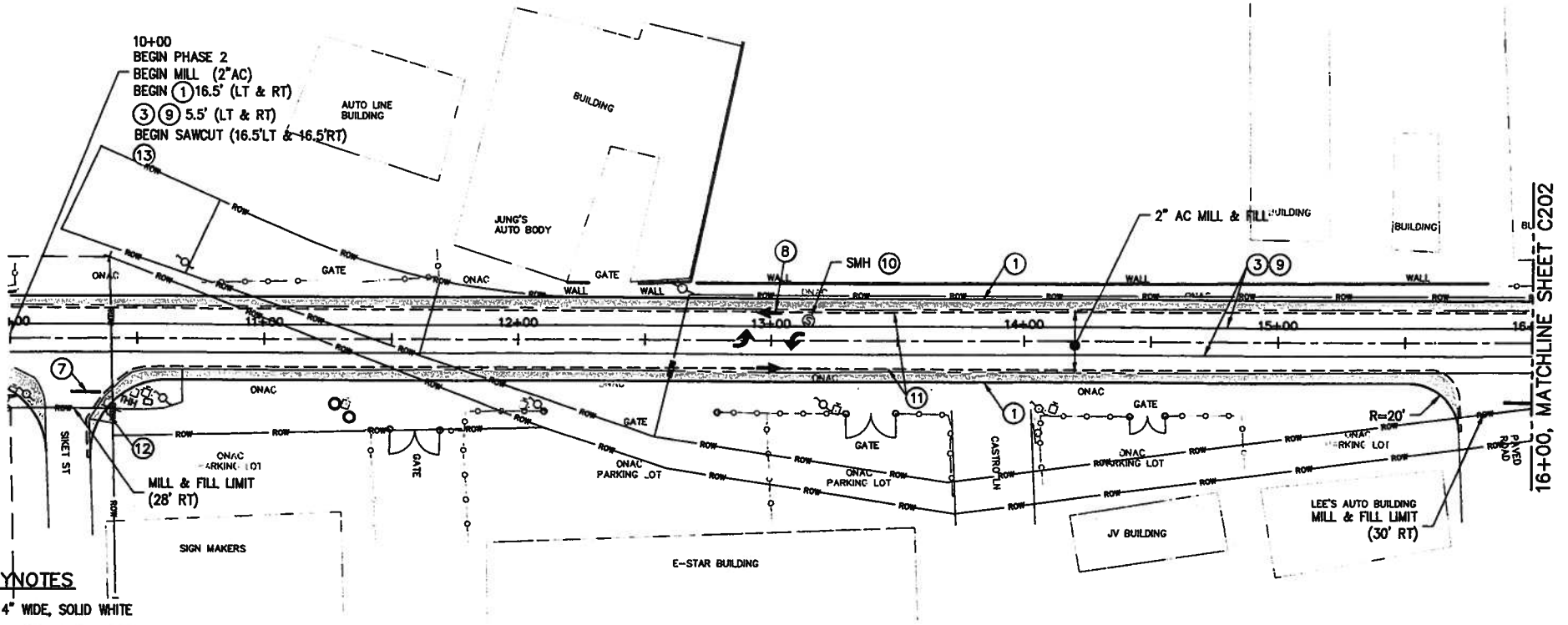
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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS

PHASE 1 - ILIPOG DRIVE IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C102	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634–01
7. STOP BAR, DPW STD DWG 634–01
8. DIRECTIONAL ARROW, DPW STD DWG 634–01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604–09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633–01
13. PROVIDE BUTT JOINT–LONGITUDINAL TRANSITION PER DPW STD DWG 603–01

LEGEND

- FULL DEPTH RECONSTRUCTION
- ROW — RIGHT OF WAY
- SAWCUT LINE

NOTES:

1. STRIPING SHALL BE THERMOPLASTIC MATERIAL (TYPE H) IN ACCORDANCE WITH DPW STANDARDS.
2. HARMON INDUSTRIAL PARK ROAD SHALL BE RESTRIPED FOLLOWING DPW STANDARDS FOR 2–LANE WITH CENTER TURNING LANE AS SHOWN ON DPW STANDARD DRAWING 634–02.

SCALE 20 10 0 40 80 — 1"=40'–0"

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DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

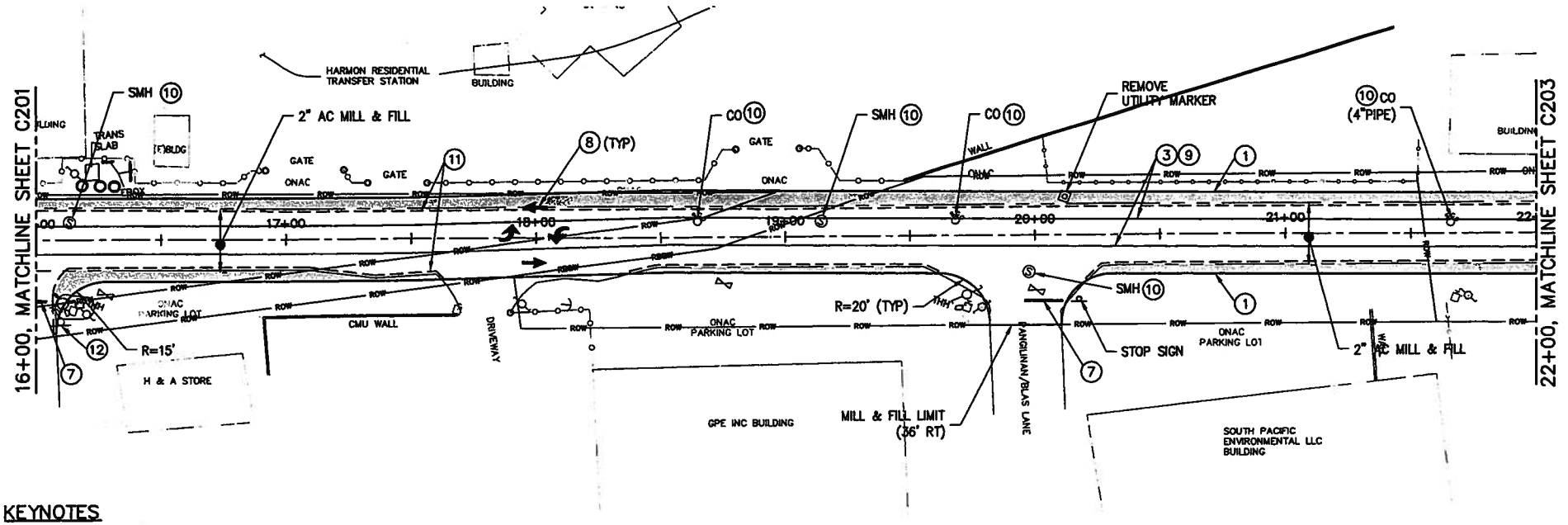
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DETAILER: RJ
CHECKER: TG/JE
DATE: MAY 01, 2018

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HARMON INDUSTRIAL PARK ROADWAY
REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD
IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C201	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633-01
13. PROVIDE BUTT JOINT-LONGITUDINAL TRANSITION PER DPW STD DWG 603-01

LEGEND

- FULL DEPTH RECONSTRUCTION
- ROW — RIGHT OF WAY
- SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

SCALE 20 10 0 40 80
1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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DESIGNER: JE
DETAILER: RJ
CHECKER: TG/JE
DATE: MAY 01, 2018

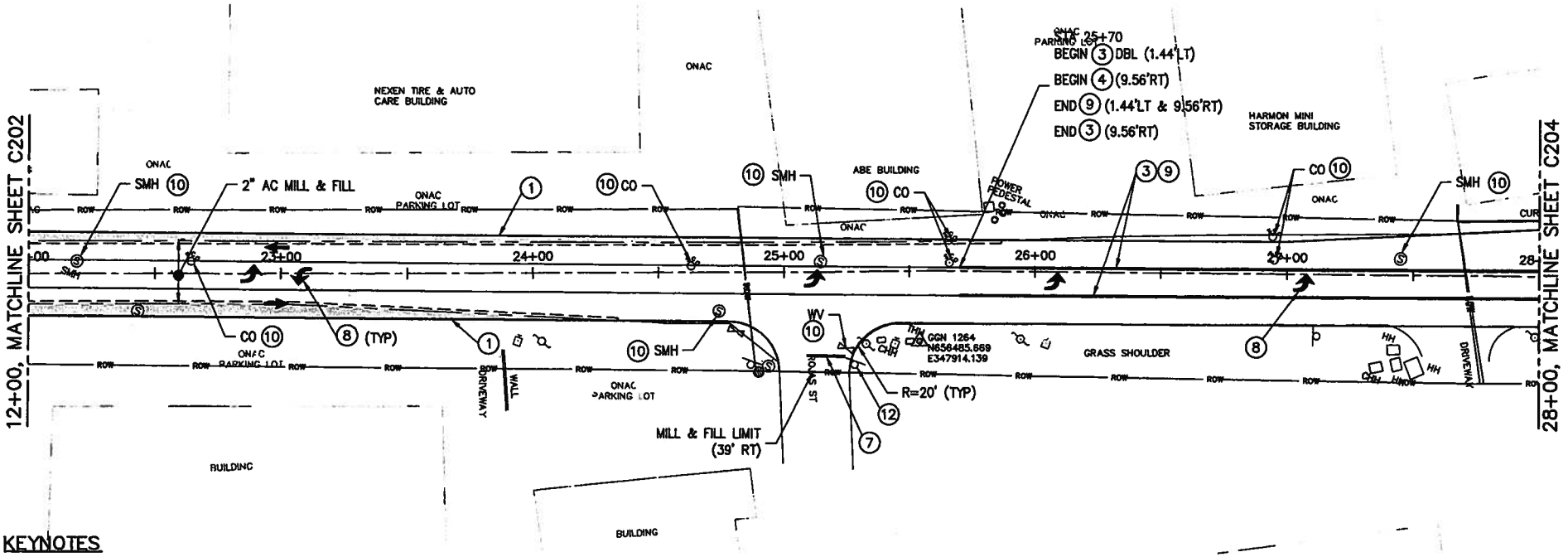
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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C202	1	

C201 1



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634–01
7. STOP BAR, DPW STD DWG 634–01
8. DIRECTIONAL ARROW, DPW STD DWG 634–01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604–09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633–01
13. PROVIDE BUTT JOINT–LONGITUDINAL TRANSITION PER DPW STD DWG 603–01

LEGEND

FULL DEPTH RECONSTRUCTION

ROW — RIGHT OF WAY

SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

20 10 0 40 80
SCALE 1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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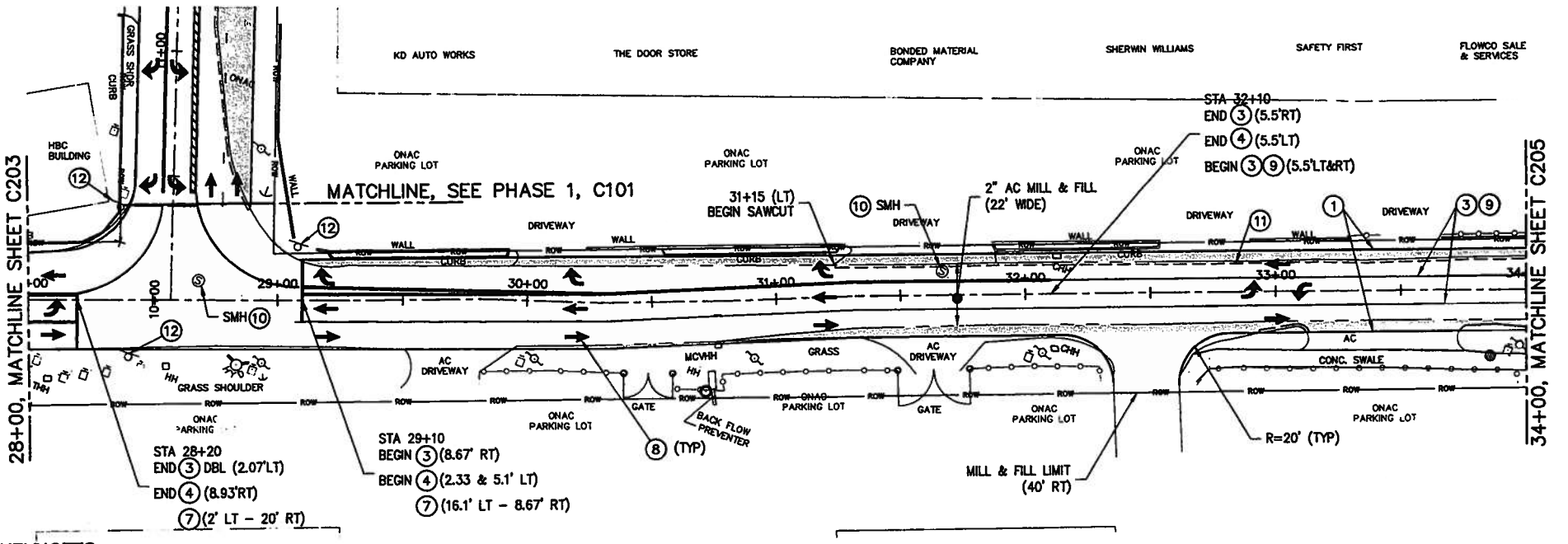
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DATE MAY 01, 2018

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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C203	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633-01
13. PROVIDE BUTT JOINT-LONGITUDINAL TRANSITION PER DPW STD DWG 603-01

LEGEND

FULL DEPTH RECONSTRUCTION

ROW — RIGHT OF WAY

SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

SCALE 20 10 0 40 80 — 1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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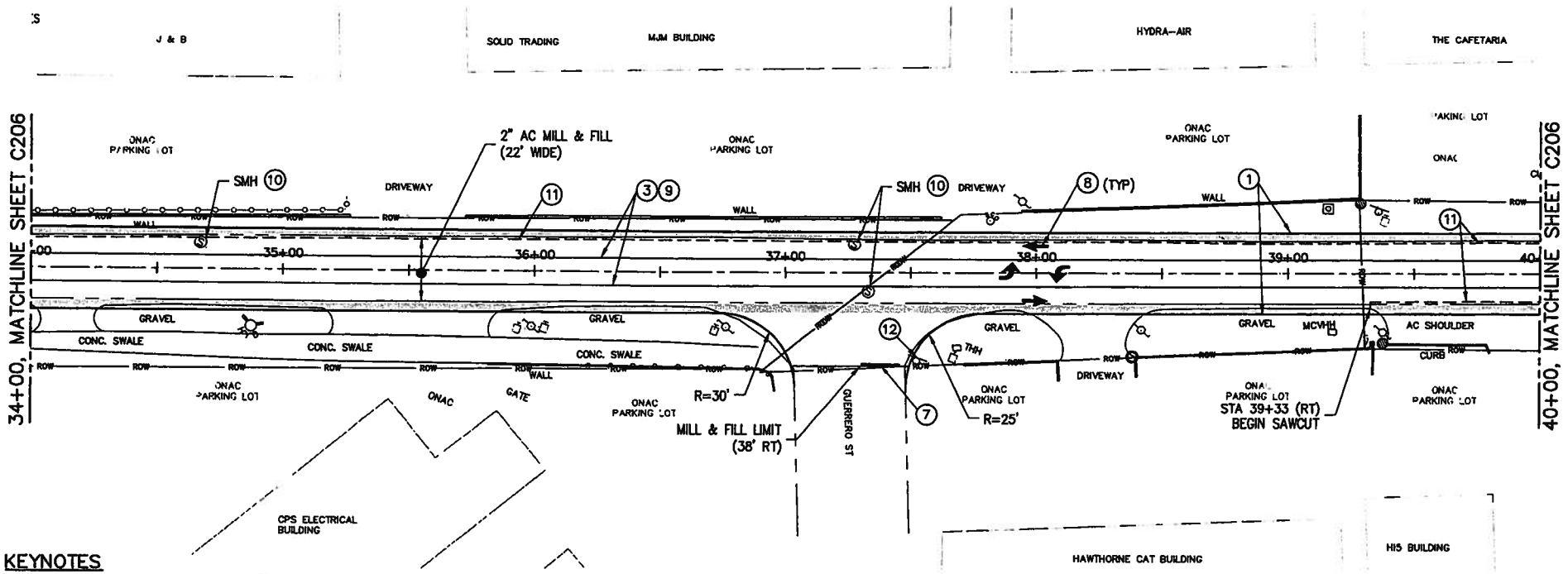
DESIGNER JE
DETAILER RJ
CHECKER TG/JE
DATE MAY 01, 2018

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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C204	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633-01
13. PROVIDE BUTT JOINT-LONGITUDINAL TRANSITION PER DPW STD DWG 603-01

LEGEND

- FULL DEPTH RECONSTRUCTION
- ROW — RIGHT OF WAY
- SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

SCALE 20 10 0 40 80 — 1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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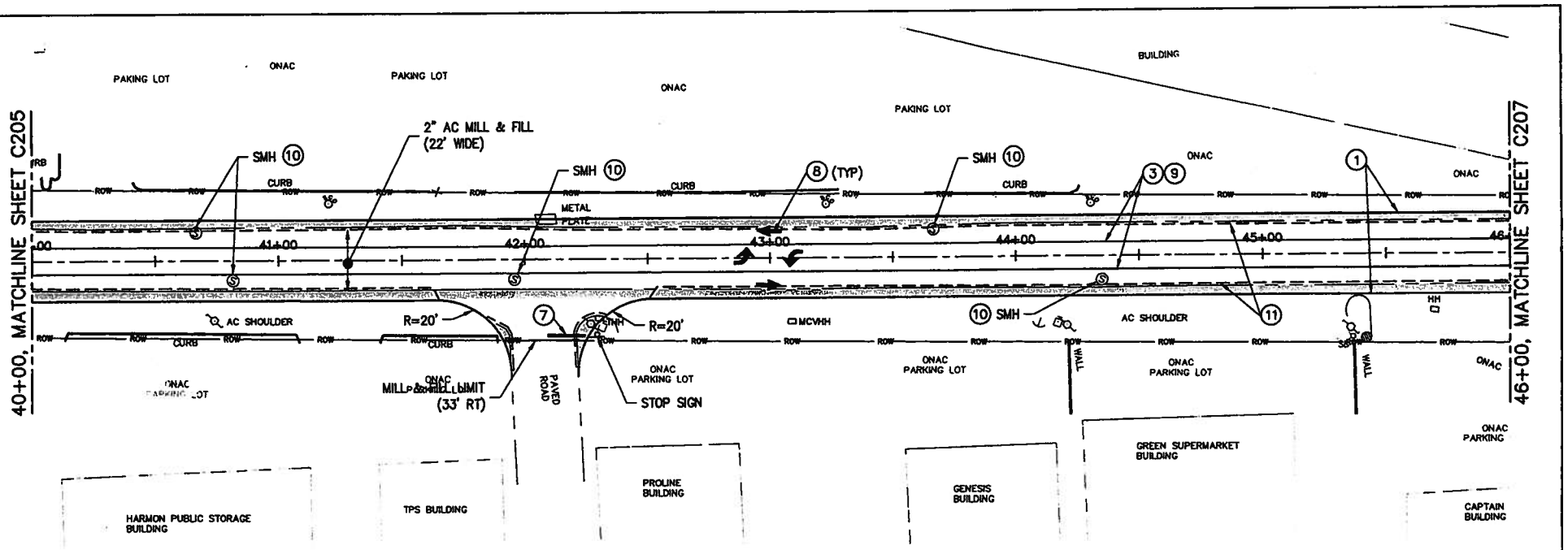
DESIGNER JE
DETAILER RJ
CHECKER TG/JE
DATE MAY 01, 2018

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HARMON INDUSTRIAL PARK ROADWAY
REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C205	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633-01
13. PROVIDE BUTT JOINT-LONGITUDINAL TRANSITION PER DPW STD DWG 603-01

LEGEND

FULL DEPTH RECONSTRUCTION

ROW — RIGHT OF WAY

SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

20 10 0 40 80
SCALE 1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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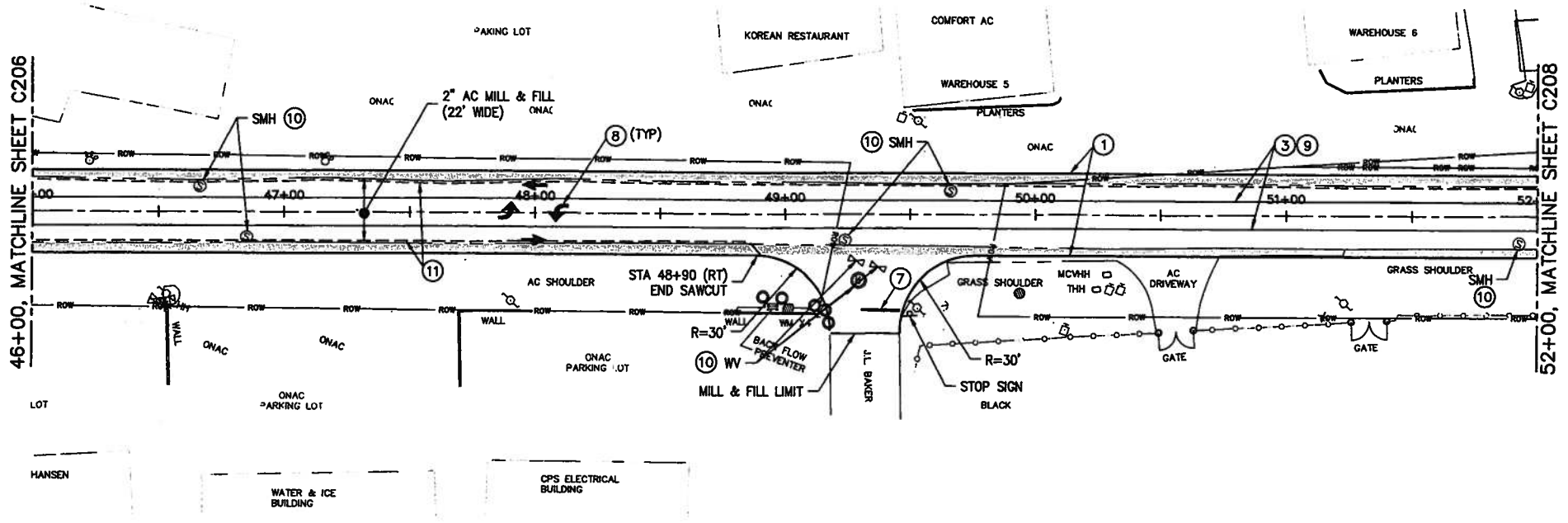
DESIGNER JE
DETAILER RJ
CHECKER TG/JE
DATE MAY 01, 2018

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HARMON INDUSTRIAL PARK ROADWAY
REHABILITATION AND IMPROVEMENT
DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C206	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634–01
7. STOP BAR, DPW STD DWG 634–01
8. DIRECTIONAL ARROW, DPW STD DWG 634–01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604–09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633–01
13. PROVIDE BUTT JOINT–LONGITUDINAL TRANSITION PER DPW STD DWG 603–01

LEGEND

- FULL DEPTH RECONSTRUCTION
- ROW — RIGHT OF WAY
- SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

SCALE 20 10 0 40 80 — 1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

This work was prepared by me or under my responsible control

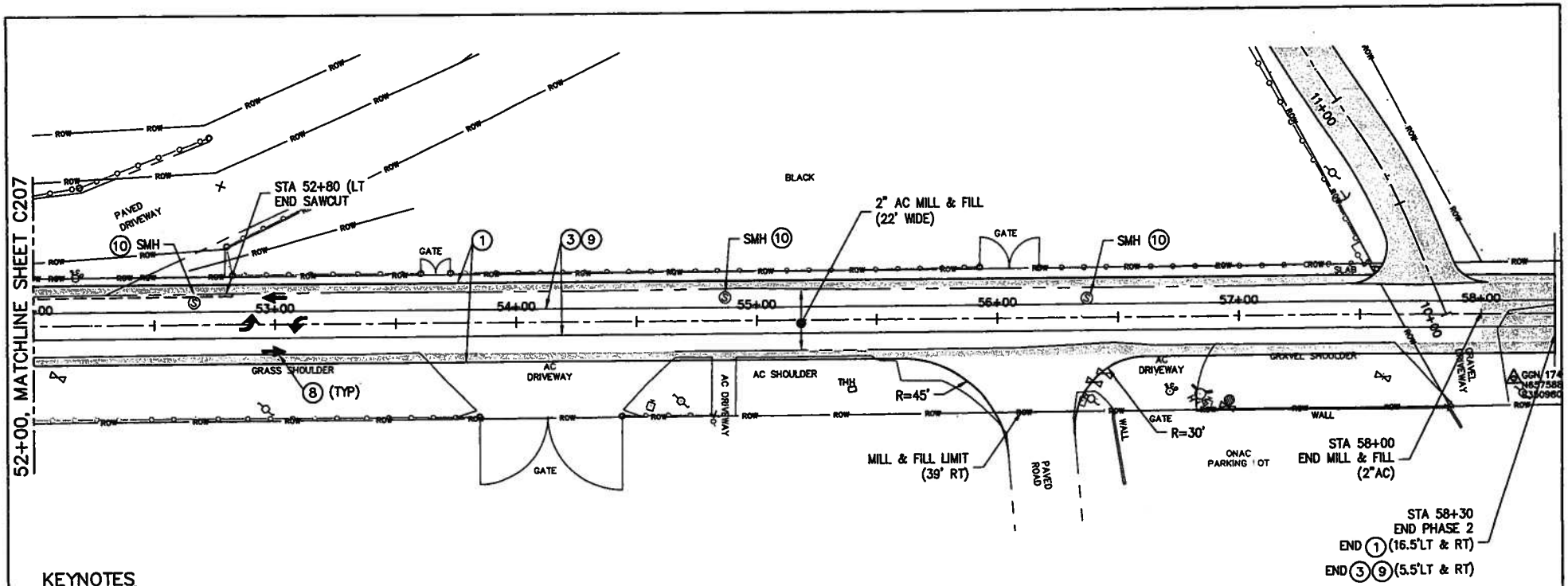
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DATE MAY 01, 2018

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HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C207	1	



KEYNOTES

1. 4" WIDE, SOLID WHITE
2. 4" WIDE, BROKEN WHITE
3. 4" WIDE, SOLID YELLOW
4. 12" WIDE, SOLID WHITE
5. DIAGONAL STRIPING WITH RPM
6. CROSSWALK, DPW STD DWG 634-01
7. STOP BAR, DPW STD DWG 634-01
8. DIRECTIONAL ARROW, DPW STD DWG 634-01
9. 4" WIDE, BROKEN YELLOW
10. ADJUST UTILITY COVER W/ CONCRETE COLLAR, SEE DPW STD DWG 604-09
11. SAWCUT LINE
12. REPLACE STOP SIGN AND STREET SIGN PER DPW STD DWG 633-01
13. PROVIDE BUTT JOINT-LONGITUDINAL TRANSITION PER DPW STD DWG 603-01

LEGEND

FULL DEPTH RECONSTRUCTION

ROW RIGHT OF WAY

SAWCUT LINE

NOTE:
SEE NOTES ON SHEET C201

SCALE 20 10 0 40 80 1"=40'-0"

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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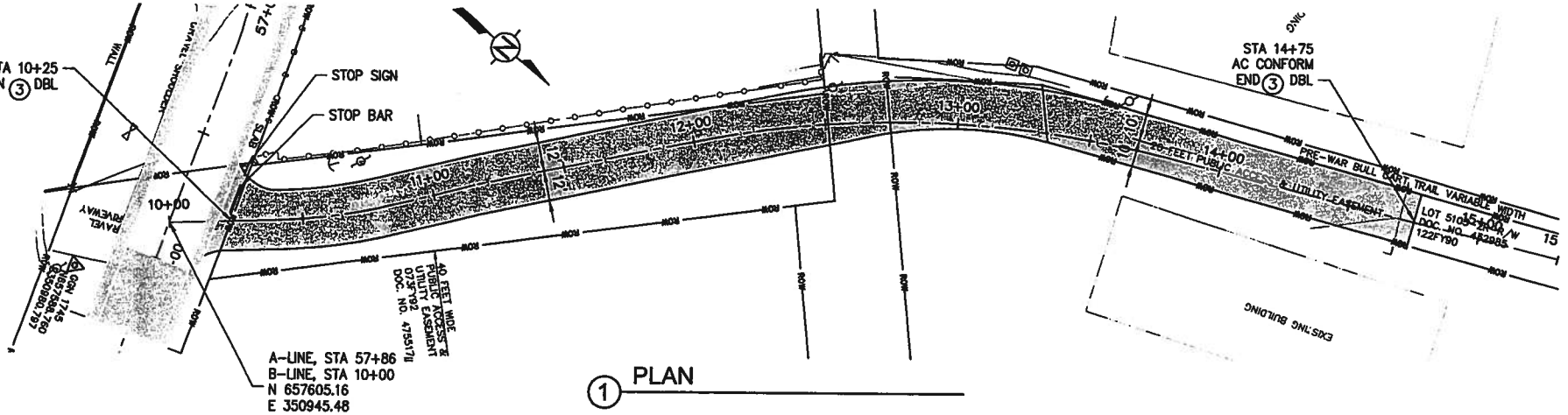
DESIGNER JE
DETAILER RJ
CHECKER TG/JE
DATE MAY 01, 2018

TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

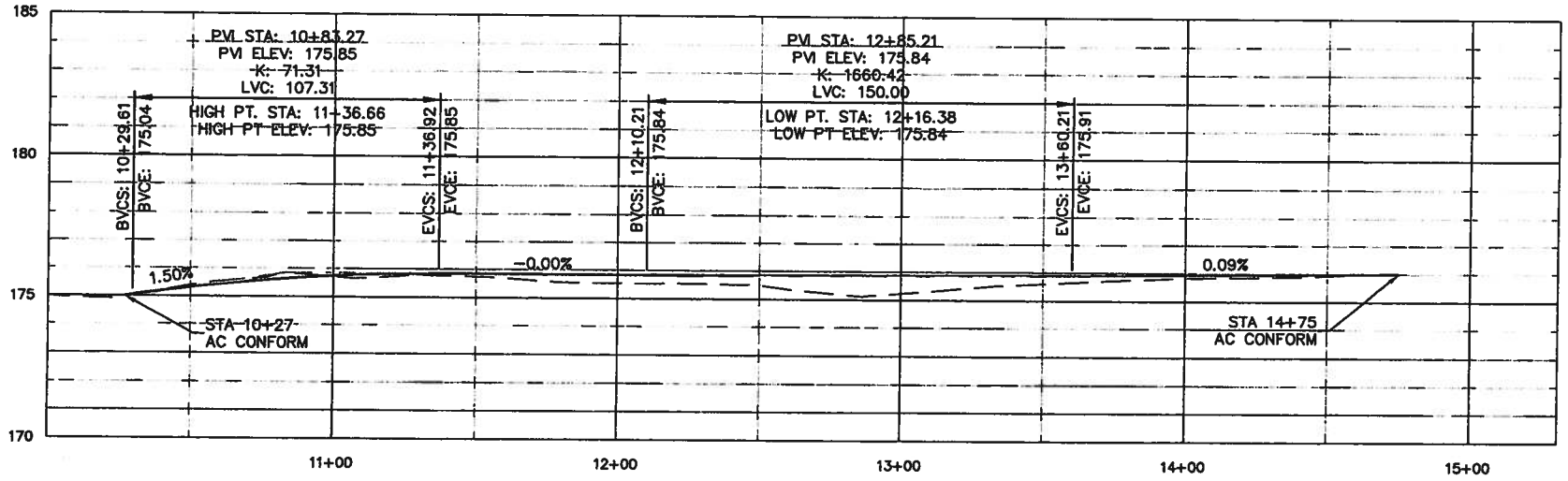
HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS
PHASE 2 - HARMON INDUSTRIAL PARK ROAD IMPROVEMENT

GUAM
DEPARTMENT OF PUBLIC WORKS

VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C208	1	



① PLAN



② PROFILE

20 10 0 40 80
SCALE 1"=40'-0"

DRAWING REVISIONS				DESIGNER	JE
REVISION	DATE	BY	DESCRIPTION	DETAILER	RJ
				CHECKER	TG/JE
				DATE	MAY 01, 2018

This work was prepared by me or under my responsible control

TG ENGINEERS, PC
CIVIL ENGINEERING, PLANNING, CONSTRUCTION MANAGEMENT & LAND SURVEYING

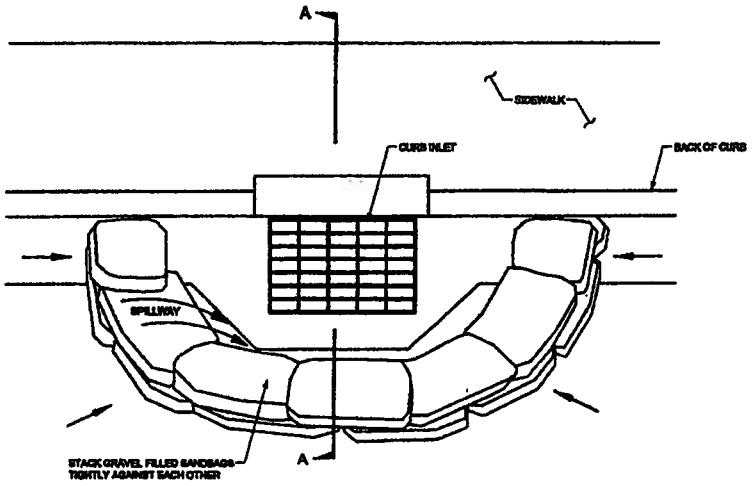
HARMON INDUSTRIAL PARK ROADWAY REHABILITATION AND IMPROVEMENT DESIGN PROJECTS
PHASE 2A - HARMON INDUSTRIAL ROAD TO HAMBURGER HIGHWAY

GUAM
DEPARTMENT OF PUBLIC WORKS

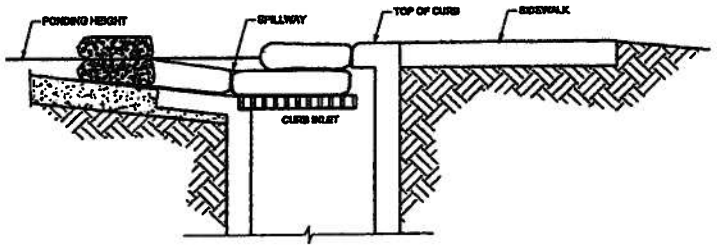
VILLAGE	TERRITORY	PROJECT	DRAWING	SHEET NO.	TOTAL NO.
TIYAN	GUAM	HIPA	C301	1	

GENERAL NOTES:

1. PLACE CURB INLET PROTECTION AT A LOW POINT IN THE CURB PROFILE TO ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS, OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, SHALL BE FILLED WITH GRAVEL, AND STACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW. TOP OF THE SPILLWAY SHALL BE BELOW THE TOP OF CURB ELEVATION.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT.



PLAN VIEW



SECTION A - A

SIGNED ORIGINAL ON FILE

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

Guam Department of Public Works
542 North Marine Corps Drive
Tamuning, Guam 96913
Tel: (671) 646-3131
Fax: (671) 649-6178

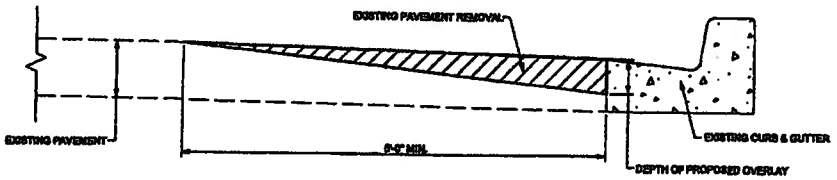
TEMPORARY CURB INLET PROTECTION

APPROVED FOR USE ON DPW PROJECTS

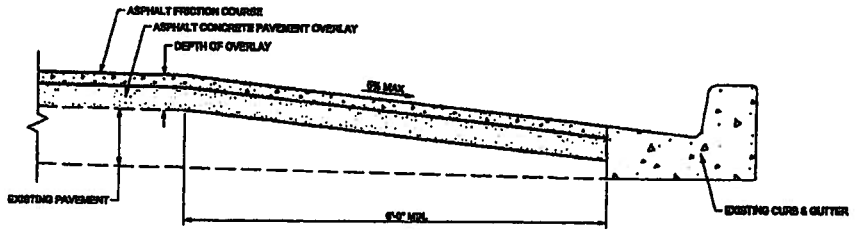
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 10-14-12

STANDARD NO. 157-02

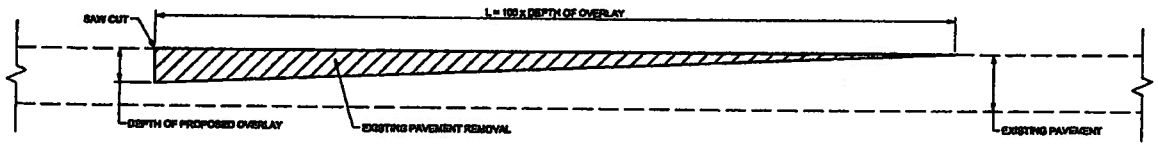


PAVEMENT REMOVAL

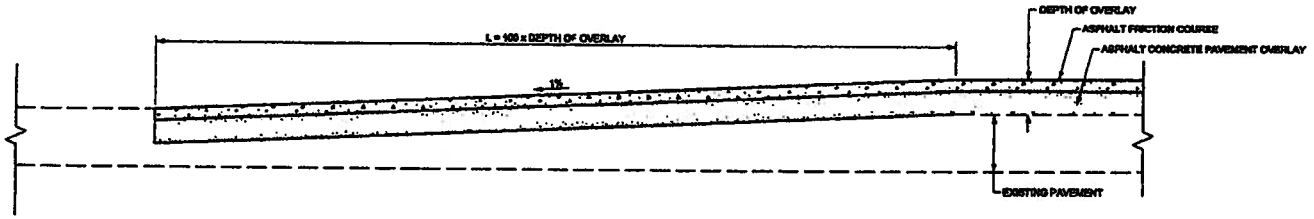


PAVEMENT OVERLAY

TAPER DETAIL FOR EXISTING CURB & GUTTER



PAVEMENT REMOVAL



PAVEMENT OVERLAY

BUTT JOINT- LONGITUDINAL SECTION

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DRAWING REVISIONS

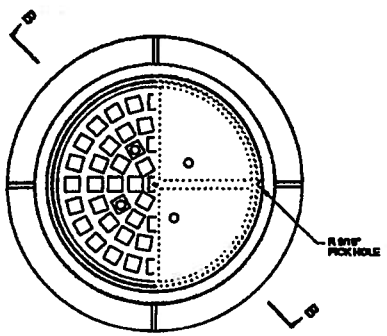
REVISION	DATE	BY	DESCRIPTION

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542 North Marine Corps Drive
Tamuning, Guam 96913
Tel: (671) 646-3131
Fax: (671) 649-6178

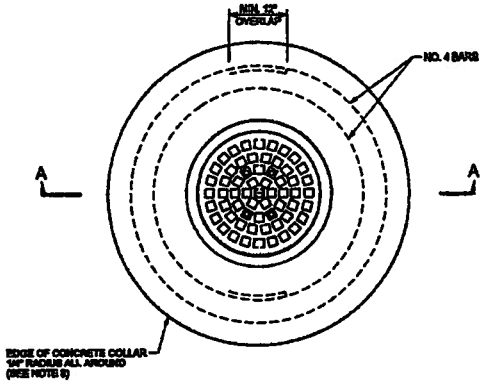
ASPHALT PAVEMENT OVERLAY TRANSITIONS

APPROVED FOR USE ON DPW PROJECTS
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS
DATE: 12-14-12

STANDARD NO. 403-01



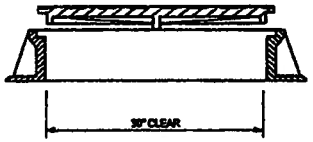
PLAN



CONCRETE COLLAR PLAN

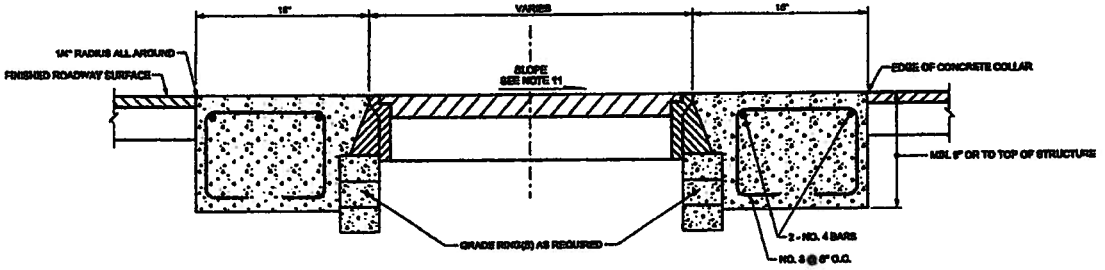
GENERAL NOTES:

1. TRAFFIC-STRENGTH MANHOLE FRAME & COVER SHALL COMPLY WITH AASHTO M18 WHEEL LOADS. EQUIVALENT MANHOLE FRAMES & COVERS OTHER THAN SHOWN MAY BE USED UPON APPROVAL BY THE ENGINEER.
2. THE FRAME SEAT AND COVER EDGE SHALL BE MACHINED TO A TRUE BEARING SURFACE ALL AROUND.
3. THE SURFACE SHOWN IS FOR ILLUSTRATION ONLY. ANY SURFACE DESIGN, OTHER THAN SMOOTH, MAY BE USED UPON APPROVAL.
4. FRAMES & COVERS SHALL CONFORM TO ASTM A48, CLASS 40 FOR GRAY IRON CASTINGS.
5. A CAST-IN-PLACE CONCRETE COLLAR SHALL BE PLACED AROUND A MANHOLE FRAME UNLESS OTHERWISE DIRECTED.
6. MANHOLE COVER SHALL BEAR NAME OF OWNER & SYSTEM FUNCTION (IF APPLICABLE).
7. CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF FP-03 SECTION 601 MINOR CONCRETE STRUCTURE.
8. CONCRETE COLLARS MAY BE POURED ROUND, OR ANY OTHER APPROPRIATE SHAPE WHEN APPROVED BY THE ENGINEER.
9. COMMERCIAL PREFABRICATED GRADE RINGS FOR MANHOLES SHALL CONFORM TO AASHTO M 199 (ASTM C-478).
10. MANHOLE COVER & FRAME SHOWN. OTHER SHAPES MAY APPLY TO UTILITY AND VALVE COVERS AND FRAMES.
11. THE SLOPE OF THE MANHOLE COVER AND COLLAR SHALL MATCH THE ROADWAY PROFILE AND CROSS-SLOPE.



SECTION B-B

TRAFFIC-STRENGTH
MANHOLE FRAME & COVER



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ON FILE

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REVISION	DATE	BY	DESCRIPTION

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542 North Marine Corps Drive
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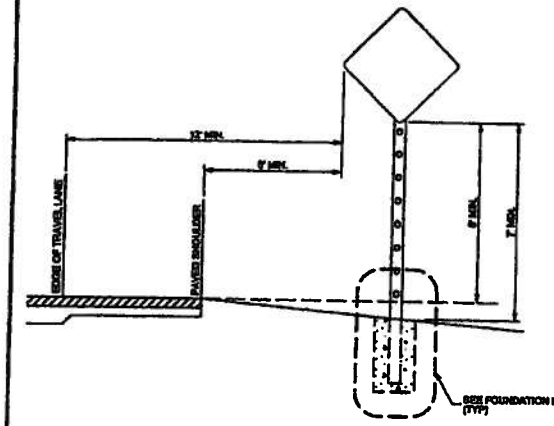
MANHOLE COVER, FRAME,
& CONCRETE COLLAR

APPROVED FOR USE ON DPW PROJECTS

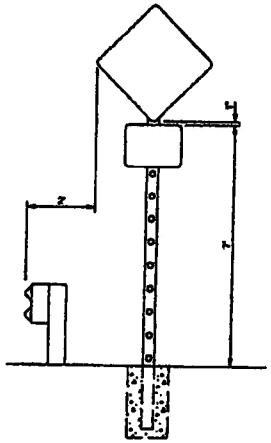
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 10.14.12

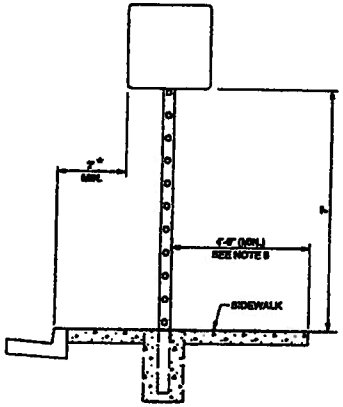
STANDARD NO. 604-09



TRAVEL LANE & SHOULDER

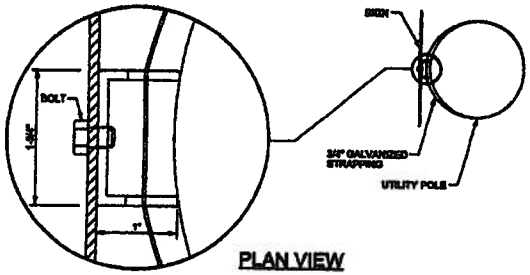


GUARD RAIL

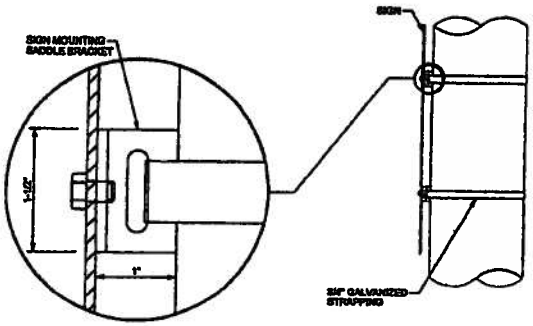


*1" MIN. WHERE SIDEWALK WIDTH IS LIMITED

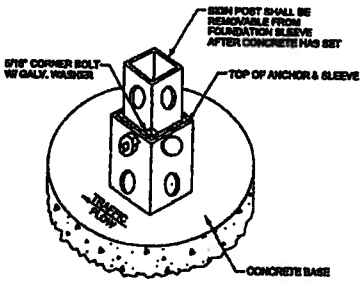
CURB & GUTTER



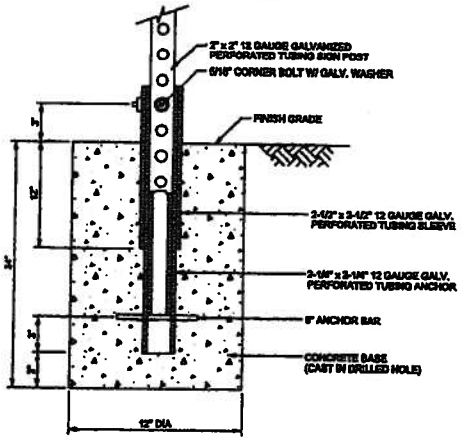
PLAN VIEW



MOUNTING DETAIL FOR ADDING SIGNS TO EXISTING UTILITY POLES



ISOMETRIC



SECTION

FOUNDATION DETAIL

GENERAL NOTES:

1. SIGNS SHALL BE INSTALLED IN CONFORMANCE WITH THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).
2. SIGN DIMENSIONS, LETTERS AND SYMBOLS SHALL CONFORM TO THE LATEST EDITION OF THE FHWA "STANDARD HIGHWAY SIGNS".
3. SIGNS SHALL BE ATTACHED TO POST WITH 3/8" GALVANIZED BOLTS WITH NUTS AND 7/8" X 1.25" STAINLESS STEEL WASHERS WITH NEOPRENE RUBBER GASKETS ON EACH SIDE.
4. SIGNS 45" AND WIDER OR LARGER THAN 10 SQ. FT IN AREA SHALL BE MOUNTED ON TWO POSTS.
5. ALL MISCELLANEOUS HARDWARE SHALL BE GALVANIZED.
6. IN SIDEWALK AREAS PROVIDE A 4'-0" MINIMUM CLEAR PATH, EXCLUSIVE OF THE WIDTH OF THE CURB. THE CLEAR PATH MAY BE ON EITHER SIDE OF THE SIGN POST.

SIGNED ORIGINAL ON FILE

DRAWING REVISIONS

REVISION	DATE	BY	DESCRIPTION

Guam Department of Public Works
542 North Marine Corps Drive
Tamuning, Guam 96913
Tel: (671) 646-3131
Fax: (671) 649-6178

ROADSIDE SIGN INSTALLATION

APPROVED FOR USE ON DPW PROJECTS

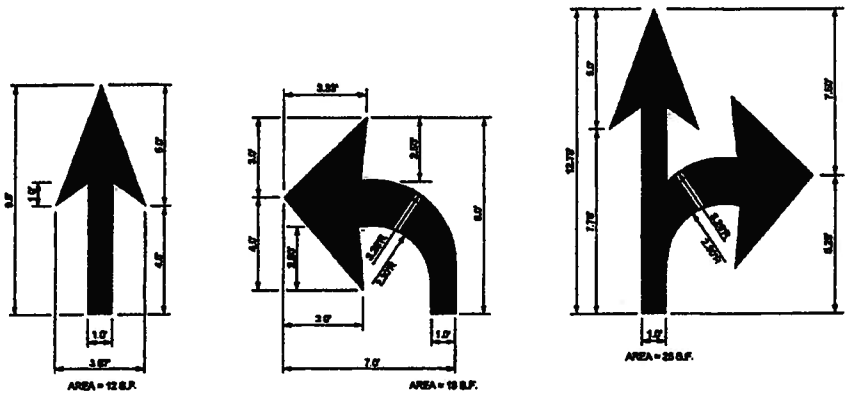
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 12-14-17

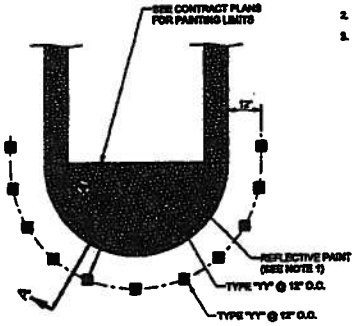
STANDARD NO. 633-01

NOTES

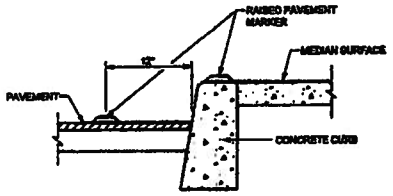
1. ENTIRE MEDIAN NOSE AND ALL MEDIAN CURBS SHALL BE PAINTED WITH YELLOW REFLECTIVE PAINT.
2. SEE RAISED PAVEMENT MARKERS DETAIL.
3. RAISED PAVEMENT MARKERS SHALL BE ALIGNED TO FACE ONCOMING TRAFFIC.



DIRECTIONAL ARROWS

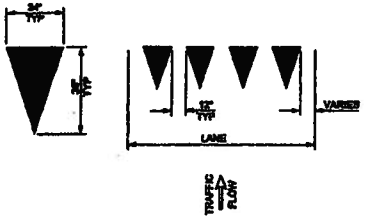


PLAN

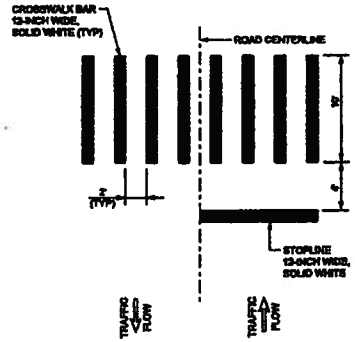


SECTION A-A

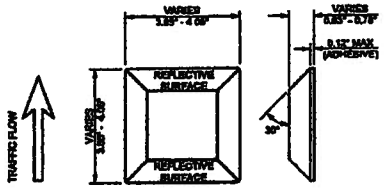
MEDIAN NOSE MARKINGS



YIELD BAR
(PLACED PERPENDICULAR TO TRAVEL LANES)



CROSSWALK PAVEMENT MARKINGS



TYPE "YY" = TWO WAY YELLOW REFLECTIVE MARKER

TYPE "CR" = CLEARRED REFLECTIVE MARKER (CLEAR SIDE SHALL FACE ONCOMING TRAFFIC)

TYPE "BB" = TWO WAY BLUE REFLECTIVE MARKER

RAISED PAVEMENT MARKERS
(REFLECTORIZED 2-WAYS)

GENERAL NOTE:

1. ALL PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC MATERIAL (TYPE II).

SIGNED ORIGINAL ON FILE

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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Tamuning, Guam 96913
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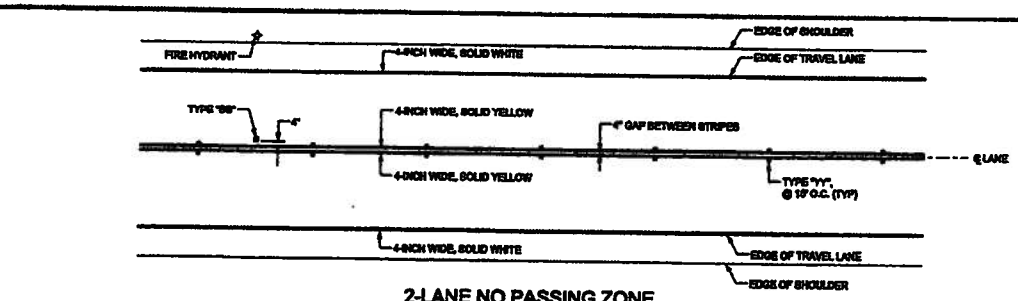
PAVEMENT MARKERS, MARKINGS AND DIRECTIONAL ARROWS

APPROVED FOR USE ON DPW PROJECTS

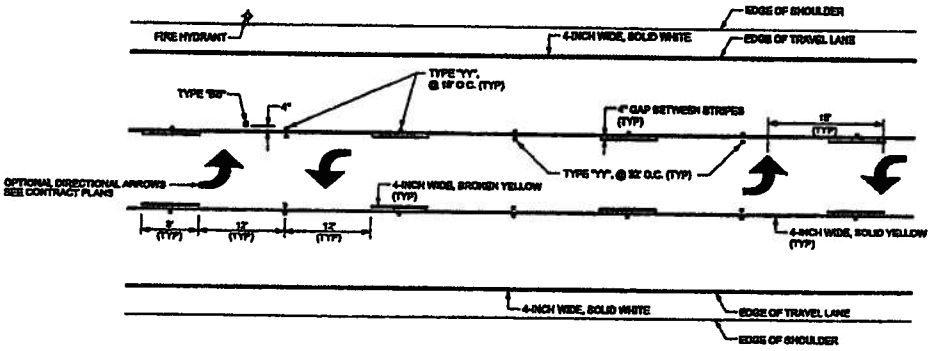
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 10.14.12

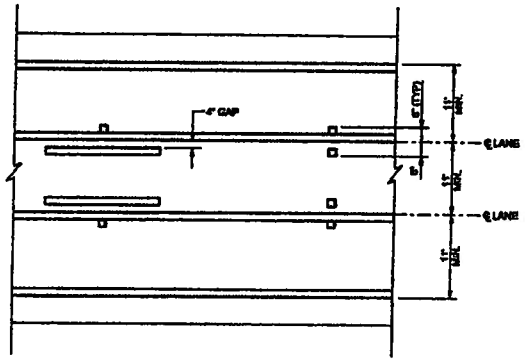
STANDARD NO. 634-01



2-LANE NO PASSING ZONE
NOT TO SCALE



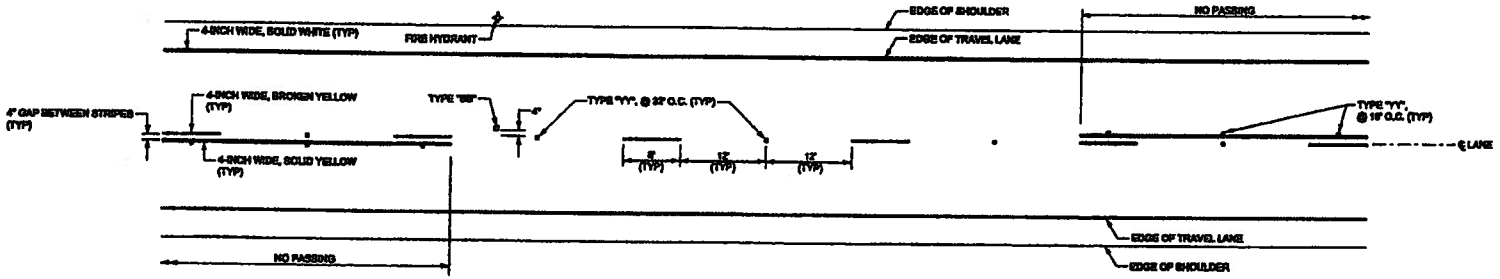
2-LANE WITH CENTER TURNING LANE
NOT TO SCALE



DETAIL

GENERAL NOTES:

1. STRIPES SHALL BE THERMOPLASTIC MATERIAL (TYPE IV).
2. FOR LANE WIDTH AND MEDIAN WIDTH, REFER TO CONTRACT PLANS.
3. FOR DETAILS OF RAISED PAVEMENT MARKERS, SEE STD 634-01.



2-LANE PASSING ZONE
NOT TO SCALE

SIGNED ORIGINAL ON FILE

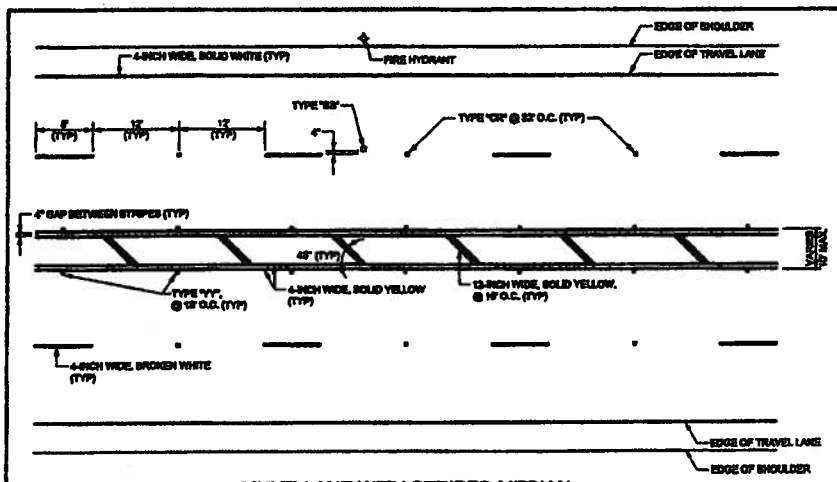
DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

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2 - LANE PAVEMENT MARKING

APPROVED FOR USE ON DPW PROJECTS
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS
DATE: 10-14-12

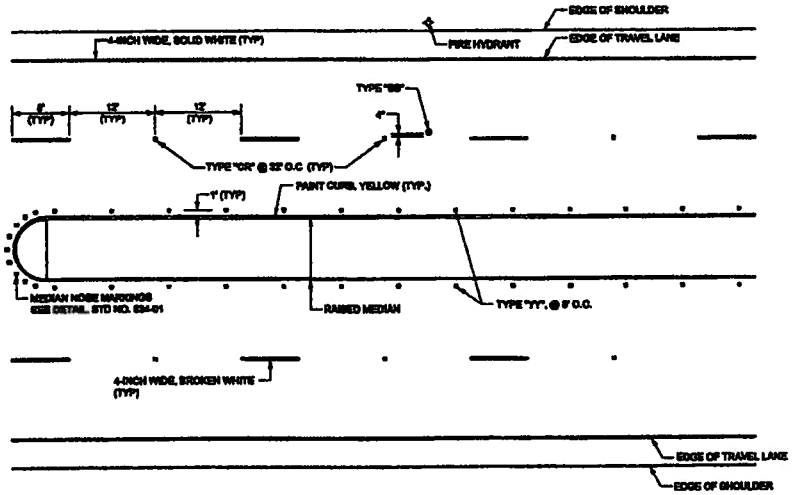
STANDARD NO. 634-02



MULTI-LANE WITH STRIPED MEDIAN

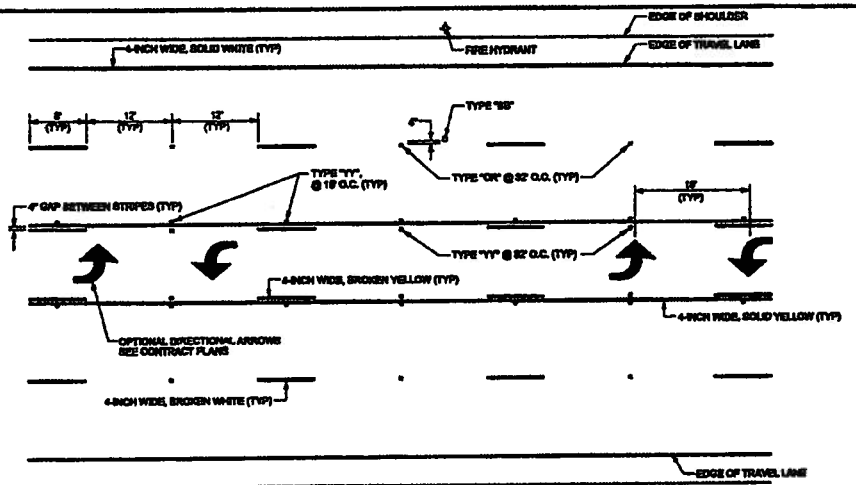
NOT TO SCALE

* MEDIAN CONDITION ALSO APPLIES TO 2 LANE CONFIGURATION



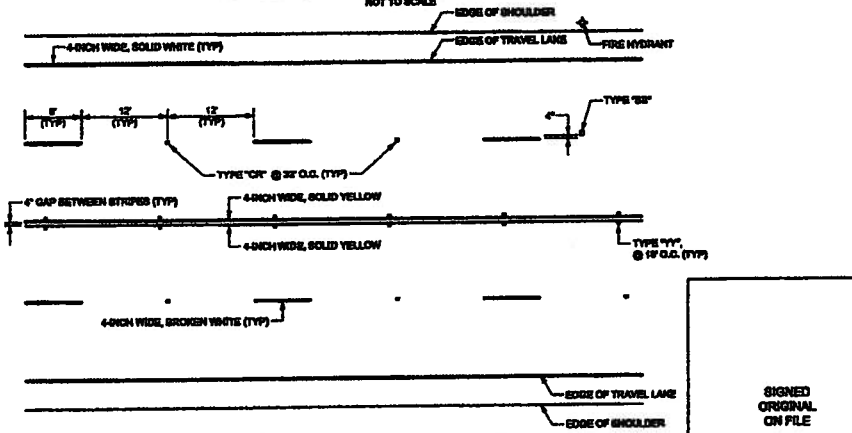
MULTI-LANE WITH RAISED MEDIAN

NOT TO SCALE



MULTI-LANE WITH CENTER TURNING LANE

NOT TO SCALE



MULTI-LANE WITH DOUBLE CENTERLINES

NOT TO SCALE

GENERAL NOTES:

1. STRIPES SHALL BE THERMOPLASTIC MATERIAL (TYPE II).
2. FOR LANE WIDTH AND MEDIAN WIDTH, REFER TO CONTRACT PLANS.
3. FOR DETAILS OF RAISED PAVEMENT MARKERS, SEE STD 634-01.

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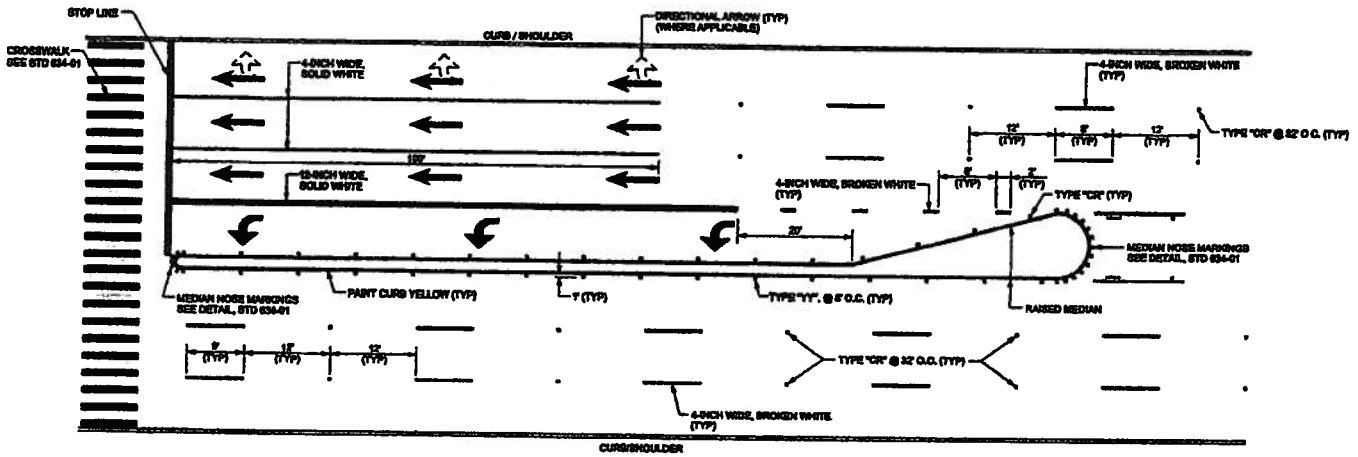
MULTI - LANE PAVEMENT MARKING

APPROVED FOR USE ON DPW PROJECTS

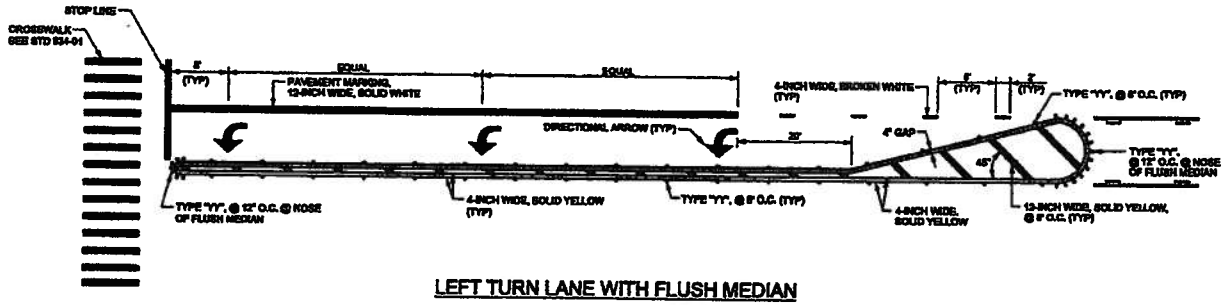
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 10 - 14-12

STANDARD NO. 634-03



MULTI-LANE INTERSECTION WITH RAISED MEDIAN



LEFT TURN LANE WITH FLUSH MEDIAN



LANE LINE EXTENSIONS THROUGH INTERSECTIONS

GENERAL NOTES:

1. STRIPES SHALL BE THERMOPLASTIC MATERIAL (TYPE II).
2. FOR LANE WIDTH AND MEDIAN WIDTH, REFER TO CONTRACT PLANS.
3. FOR DETAILS OF RAISED PAVEMENT MARKERS, SEE STD 634-01.

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Fax: (671) 649-6178

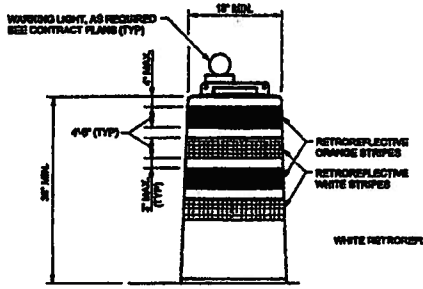
INTERSECTION PAVEMENT MARKING

APPROVED FOR USE ON DPW PROJECTS

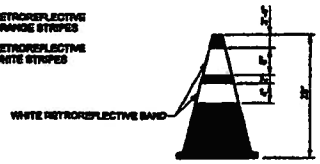
CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 12-14-12

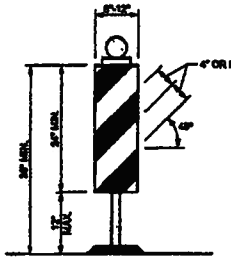
STANDARD NO. 634-04



ORANGE TRAFFIC DRUMS

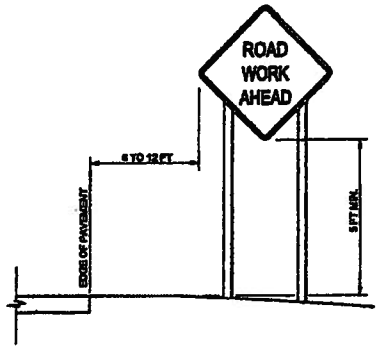


ORANGE CONES

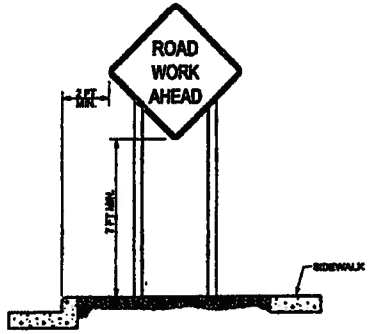


VERTICAL PANEL

CHANNELIZING DEVICES

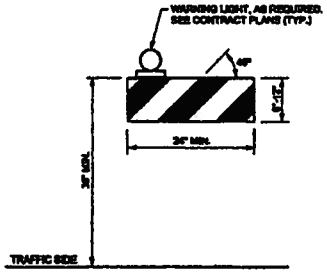


RURAL AREA

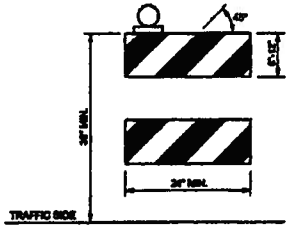


BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA

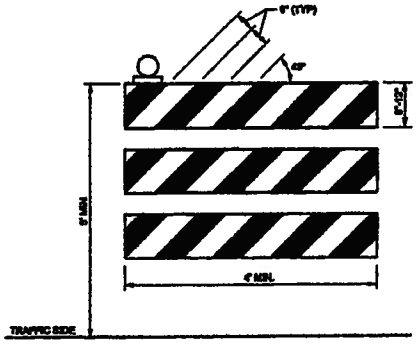
TYPICAL SIGN INSTALLATIONS



TYPE 1 BARRICADE



TYPE 2 BARRICADE



TYPE 3 BARRICADE

TRAFFIC BARRICADES

GENERAL NOTE:

1. ALL WORK ZONE HARDWARE SUCH AS DRUMS, CONES, SIGN SUPPORTS, BARRICADES, AND BARRIERS MUST MEET THE CRASHWORTHY PERFORMANCE CRITERIA IN NCHRP-350/MASH AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).

NOTES:

1. MARKINGS FOR BARRICADE RAILS SHALL BE RETROREFLECTIVE ORANGE AND WHITE STRIPES SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION OF TRAFFIC AS SHOWN.
2. TYPICAL RAIL STRIPE WIDTHS SHALL BE 6 INCHES. 4 INCH WIDE STRIPES MAY BE USED FOR RAIL WIDTHS LESS THAN 36".
3. BARRICADE SUPPORTS ARE NOT SHOWN. SUBMIT PRODUCT INFORMATION INDICATING NCHRP-350/MASH CRASH TESTED AND APPROVED.

SIGNED ORIGINAL ON FILE

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

Guam Department of Public Works
542 North Marine Corps Drive
Tamuning, Guam 96913
Tel: (671) 646-3131
Fax: (671) 649-6178

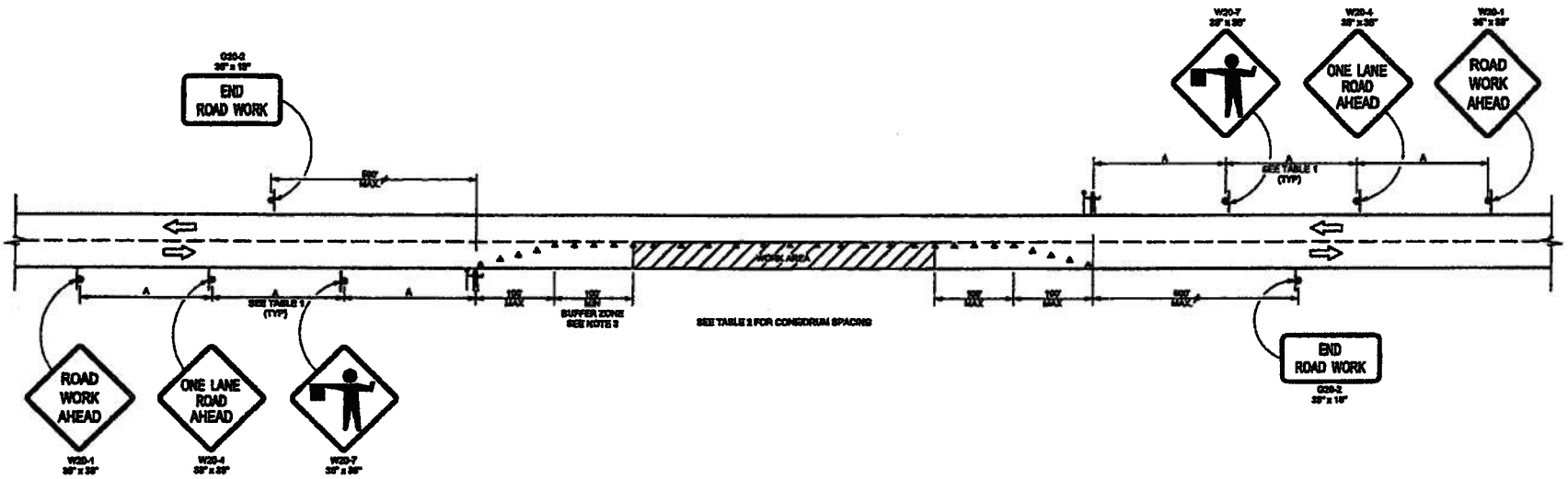
CHANNELIZING DEVICES AND BARRICADES

APPROVED FOR USE ON DPW PROJECTS

CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 10-14-12

STANDARD NO. 635-01



LEGEND:

- WORK AREA
- CHANNELIZING DEVICES
- FLAGGER WITH STOP/SLOW PADDLE
- SEQUENTIAL OR FLASHING ARROW
- TEMPORARY SIGN
- TRAFFIC FLOW

TABLE 1

SIGN SPACING	
ROAD TYPE	A (FT)
URBAN - SPEED 35 MPH OR LESS	100
URBAN - SPEED 50 MPH OR MORE	350
RURAL	500

TABLE 2

CONEDRUM SPACING	
APPROACH SPEED (MPH)	SPACING (FT)
25 & BELOW	25
35	35
45	45

GENERAL NOTES:

1. PAVEMENT MARKINGS FOR TEMPORARY TRAFFIC CONTROL, IF REQUIRED, SHALL BE AS DIRECTED BY THE ENGINEER OR SHOWN IN THE CONTRACT PLANS.
2. THE SIGN LOCATION SPACINGS MAY BE VARIED FROM THE DIMENSIONS SHOWN DUE TO FIELD CONDITIONS INCLUDING ROAD ALIGNMENT, SIGHT DISTANCE, INTERSECTIONS, DRIVEWAYS, PERMANENT SIGNS OR OTHER OBSTRUCTIONS.
3. BUFFER ZONE CAN BE INCREASED AS DIRECTED BY THE ENGINEER FOR HORIZONTAL OR VERTICAL CURVES DUE TO SIGHT DISTANCE CONSIDERATION.

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ORIGINAL
ON FILE

DRAWING REVISIONS			
REVISION	DATE	BY	DESCRIPTION

Guam Department of Public Works
542 North Marine Corps Drive
Tamuning, Guam 96913
Tel: (671) 646-3131
Fax: (671) 649-6178

LANE CLOSURE ON TWO LANE HIGHWAY

APPROVED FOR USE ON DPW PROJECTS

CHIEF ENGINEER, HIGHWAYS
DEPARTMENT OF PUBLIC WORKS

DATE: 10-14-12

STANDARD NO. 635-02